

AN INVESTIGATION INTO THE IMPORTANCE OF THE QUANTITY
AND QUALITY OF THE MOTHER-CHILD RELATIONSHIP IN
PRESCHOOL CHILDREN

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I hereby declare that this dissertation is my own work
and that I have not submitted it for a Master of Arts
degree in Clinical Psychology to any other University.

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ABSTRACT

The present study aimed first, at determining whether part-time (nursery-school attendance), and a full-time (day-care attendance) quantitative disruption in mother-child interaction, affects the child's separation anxiety, stranger anxiety, frustration tolerance and general coping mechanisms. Second, the effect of the quality of mothering (the degree of maternal acceptance and responsiveness) on the child's separation anxiety, stranger anxiety, frustration tolerance and general coping mechanisms was assessed. Thirdly and fourthly, this study aimed at determining whether the age and the sex of the child affect the separation anxiety, stranger anxiety, frustration tolerance and general coping mechanisms exhibited by that child; and finally whether there is a relationship between separation anxiety, stranger anxiety, frustration tolerance and general coping mechanisms.

Fifty-six four-year-olds and their mothers were observed. These included 14 children who stayed home with their mothers; 14 children attending nursery-school; 14 children attending a day-care centre from the age of three; and 14 children attending a day-care centre from the age of one. A problem-solving task was administered to the children to obtain a measure of their frustration tolerance; a modified version of the Ainsworth-Wittig Strange-Situation Procedure was employed to measure the children's separation anxiety and stranger anxiety;

a Fantasy Test was administered to the children to obtain a measure of their general coping mechanisms; the mothers were rated in terms of acceptance of and responsiveness to their children, and finally the mothers were interviewed and requested to complete the Porter Parental Acceptance Scale.

Pearson Product-Moment Correlation Coefficients, One way Analyses of Variance and t-tests were used to compute the results.

The only significant findings of the present study were : (1) a positive relationship between the quantity of mother-child interaction and frustration tolerance; (2) separation anxiety was positively correlated with maternal acceptance defined as "the parent regards the child as a person with feelings and respects the child's right and need to express these feelings"; (3) age was negatively correlated with separation anxiety, i.e., with increasing age, separation anxiety decreases; (4) age was positively correlated with frustration tolerance, i.e., with increasing age, the ability to tolerate frustration increases; (5) age was positively correlated with the coping mechanisms, i.e., with increasing age the competence of the coping mechanisms exhibited by a child increases; (6) frustration tolerance correlated positively with separation anxiety; (7) stranger anxiety and separation anxiety were positively correlated; and (8) separation anxiety and coping mechanisms exhibited by the child were negatively correlated.

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The results were discussed within an ethological and organizational behavioural framework. Limitations of the present study were pointed out and suggestions for future research and for preschool centres in the community were offered.

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INTRODUCTION

The research on the effect of brief mother-child separations, i.e., hospitalization (Douglas, 1975; Robertson and Robertson, 1971; Robertson, 1953) and long-term separations, i.e., institutionalization (Tizard & Rees, 1975; Tizard, Moss and Perry, 1976; Dennis, 1973), has reported overall consistency and reliability of findings. The short-term three-stage reaction process, protest, despair and detachment (Robertson & Bowlby, 1952; Bowlby, 1960, 1973) has been found to be common in almost all mother-child separations (Heinicke & Westheimer, 1966; Spencer-Booth & Hinde, 1967; Kaufman & Rosenblum, 1967; Stayton, Ainsworth & Main, 1973). The long-term effects of prolonged mother-child separation without the provision of a constant mother-substitute have been found to include social-emotional, and cognitive retardation and extreme difficulty in establishing intimate trusting-interpersonal relationships throughout life (Tizard, and Rees, 1975; Levy, 1973; Dunn, 1976, Dennis, 1973; Goldfarb, 1943).

Until recently, very little was known of the effects of part-time mother-child separation, i.e., nursery-school and day-care centre attendance. Bowlby (1973) and Ainsworth, Bell and Stayton (1971) have suggested that the repeated separations of child and mother, with substitute day-care leads to a cumulative qualitative disruption of the mother-child relationship which hinders the socialization of the child. The studies investigating the effects of daily full-time and part-time separations

have reported extremely inconsistent and contradictory findings (Etaugh, 1974; Hoffman, 1979, 1974; Blehar, 1977; Sjölund, 1969; Rubenstein and Howes, 1979). For this reason, part-time mother-child separation was chosen as the focus of the present research in an attempt to further clarify the issues involved. The particular variables to be investigated are dealt with below.

The age of the child at which the initial separation occurs is a vital factor (Blehar, 1977; Robertson and Bowlby, 1952; Brown and Caldwell, 1973). The cognitive, motor and social-emotional development of children between the ages of one to five set the stage for greatly diverse reactions to daily full-time or part-time separation from maternal contact.

In addition to quantity of mother-child interaction, the quality of the relationship has perhaps been found to be the most determining factor in the development of psychological adjustment (Ainsworth and Bell, 1974; Fein and Clarke-Stewart, 1973; Waters, 1978). Consistency, dependability, sensitivity to cues, warmth and acceptance are some of the key variables in parenting found to result in well-adjusted, stable, self-confident and competent children (Ainsworth, Blehar, Waters and Walls, 1978; Baumrind, 1968; Winnicott, 1974; Harlow, 1963; Yarrow, 1979; Fein and Clarke-Stewart, 1973).

Anxiety experienced throughout life in the face of separation from loved-ones and in the face of unknown others and events is believed to depend largely on the experience of these two situations during the childhood

years and on the mechanisms learnt in dealing with these stresses (Rutter, 1979; Ainsworth, 1979; Bowlby, 1973). Ability to tolerate frustration and thereby to cope more effectively is also greatly dependent on the early mother-child relationship, particularly on maternal child-rearing variables.

It was therefore decided to investigate the effects of:- (a) the quality of the mother-child interaction in the first five years of life; (b) the quantity of mother-child interaction; (c) the age of the child at initial separation and age in general; and (d) sex, on:- (i) separation anxiety; (ii) stranger anxiety; (iii) frustration tolerance; and (iv) general coping mechanisms, in $\pm$ four-year old children attending a day-care centre, nursery-school or neither.

Four groups of mothers and children will be employed:- (1) a group of children who stay at home with their non-working mothers; (2) a group of children who attend a half-day nursery-school from the age of three and their non-working mothers; (3) a group of children who attend a day-care centre from the age of three years and their working mothers; (4) a group of children who attend a day-care centre from the age of one year and their working mothers.

Each mother-child pair will be requested to spend one hour at the University of the Witwatersrand where the experimental procedure will be conducted. To measure the quality of mothering the Porter Parental Acceptance Scale

(PPAS) will be administered to the mothers, and observational ratings of the mother's interaction with her child will be made by two observers. To gain an index of the child's frustration tolerance an insolvable problem-solving task will be presented to each child. Tizard and Tizard's (1971) modification of Ainsworth and Wittig's (1969) Strange-Situation Procedure, will be used to measure the child's separation and stranger anxiety. A Fantasy Test (Shmukler and Skuy, 1979) will be administered in order to obtain a measure of the child's coping mechanisms.

All scales will then be scored and the scores punched onto computer cards. T-tests, one-way analyses of variance and Pearson product-moment correlation co-efficients will be used to compute the results.

CHAPTER I

ATTACHMENT

Before examining the effects of disruption on the mother-child relationship, it is first necessary to look at the development and components of that relationship.

Two major research strategies have been adopted. First, from an ethological standpoint, studies have been conducted on primates and lower animals in an attempt to isolate the various stages in the development of the mother-infant relationship (Minde & Spencer-Booth, 1967; Goodall, 1965; Schaller, 1965; Harlow & Harlow, 1965). Extrapolations were then made to human development. Second, direct observational procedures of mothers and their young infants have been undertaken (Bowlby, 1973; Ainsworth, 1967, 1969; Maccoby & Feldman, 1972; Marvin, 1977; Carter, 1976; Dunn, 1976).

The phenomenon of imprinting, first termed by Lorenz (1935, cited in Bowlby, 1969) from his experimentation with birds, has been examined in animals and extended to apply to the human post-natal period of approximately one year. Brody & Axelrod (1970) incorporate the notion of imprinting into their theory of socialization within the first year of life. They state that there are two critical periods of socialization : (a) Imprinting to the human species indicated by the infant's ability to fixate visually or auditorily and by his ability to pursue a human object visually, (b) Imprinting to the mother-figure which is indicated by the infant's ability to discriminate the

mother-figure from other human figures. The first stage is seen as automatic and innate and ends at approximately four months. The second stage begins with the perception of inner tension and a perception of the ability to summon aid to tension and is completed by $\pm$ seven months. The second stage brings into question the notion of attachment of the infant to a particular mother-figure.

What does one mean by "attachment"? Researchers and theorists from many schools of thought have attempted to define the process by which an infant develops a strong preference for a specific mother-figure.

The psychoanalytic object-relations school discusses attachment in terms of Secondary Drive theory, ie., through the gratification of primary instinctual needs, the infant learns to associate gratification and pleasurable feelings with the figure who responds to his needs. This develops into a fear of the loss of the particular figure which would result in excess tension due to unmet needs and helplessness. As the infant develops, this fear and eventual separation anxiety are manifested by clinging, searching and following which are "attachment behaviours". This approach emphasises the intraorganismic aspects of the development of true object relations culminating in attachment (Freud, 1915; Balint, 1949; Fairbairn, 1956; Klein, 1952).

Learning theorists who have directed their attention to the area of attachment (Feldman & Ingham, 1975; Sears, 1951; Sears, Maccoby & Levin, 1957; Beller, 1955;

Gewirtz, 1961, 1969; Cairns, 1966; Rosenthal, 1973), emphasise the environmental contingencies which allow the infant to learn "human motives of sociability, dependence, need to receive and show affection, and desire for approval from others" (Dollard & Miller, 1950 cited in Ainsworth, 1969). Like the psychoanalytic school their approach is from a secondary-drive position. The infant is dependent on the mother for gratification of all his physiological needs. When in discomfort, by crying he initiates the mother's attention and his discomfort is relieved. This reinforces the behaviour which resulted in need-gratification and the child acquires a drive to be close to his mother and to attract her attention. This has been termed a "dependency drive". The reciprocal reinforcement between mother and child sets the stage for strong proximity-directed behaviours, affection and approval which are the foundation of the mother-child relationship.

The third perspective to the issue of attachment is the ethological approach of which John Bowlby (1958, 1969) is the central proponent. The ethological framework was the framework within which the present research was conducted. It was considered to be the most integrated and holistic approach to the study of mother-child attachment for several reasons : it brings together the psychoanalytic considerations of instinct theory, the intra-organismic contributions of object-relations theory, the learning theorists' emphasis on external environmental influences; it incorporates evolutionary based ethologi-

cal research findings, particularly from primate studies, as well as including a Piagetian background of cognitive and perceptual development. In addition to theoretical integration, ethological concepts and methods allow for research to be undertaken into the social responses of the preverbal period of infancy, a period not directly available to psychoanalytic methods.

Bowlby (1958), Ainsworth (1967), Sroufe (1977), and other followers of the ethological trend, chose to use the term "attachment" in defining the child's tie to the mother in preference to the learning theorists' use of "dependency". They felt that "dependency" denoted something negative, immature and regressive, i.e., an undesirable trait, whereas "attachment" implies an affectional tie to a specific individual, a healthy ability to form relationships and to develop concern for others. "Attachment" was also seen as specific and enduring and imbued with affect of an intense nature, whereas "attachment" allows for a generalized mode of relating to any number of individuals. In addition "dependency" implies a stage out of which the individual "should grow".

Bowlby's (1969) control theory of attachment behaviour is rooted within an evolutionary context. For man to have survived in a harsh environment with an exceptionally long infant-helplessness stage, proximity to adults was essential. Bowlby identified five behavioural systems which maintain the human infant in close proximity to the mother-figure - sucking, clinging, following, crying,

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theory of anxiety and attachment on the basis that several key psychoanalytic variables have been omitted. He states that Bowlby, by viewing anxiety reactions as genetically and evolutionarily determined, overlooks "the instinctual source of anxiety reactions, the mechanism of projection which displaces the apparent location of the source of the anxiety" (p.378) and the ego's general defense mechanisms which may distort object relations and the perception of and affect associated with the attachment figure. These factors, however, are probably more applicable to the quality of the mother-child attachment and resultant interaction, rather than to the issue of the developmental process of attachment. Bowlby (1973) includes the concept of defence mechanisms in his treatment of the disruption of the attachment bond, which will be dealt with in future chapters.

The control theory of attachment can be summarised as follows : The infant is evolutionarily and genetically programmed in a species-characteristic fashion towards a "set-goal". This "set-goal" is - to become attached to an object. Via the sense modalities the infant receives input from the environment. This is processed according to the developmental level of his sensori-motor and cognitive structures. Together with the appraising processes ie., his affect and emotion which provide him with feedback, the infant directs his output towards the attachment figure. Bowlby (1969) uses the analogy of the anti-aircraft missile which seeks its "set-goal" - enemy

aircraft - in explaining this control system. This missile uses its sensorimotor and control equipment to guide it to its target. From approximately one year of age "goal-corrected" behaviour develops, i.e., with further cognitive and motor development, the child is able to anticipate others' actions and plan his future course of action in order to obtain gratification. This ability to plan becomes hierarchically more complex, particularly with the development of language, through to adulthood.

As mentioned above, Piaget's contributions to perceptual and cognitive development are integrated into Bowlby's approach. Piaget's stages of cognitive development parallel Bowlby's stages of attachment. Two aspects, perceptual-motor development and the development of object constancy, are the most pertinent to the development of attachment.

Bowlby's developmental phases of attachment : Phase 1 : Orientation and signals without discrimination of figure. (Birth - 12 weeks).

The infant is not viewed as a tabula rasa at birth. He has a number of behavioural systems ready to be activated by particular stimuli or terminated by other stimuli. This occurs within a fixed-action pattern i.e., a simple structure, or "reflex schemata" (Piaget, 1952). However, some discrimination is present - a bias to respond to human stimuli. This is the period which can be compared to Brody and Axelrod's (cited in Schaffer, 1971) first stage of imprinting to the human species wherein the infant responds to all human auditory,

kineasthetic and visual stimuli. Learning and experience take place within the sphere of reflexes. This corresponds to Piaget's (1952) first stage of sensorimotor development.

Phase 2 : Orientation and signals directed towards one or more discriminated figures (Three months - 6 months)

Auditory and then visual discrimination develop. The infant's preference for the mother-figure is beginning to emerge. In the second stage (1-4 months) and third stage (4-10 months) of sensorimotor development, Piaget (1952) emphasizes improved motor co-ordination with a commencing awareness of the infant of his own body and actions, the primitive ability to anticipate events, and signs of curiosity. Stages 1 and 2 of object constancy sees the infant develop from reactions only to immediately present sensory events to the ability to co-ordinate sensory input into perceptual schemes. If an object leaves his visual field the infant continues to stare at the spot where the object disappeared. This, Piaget (1952) terms "passive expectation".

Phase 3 : Maintenance of proximity to a discriminated figure by means of locomotion as well as signals (Seven months - $\pm$ 30 months)

Behaviour at this stage becomes goal-corrected i.e., the infant's set-goals are influenced by his expectations of his mother's actions. This is due to the development in the fourth, fifth and sixth stages of Piaget's sensorimotor development, of increased understanding of the

diminish and he takes into account others' feelings and intent. He can now begin to work to influence his mother's set-goals and her plans of action. This heralds the start of a true person-to-person relationship.

Research on child-mother attachment has moved through several phases. First, the emphasis was on primate research. Second, observations of mother-infant pairs were undertaken. Third, the attachment behaviours became the focus in an attempt to consolidate the concept of attachment and its development. Fourth and currently, the trend is to view attachment as an organizational construct, continuous through time and determining of other behavioural organization. The first two stages helped to propagate the ethological theory of attachment. The latter two stages have been used to verify the theory and shall be discussed, bringing the review of attachment research into the present.

Research of the attachment phenomenon has used Bowlby's (1969) list of attachment behaviours and Ainsworth's (1973) extension of this list, to examine the nature and intensity of child-mother attachment - sucking, smiling, crying, clinging, following and greeting behaviours, exploration, and response to strangers vs. mother are some of the behaviours.

There has been a substantial lack of agreement on the consistency and reliability of attachment behaviours exhibited by infants in the presence and absence of their mother-figures (Lamb, 1974; Masters & Wellman, 1974).

Infants smiling to mother versus strangers within the first eight months of life has only been found to be discriminative in certain situations (Ainsworth, 1973; Stayton et al., 1973; Masters & Wellman, 1974). A possible explanation for the contrasting results is that important factors were treated differently in studies of the smiling response as an attachment behaviour. The factors included - distance of mother or stranger from the infant, amount of stimulation offered, habituation to the unfamiliar adult allowed, facial expression of the stranger and setting of research, i.e., home or laboratory (Spitz, 1965; Rheingold & Eckerman, 1973; Ambrose, 1961).

Crying has also been found to be undifferentiated in certain situations, such as in response to the father versus mother absence (Cohen & Campos, 1974). Crying was however differentiated in response to mother versus stranger absence in a study by Fleener & Cairns (1970). Stayton et al. (1973) reported the occurrence of discriminative crying in response to the absence of mother at an earlier age (5 months) than demonstrated by other studies.

Following and proximity-seeking behaviours have been found to be a most useful measure in discriminating subtle preferences to one attachment figure over another (Cohen & Campos, 1974; Lewis, Weintraub & Bon, 1973; Kotelchuck, 1973). These attachment behaviours are subject to change according to age and are replaced in the older child by "distal" attachment behaviours, eg., looking and

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verbalizing (Lewis et al., 1973). Following of the mother by the infant has also been found to be more frequent in stress situations such as a strange environment, or in the presence of an unknown adult (Stayton et al., 1973; Ainsworth & Wittig, 1969). Thus, the stability of the following-proximity-maintaining response is much stronger than that for smiling, crying and other behaviours (Coates, Anderson & Hartup, 1972; Maccoby & Feldman, 1972).

Support for Bowlby's (1973) standpoint that being left alone has an evolutionary-developed danger signal that evokes proximity seeking behaviour, has been found in studies comparing infants' reactions to being left alone to being left either with a stranger or within visual and auditory range of the mother. Attempts at following and reunion greetings were stronger and more frequent in the former situation (Stayton et al., 1973; Bell & Ainsworth, 1972).

The use of the mother-figure as a secure base and the degree of exploratory behaviour manifested by the infant has also been used as a measure of attachment (Ainsworth & Wittig, 1969; Harlow, 1963).

Ainsworth & Wittig (1969) have devised a measure, the Strange-Situation Procedure, to assess the quality of attachment. The process involves seven three-minute episodes which consist of :-

1. Mother and baby with toys alone in the observation room;
2. A stranger enters and eventually approaches the baby;
3. Mother leaves the baby with a stranger;

4. Mother returns and the stranger leaves;
5. Mother leaves the baby alone;
6. Stranger returns;
7. Mother returns again.

Within each episode the balance between proximity-serving attachment behaviours and exploratory play is recorded.

Attachment behaviour and exploratory behaviour are antithetical to, yet supportive of each other (Ainsworth, 1979; Stayton & Ainsworth, 1973). In an insecure, unfamiliar situation attachment behaviour is intensified with a decrease in exploratory behaviour. With secure attachment, even in an unfamiliar setting, exploration is promoted. If a mother is accessible, reliable and responsive the infant's anxiety concerning her proximity and availability will be at a minimum, liberating his energy and interest in his surroundings. The development and consolidation of object constancy, together with increasing locomotor and language skills allow the infant to venture further and for longer periods. The nature of the use of the mother as a secure base from which to explore changes from physical contact to visual and auditory contact. The ability to explore one's environment promotes cognitive and social competence via exposure to novelty and varied manipulation of objects which results in a sense of effectance and control over one's environment. Thus the quality of mothering largely determines the quality of attachment, which in turn determines the degree and

nature of exploration which promotes cognitive and social development.

From their observations using the Strange-Situation Procedure, Stayton & Ainsworth (1973) have identified three patterns of attachment behaviour along a security-anxiety dimension : Group A - babies rarely cry in the separation episodes, and in the reunion episodes, avoid the mother, alternating between proximity-seeking and avoidant behaviours, or they totally ignore the mother. This pattern of attachment has been termed anxious-avoidant attachment. Group B - babies use their mothers as a secure base from which to explore; their attachment behaviour at separation is greatly intensified resulting in distress with diminished exploration; and on reunion they seek contact with, proximity to or interaction with their mothers. These are classified as securely attached. Group C - babies evidence some anxiety even prior to separation, are intensely distressed by separation and on reunion are ambivalent toward the mother, seeking close contact yet resisting contact or interaction when offered. The attachment is anxious-resistant in nature.

In general with the mother's absence the infant's crying increases and exploratory behaviour decreases (Ainsworth & Wittig, 1969; Cox & Campbell, 1968; Rheingold, 1969). The loss of the attachment figure and the resulting distress diminishes interest in the environment and lowers the general level of activity (Bowlby, 1961). However, the securely attached infants are more able to make use of

mother as a secure base and as a source of comfort and reassurance. They are then in a position to sooner re-engage in their healthy exploration, whereas the anxious-resistant infants are too distressed to resume play while the anxious-avoidant infants' exploration has been found to be less competent and of an anxious and angry nature (Connell, 1976; Main and Londerville, 1978, cited in Ainsworth, 1979; Matas, 1978). Support has been found for Ainsworth's (1977) qualitative classification of attachment (Sroufe & Waters, 1977; Waters, Wippman & Sroufe, 1979). However, there has been a lack of clarity in identifying the variables which influence exploratory behaviour, as the fear-reducing quality the mother offers the infant by her presence cannot be fully equated with attachment of infant to mother per se.

The balance between attachment behaviour and exploration is a far more complex phenomenon and has been retained as an essential component in the new directions in which attachment research is going (to be discussed below). The use of the isolated indices of attachment has diminished for several reasons arrived at from the low correlational studies. First, several of these behaviours are often counterindicated in simultaneous occurrence, e.g., smiling and crying (Lamb, 1974). In addition, research has demonstrated the replacement of certain behaviours with more developmentally mature equivalents. For example, locomotor development allows for following rather than, or in addition to smiling and crying (Stayton et al.,

and behavioural system, flexibly operating in terms of set goals, mediated by feeling, and in interaction with other behavioural systems"(p.1185). The role of affect is primary within this framework. It is the young child's feelings associated with the caretaker that determine his ability to use the caretaker as a secure base and to be comforted preferentially by her. The quality of this attachment, from an organizational perspective, is believed to be continuous throughout the child's developmental stages. Therefore an assessment of a child's negotiation of developmental tasks would throw light on the nature of his attachment relationship with the mother as well as on the quality of her mothering (the latter aspect to be discussed in Chapter IV).

The latest research examining the continuity of adaptation through the preschool years supports the hypothesis that adaptive attachment results in later adaptive organization of behaviour, such as exploration, mastery of the inanimate environment, autonomy and peer group acceptance and competence. As already mentioned, secure attachment results in greater, more competent exploration and a superior quality of play (Main, 1977; Ainsworth, 1979; Matas, 1978). Matas, Arend and Sroufe (1978) in a longitudinal study, classified infants at 12 months and then at 18 months according to quality of attachment and then examined certain behaviours at the age of two. At two years the earlier classified securely attached infants exhibited more enthusiasm and positive affect in a problem-

solving task, they were less frustrated, less petulant and able to ask the caregiver for help. Insecurely attached infants were less able to use the caregiver's help, were more negativistic, gave up quickly and were more distressed. The infants who could not be comforted at 6 and 12 months evidenced more tantrums and were more dependent at two years of age. The infants classified at 12 and 18 months as anxious-avoidant in their attachment, at the age of two, were occasionally aggressive to the mother and often used the experimenter for help rather than their mothers. Waters (1978) and Main (1973) also found that as toddlers the securely attached infants were more socially and cognitively competent. Therefore, the prediction that infants evidencing adaptive organization of attachment behaviour would later exhibit adaptive growth in other areas, was positive. Waters, et al. (1979) examined peer competence and ego-strength in the peer group, in 32 3½-year-olds who had been assessed according to quality of attachment at 15 months. They found that the securely attached 15 month-olds were more competent and ego-effective in the peer group at 3½ than those who had been classified as anxiously attached.

Arend, Gove and Sroufe (1979) followed up the children from the Matas et al. (1978) study when they were 4½ to 5½ years of age in terms of ego-resiliency and curiosity. The previously classified securely attached children scored significantly higher in ego-resiliency and curiosity than the anxiously attached children. The securely

attached children could moderate their degree of ego-control according to the situation, whereas the anxious-avoidant attached children tended toward over-control, i.e., avoidance of the stranger and little emotional expressiveness, and the anxious-resistant children tended toward under-control, i.e., inappropriate expression of affect toward the mother or stranger's approaches.

From the above findings, it can be concluded that the patterning of behaviour can be predicted across time. It is the categorization of behaviour into a meaningful organised construct which is essentially stable, not the underlying isolated behaviours. The quality of mothering determines, in part, the quality of attachment during the first year of life. This then largely determines the young child's successful negotiation of developmental tasks, such as independence, cognitive-competence, peer-group competence and emotional adaptiveness.

Separation, frustration and encounters with strangers are some of the central issues noted that the preschooler has to confront. Within the framework of organizational behaviour elucidated above, the most influential factors on how the young child will deal with these issues are :

- (a) the availability of a continuous stable caretaker;
- (b) the quality of mothering by that caretaker;
- (c) the quality of attachment resulting from (a) and (b).

The aim of this study is to examine the importance of the quality and quantity of mothering on preschoolers' separation anxiety, stranger anxiety, frustration tolerance

and general coping mechanisms. But first an enquiry into the development of the dependant variables is necessary.

In summary, this chapter has provided a rationale for the use of the Bowlbian-based approach to attachment theory and research. This approach has been found to be the most integrated and inclusive framework. The concepts and systems of behaviour described have allowed for the furtherance of empirical research. The framework has also prevented an immobilization of theory and method by postulating an organizational systems approach to attachment. Attachment is viewed as one of the basic behavioural organizations that is inter-related with later developing behavioural systems. The particular systems to be examined in the present study are : the preschooler's reactions to separation, strangers and frustration, and the development of general coping-mechanisms.

CHAPTER II

SEPARATION ANXIETY, STRANGER ANXIETY AND FRUSTRATION TOLERANCE

2.1 Separation Anxiety

Anxiety has been defined as a state of anticipated confrontation with a danger stimulus or of preparation for the stimulus despite its anonymity (Bowlby, 1960). Goldstein (1939) defined anxiety as an experience when the organism is unable to cope with the situation and is thus in danger of disorganization. Fear, as opposed to anxiety, was defined by Bowlby (1960) as "the subjective state accompanying escape and 'freezing' whenever the cognitive component of these responses is at a higher level, namely whenever there is a clear conception of what object it is which has activated them" (p.77). Fright is the subjective experience of actually encountering the dangerous expectation in which there is an element of surprise.

Separation anxiety can thus be defined as the anticipation of the confrontation with the unpleasant experience of the absence of the mother figure. The issue of separation anxiety has been approached from basically two theoretical standpoints :

- (a) The theory of secondary drive;
- (b) The ethological theory of attachment.

There are five main conceptions of separation anxiety within the theory of secondary drive framework :

- 1) Freud's theory that the uncathexed libido, i.e., the unmet basic needs, would overwhelm the organism

in the absence of the loved figure, giving rise to a state of extreme tension and anxiety.

- ii) The "birth-trauma theory" wherein birth is seen as the prototype of separation anxiety (Fairbairn, 1952; Rank, 1924).
 - iii) The "signal theory" which states that without the mother the child is subject to the risk of traumatic psychic experience. Anxiety serves to ensure that he is not separated from her for too long (Freud, 1926; Spitz, 1950; Joffe & Sandler, 1965).
 - iv) Klein's (1952) theory of persecutory and depressive anxieties. Persecutory anxiety arises from the projection by the child of his aggressive feelings and phantasies onto the mother which then arouses in him fears of persecution and hostility from her. Depressive anxiety arises at the point where he perceives the mother as a single object having integrated the good and bad aspects. He then fears that the attacks on the "bad object" have destroyed the "good object" as well.
 - v) The theory of "frustrated attachment". The mother is viewed primarily as the source of nurturance and comfort, and the anxiety arising from anticipated separation from her is due to the possibility of the infant's needs remaining unmet (James, 1890; Suttie, 1935; Herman, 1936 cited in Bowlby, 1973).
- These five standpoints all adhere to the belief in a biologically-based foundation for attachment and

separation anxiety and a belief that attachment and reactions to separation from the mother-figure are primarily due to the need for the gratification of instinctual needs.

In contrast to the secondary-drive approach, (as already mentioned in Chapter I), Bowlby (1960; 1973) places attachment and separation anxiety within an evolutionary ethological context. Separation of the young child from the mother threatens his very survival. The mother offers protection and security without which the youngster would be exposed to life-threatening dangers. Therefore the fear of separation becomes an instinctual response to danger. This does not rule out the association and need of the mother as a source of comfort and nurturance. The infant soon learns to associate comfort with her presence and distress with her absence. However, this is secondary to the primary need for attachment as a survival mechanism (Stayton, et al., 1973).

The first indications of separation anxiety have been said to occur as early as three months of age (Yarrow & Goodwin, 1963). Sleep and feeding disturbances and withdrawn apathetic behaviours were the signs of distress observed at separation. However, as Yarrow (1964) pointed out, these reactions are more likely due to an awareness on the infant's behalf of a change in sensory stimulation presented by different caretakers with a diminishment in predictability of their behaviour. As mentioned in Chapter I, before separation anxiety with regard to a particular

figure can occur, discrimination and cognitive awareness of that figure as an external entity in its own right are necessary. Therefore true separation anxiety can only begin in the last quarter of the first year of life. Schaffer (1958) found that separation anxiety evidenced by intense crying, stranger anxiety and clinging to mother did not occur before seven months of age. Stayton, et al. (1973) found support for this time of onset of separation anxiety. Anticipatory thought is also a necessary development in separation anxiety. The young child in the second and third years of life begins to recognise the signs of an impending departure of the mother and depending on the security of the attachment relationship, will react with corresponding intensity.

There are several situations that will evoke separation anxiety in the individual child (Bowlby, 1960, 1973; Yarrow, 1972; Provence, Maylor & Patterson, 1977). First of all, the actual experience of having been separated for any length of time will activate attachment behaviours and evoke anxiety at the slightest indication of future separation from the mother. Second, the use of threats of love withdrawal and separation to discipline a child results in anxious attachment and separation anxiety with fears of abandonment. Third, qualitative deficiencies in the mother-child relationship, eg., unresponsiveness, rejection by the mother in relation to the child, would result in insecurity, feelings of worthlessness and guilt at perhaps having done something wrong. Separation anxiety would

intensify as an actual separation could mean confirmation to the child of his bad feelings.

The latter two situations are concerned more directly with the development of anxious or secure attachment and concomitant degree of separation anxiety resulting from qualitative differences in mothering. The first situation of past or present separation reactions bears directly on the immediate and long-term manifestations of separation anxiety. Therefore, for the purpose of this chapter, the focus shall be on the actual physical absence of the mother and its effects on the development of separation anxiety in the child. The importance of the quality of mothering on separation reactions will be dealt with in Chapter IV.

Drawing from the findings of mother-child separation in primates (Harlow & Zimmerman, 1959) and from observations of human mother-child separations (Bowlby, 1944, 1953; Burlingham & Freud, 1944; Bowlby, Ainsworth, Boston & Rosenblum, 1956; Heinicke, 1956; Robertson & Bowlby, 1952; Schaffer, 1958), Bowlby & Robertson identified three stages in the reactions of young children to separation from their mothers (Robertson & Bowlby, 1952; Bowlby, 1960, 1973). Three stages are: protest, despair and detachment.

Protest is evidenced by excessive crying and acute distress with desperate attempts to search for the mother. There is a strong expectation that she will return. This stage can last from a few hours to a week during

which the child will generally reject substitute figures and their attempts to comfort him. Clinging to these figures does however sometimes occur but does not result in appeasement and settling.

Despair takes over from protest in the form of withdrawn, inactive behaviour and increasing hopelessness that the mother will return despite a continuing vigilance for her. This stage is often misread as the child's acceptance of the situation. However, it is rather a quietening down due to the process of mourning.

Eventually the child seems to lose all interest in his mother and enters the stage of detachment. He begins to smile and socialise and accepts the approaches of the substitute mother-figure. If confronted with the mother, the child often acts as if he does not recognise her and remains disinterested in and indifferent to her. A complete repression of his feelings for her has occurred. If the separation is prolonged and the child is exposed to changing substitute caretakers, he eventually will lose all interest in mothering figures with little concern in his interactions with people in general. A pre-occupation and possessiveness with material objects replaces the need for human nurturance. If the separation is brief and the child is returned to his mother, attachment will be re-evoked even if detachment has occurred to some degree. However, the child will remain anxiously attached and evidence strong separation anxiety for some time until the trust in his mother's availability and responsiveness has been restored.

The existence and process of the three stages has been substantiated by numerous studies dealing with varied types of separation (Heinicke & Westheimer, 1966; Robertson, 1963; Hinde, 1970; Spencer-Booth & Hinde, 1967; Stayton et al., 1973). The salience of each stage is determined by the permanence, duration and repetition of the separation experience (Yarrow, 1964). Brief separations (hospitalisation, vacation, maternal employment) chiefly evoke protest. Separation anxiety is therefore the central focus. Long-term separations (institutionalization) allows for the development through all three stages. The issues of grief and mourning following despair and of defence mechanisms which detachment signals, then become the major concerns (Bowlby, 1960, 1973). As separation anxiety is the variable under investigation here, brief separations are the focus of study. Nevertheless, a short account of the effects of long-term separation is first required as the basic formulations of separation reactions in children were derived from the more extreme circumstances.

2.1.1. Long-term Separation

The most thorough and comprehensive study of the reactions of children to separation was done by Heinicke and Westheimer (1966). They observed ten children placed in residential nurseries for between 12 days and 21 weeks due to family emergency situations. The central factors affecting the responses of the children were - accompanying sibling or familiar possession, duration of stay and the

was affected in that the children's vocabulary initially decreased and there were frequent sleep disturbances. Throughout the separation, emotional turmoil in the children was evident, alternating between excessive cheerfulness and sadness or resignation. Hostility and anger, often self-directed, were very marked.

Anger plays a major role, together with depression, in mother-child separation. Anger in the child is evoked from the frustration or despair following the "abandonment" of the child by the loved mother. However, it may be destructive in that it can permanently weaken the affectional bond if not dealt with tolerantly and with acceptance on behalf of the parent. If not thus dealt with, ambivalence in and a distortion of the relationship results. The child may project his aggression onto the mother alienating himself; he may turn his anger onto himself via self-injury; or he may derogate himself rather than undermine the mother (Heinicke, 1956). Any one of these alternatives would hamper healthy development in all spheres.

On reunion, Heinicke and Westheimer (1966) observed several indications of detachment in the ten children in relation to their mothers. The children who had been separated for more than two weeks evidenced more severe detachment for three days following reunion than those separated for less than two weeks. The former treated the mother as a stranger, did not cling or show any other attachment behaviour. Restoration of the affectionate

attachment relationship sometimes only occurred twelve weeks following reunion. The quality of the relationship prior to and after the separation greatly determined the recovery. The children separated for shorter periods were very ambivalent in their behaviour toward their mothers, alternating between detached, rejecting, defiant behaviour and demanding, clinging, anxious behaviour. Again the manner in which the mother responded (accepting or rejecting via disciplinary action) determined the child's successful resolution of the conflict.

Studies of long-term hospitalization of young children have reported very similar separation and reunion reactions (Robertson, 1953, 1963; Douglas, 1975; Edelstan, 1943, Fagin, 1966; Prugh, Straub and Sand, 1953; Schaffer, 1958). The children evidenced protest, despair and detachment in much the same forms as children in residential care. Recovery depended on duration of stay, quality of mothering and age of child. The long-term effects of separation without adequate substitute care are demonstrated chiefly by studies of children placed in institutions on a permanent basis. Psychopathic-type deviations are frequently reported (Bowlby, 1944; Tizard and Rees, 1975; Levy, 1973, Goldfarb, 1943; Dennis, 1973; Yarrow, 1961; Prugh and Harlow, 1962). Depending on the age of entry to the institution, the psychopathology of these children has been interpreted as being a result of either faulty attachment or of the development of detachment in response to the separation from their mothers and families. On the whole these children

experience difficulty in establishing warm, trusting, intimate relationships. They are often very disruptive socially, displaying much anger, distrust and hostility.

2.1.2. Brief separations

What is meant by brief separations (a few days) is more complex than the mere number of days a child is away from the mother. The subjective experience of the length of the separation to the child is very dependant on the age of the child (Provence et al., 1977). To a very young infant ($\pm$ 9 months) in the process of developing full object constancy, who has no concept of time and who has not fully developed an internal representation of the mother-figure, a few hours away from her in an unfamiliar setting will be extremely distressing. He has no way of determining her continued existence, let alone her return. Anxiety would then enter the attachment relationship. To a slightly older child ($\pm$ 18 months) a few hours would be equally distressing particularly if repeated fairly often. Separation anxiety and anxious attachment would be the resulting consequences. Schaffer & Callender (1959) found that infants under seven months of age adapted fairly easily to the absence of the mother and to care by others. The infants between seven and twelve months, on the other hand, were extremely distressed, marked by extreme stranger anxiety, clinging to their mothers and strong protest at their departures.

Due to a consolidated internal representation of the mother and due to the greater independence of the pre-school child, a stronger tolerance for separation is

developed. Therefore the separation would have to be for longer than a day to evoke protest, despair and detachment.

Brief separations chiefly arouse protest and despair which can co-exist within the same period. The child's separation anxiety is the most subject to increment. Although depression and the repression of the need for human relatedness which follows despair and detachment are far more serious for the development of the child, separation anxiety has been identified as a major factor in the development of psycho-pathology of the neurotic kind (Fairbairn, 1952; Freud, 1953; Benedek, 1956; Freud, 1917; Bowlby, 1960, 1973; Hinde & Spencer-Booth, 1971). On a long-term basis the anxious attachment and the unwillingness to separate from the mother following increased separation anxiety, hampers the individual's exploration behaviour, the growth towards autonomy, and interferes with peer relations.

The short-term effects of brief separation hint at the long-term effects mentioned. Fagin (1958) in a study of hospitalization of one to seven days in two groups of children (accompanied/unaccompanied by mother), found that up to a month after the return home, the children who had been unaccompanied by their mothers evidenced more upset at subsequent temporary brief separations and greater dependency than the children who had been accompanied by their mothers.

Prugh, Straub Sands, Kirschbaum and Lenihan (1953)

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be reasonably well-adjusted. Conversely, the children from unstable families exhibited aggressive behaviour, head banging, fear of strangers and stronger dependency, and at the age of eight were described as aggressive and uncontrolled.

Bowlby (1973) and Moore (1969) warn of the effects of repeated separation in humans, particularly up to three years of age. Bowlby (1973) states : "Although the effects of small doses appear negligible, they are cumulative. The safest dose is a zero dose" (p.76).

Moore (1969) reported that if the mother-child relationship was of a high quality, even several brief separations did not leave the child's attachment to the mother adversely affected despite the distress at each separation. However, Hinde and Spencer-Booth (1971) in their research on primate mother-child separation, found that infants that had been subjected to two six-day separations evidenced more disturbed behaviour in a strange situation, with a decrease in exploration away from the mother, than infants separated only once. The latter were in turn more disturbed than the control group who had never been separated. This tendency was observable, though to diminished degrees, up to one and half years later. Similarly, Douglas (1975) found that a single hospital admission of one week or less in childhood did not result in disturbance in adolescence. However, the findings indicated that prolonged or repeated admission in childhood resulted in behaviour disturbance or delinquency in adolescence.

The issue of maternal employment with subsequent daily separation of mother and child appears central to Bowlby's quotation. The general effect of maternal employment and substitute care-arrangements will be discussed in Chapter III on the importance of the quantity of mother-child interaction. However, the studies dealing directly with the effects of these two variables on separation anxiety will be briefly mentioned here.

The findings concerning the effects of day-care attendance and maternal employment on children's separation reactions are contradictory. Sex, age of initial attendance at a day-centre and differences in research methodology are the major variables accounting for the inconsistency.

Ainsworth (1972) hypothesized that daily separations would have the effect of shifting the young child's set-goal expectations i.e., when and where to expect the appearance and response of the mother. When the mother does not reappear when expected in the day-care setting during day-long separation, the child's attachment behaviours would be activated and separation anxiety prior to the next impending departure would be stronger. Yarrow (1964) pointed out that greater distress at daily separation would only begin to operate at $\pm$ 8 months of age before which time the strong emotional bond (attachment) of the child to the mother would not have been consolidated. Ricciuti (1974) similarly suggested that daily disruption could interfere with the emergence of the affectual bond between mother and child.

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In line with the above expectations, Moore (1965) found that children of working mothers were more dependant in their attachments and exhibited several signs of insecurity and anxiety eg., bed-wetting, nail-biting. Blehar (1974) and Ainsworth and Wittig (1969) found that day-care children cried in response to separation considerably more than home-reared children. Reunion behaviours were also found to be disturbed in the day-care group - the younger children tended to avoid the mother, which Blehar interpreted as a defensive strategy due to anger and anxious attachment in relation to the mother; the older children evidenced angry and resistant behaviour on reunion. Both resistance and avoidance on reunion were absent in the home-reared group.

Blehar (1973, 1974) found that children's degree of protest and avoidance increased with time spent in day-care and concluded that daily separation renders the child more susceptible to distress due to the development of an insecure, ambivalent attachment relationship with the mother. However, contrary to Blehar's findings, Roopnarine and Lamb (1978) found that with continued day-care attendance the differences between the day-care and home-reared groups fell away, i.e., the greater upset experienced by brief separation in the day-care group dissipated. Heinicke and Westheimer (1965) equally reported that day-care children became less concerned with separation from their mothers over time, probably due to the repeated, reassuring return of the mother at the end of each day.

Contrary to Ainsworth's (1972) hypothesis that attachment behaviours would be activated by repeated daily separation, Rubenstein and Howes (1979) found that day-care children cried less than home-reared children, regardless of setting, and that they did not exhibit any greater attachment behaviour such as initiating tactile contact with the caregivers. The day-care group's cognitive development was also not found to suffer, indicated by a maturer developmental level of play compared to the home group. Rubenstein and Howes (1979) concluded that there were no adverse effects on the emotional development of children experiencing day-care separations from their mothers. Peer availability and interaction was found to greatly alleviate the possible negative effects of separation. Peers offer alternative opportunities for sound responsiveness and security in the absence of the primary attachment figure.

Cochran (1977) found that the similarities in separation and stranger reactions in day-care and home-reared groups, were greater than the differences observed. Kagan (1970) who also found no significant differences in distress reactions in the two groups following maternal separation, explained the findings in terms of the similar cognitively developed ability to assimilate new stimuli.

In contrast to Kagan's explanation, Schwarz, Krolick and Strickland (1973), in their study comparing day-care and non-day-care three year-olds separation reactions in a new unfamiliar setting found that the day-care children's

reaction was generally positive. The day-care group, rather than exhibiting withdrawn, clinging behaviour as expected, proved to be superior in peer social interaction and less tense than their non-day-care counterparts. The quality of attachment to mother for both groups was found to be of equal standing, therefore the possibility of the occurrence of detachment in the day-care group as an explanation for the differences in behaviour, is not applicable. Doyle (1975) supported the finding that daily separation does not weaken attachment. Similarly Caldwell, Wright, Honig and Tannenbaum (1970) found that anxious or insecure attachment was not due to day care experience. Prior exposure to a group and to unfamiliar adults were suggested to account for the little distress evidenced by day-care children in reaction to a strange situation. Doyle and Somers (cited in Belsky & Steinberg, 1978) equally found that home-reared children cried more often and played less during separation from the mother than day-care children.

Swift (1964) concluded that the effects of day-care cannot be equated with the effects of institutionalisation. The major difference between the two situations is the fact that the day-care child maintains the basic relationship and identification with the parents, despite repeated, daily separation. Maccoby and Feldman (1972) in their study of home-reared and kibbutz-reared children, arrived at the same conclusion. Kearsley, Zelazo, Kagan and Hartman (1975) equally stated that the psychological processes mediating separation distress are not affected either by

the number of caretakers or by daily maternal separation.

If Swift (1964), Maccoby and Feldman (1972), Rubenstein and Howes (1979) and Kearsley et al. (1975) are correct in their conclusions, one could hypothesize that the quality of mothering and the resulting nature of the child's attachment to the mother prior to and during day-care attendance, rather than the quality of mother-child interaction, would be more important in determining children's separation reactions on a daily and cumulative basis. Yet the fact that evidence of the quantitative disruption of mother-child interaction due to employment and day-care attendance does exist, (Blehar, 1974; Ainsworth and Wittig, 1969) necessitates further enquiry into the issues. This is the direction the present research has taken.

2.2 Stranger Anxiety

One of the consequences of mother-child separation documented in many of the studies on separation anxiety, is an increase in the fear of strange situations and stranger anxiety exhibited by the young child (Prugh et al., 1953; Moore, 1969; Hinde and Spencer-Booth, 1971; Heinicke and Westheimer, 1966; Bowlby, 1973). As mentioned in Chapter I, the use of the mother as a secure base fosters exploration and the ability to approach novel objects, i.e., inanimate and human. Anxious-resistant attachment results in strong separation anxiety which results in greater stranger anxiety (Ainsworth et al., 1977; Stayton and Ainsworth, 1973).

Although closely connected, separation and stranger anxiety have different developmental origins (Tennes and Lampl, 1966). They have a common determinant - fear of loss, and a common cognitive developmental achievement - the discrimination of the familiar from the unfamiliar (Kearsley et al., 1975), but stranger anxiety is equally a reaction to a fear or wariness of the strange *per se*. The strange also evokes curiosity and a desire to explore the unfamiliar object or situation. Fear and curiosity are in dynamic equilibrium. The preponderance of the former is antithetical to growth, the latter facilitative of growth.

The theorizing and research concerned with stranger anxiety parallels that of attachment. Several schools of thought have addressed themselves to the issue of stranger anxiety, resulting in inconsistency and a lack of agreement on the existence, definition, development and manifestation of stranger anxiety.

Anxiety has been defined as a state of anticipated confrontation with a danger stimulus or of preparation for the stimulus despite its anonymity (Bowlby, 1960). Stranger anxiety therefore implies an unpleasant arousal state in anticipation of a confrontation with a strange (anonymous) person. However, most of the studies addressing themselves to this phenomenon judge an infant's response in the actual presence of the stranger - they do not give the infant any signal concerning the impending confrontation, in reaction to which the infant may become anxious. The

negative response of the infant in the presence of the stranger is thus wariness or fear which are reactions to known, specific stimuli.

Fear and wariness are not synonymous. The use of these two terms in studies of infants' reactions to strangers is largely responsible for the inconsistent findings. Wariness has been used to refer to subtle, milder forms of stranger reactions, eg., sobering, any change in facial, vocal and positional expression, and gaze avoidance on the entry of a stranger. Fear refers to the more blatant overt avoidance behaviours, eg., crying, clinging to the mother, freezing and escape attempts (Sroufe, 1977); Bischoff, 1975; Waters, Matas and Sroufe, 1975; Décarie, 1974). The number of children exhibiting the latter are infrequent compared to those exhibiting the former reactions.

Inconsistency in definition and expression of the stranger response is also due to the misinterpretation of a positive overture made by the infant to the stranger (Rheingold and Eckerman, 1973; Haviland and Lewis-cited in Sroufe, 1977). As mentioned, novelty evokes two conflicting behavioural tendencies, fear and curiosity or affiliation. The preponderance of the one system in any situation does not imply the total absence of the other system in all other situations. The child's prior state of tension, his mood, the relationship with the mother in terms of security and comfort, his age and sex and the setting of the research, as well as presence or absence

of the mother, are only some of the variables that need to be accounted for when discussing positive or negative reactions of the child to the stranger.

In addition to the sex of the stranger, the sex of the infant has been noted to influence stranger reactions (Lewis and Brooks, 1974; Décarie, 1974). The inconsistency and ambiguity of sex differences in stranger reactions is evident. Greenberg, Hillman and Grice (1973) found that twelve-month-old male infants responded more negatively to male than to female strangers, while their female contemporaries did not differentiate sex of the stranger in their reactions. Lewis et al. (1973), however, found that girls are slightly more fearful of male strangers than boys but the difference was not significant. Décarie (1974) and Morgan and Ricciuti (1969) reported that boys responded more positively to a female stranger; conversely, Bronson (1972) found that sixteen-month-old girls were more interested in a female stranger than were the boys, and similarly, Maccoby and Feldman (1972) found that two to three-year-old girls were more likely to interact with a female stranger than were the boys.

Décarie (1974), in her review of the research on sex differences in stranger reactions, concluded that there is a slight tendency for girls to react negatively to strangers earlier, more frequently and more intensely than boys, however, the finding was not significant. Schaffer (1966) and Robson, Pederson and Moss (1969) found that the onset of stranger wariness was significantly earlier in

girls. Tennes and Lampl (1964) reported a more intense fear in girls than in boys and Bronson (1972) and Décarie (1974) found that girls were more variable in their responses to strangers than boys.

Although there is a substantial lack of clarity in the above-mentioned studies, the fact that sex differences in infants' reactions to strangers do occur, is certain. Sex was therefore introduced in the present study as an independent variable in relation to stranger anxiety/fear.

Despite the varied approaches to the issue of stranger reactions in infants, only the current Bowlbian-based school of thought has succeeded in overcoming the immobilization resulting from the ambiguity and inconsistency of general findings. The psycho-analytic, ethological and cognitive-developmental approaches have made invaluable contributions to the theory of the developmental establishment of negative stranger responses in children, but they severely lack direction when it comes to the consequences and predictions that stranger reactions may imply. The Bowlbian approach, on the other hand, incorporates many important statements and observations from the approaches mentioned, but their major strategy is the conceptualization of stranger reactions into the total consideration and exploration of human development. Taken from this integrated standpoint, much can be hypothesized and tested in terms of the implications the interaction of several behavioural systems may have for immediate and long-term individual development.

Before expounding the advances of the current theory and research of the latter integrated approach, the contributions of the psychoanalytic, ethological and cognitive-developmental schools will be briefly mentioned.

Those theorists within the psychoanalytic object-relations school who address themselves to the issue of infants' reactions to strangers use the term "anxiety" in the description of an infant's reactions to strangers (Spitz, 1957) Benjamin, 1963). Spitz (1957, 1946) labelled the infant's avoidance of or distress in relation to a stranger as the "eight-month anxiety" which signals the establishment of a libidinal tie to a specific love-object. The term anxiety is used appropriately to describe the infant's response to a stranger. Anxiety is evoked due to the unsatisfied desire and expectation of seeing the mother, and the possibility of having lost the mother as well as in response to the danger signal of the continuing presence of the stranger.

Those of the ethological standpoint relate infants' fear of strangers to the flight response in animals in reaction to members of a different species. Fear and avoidance of the strange function in the need for survival of the species (Freedman, 1961, 1965; Blurton-Jones, 1972; Bronson, 1968). Bowlby can be placed within this approach, however, to do so would neglect the complexity of his contribution and that of his followers (Sroufe, 1977; Bischof, 1975; Waters et al., 1975). Similar to their treatment of attachment theory and as already mentioned, the Bowlbian

school incorporates aspects of several approaches. This shall be discussed shortly.

Hebb (1946) and Hunt (1965), within a cognitive, developmental framework attempted to explain the fear of strangers exhibited by infants in terms of the incongruity hypothesis. The infant's reaction is determined by the degree of incongruity between present sensory input and past, learnt expectations and neurophysiological patterns. If the incongruity is not too great and the infant is aroused, interest and curiosity followed by approach to the stranger will result. However, if the novelty is too incongruous in terms of past experience, duration, interaction and intensity, wariness or fear followed by avoidance will be the outcome.

Bowlby (1973); Schaffer (1963, 1977); Schaffer and Emerson (1964) and the most current researchers within an ethological-Bowlbian framework, Sroufe (1977); Waters et al. (1975) and Bischof (1975), incorporate Piaget's contributions to cognitive development into their approach to the issue of children's reactions to strangers.

Schaffer (1977) outlines the importance of cognitive development in stranger fear. He states that the infant can discriminate familiar from unfamiliar stimuli before $\pm$ 8 months of age. However, motorically the infant does not discriminate, he reaches out impulsively to any novel object placed within his grasp. Therefore discrimination is not sufficient to produce fear/wariness. With the development of visual schemata, object constancy, internal

quarter of the first year of life, $\pm$ 7 - 12 months (Spitz, 1957; Schaffer, 1966; Emde, Gaensbauer and Harmon, 1976; Morgan and Ricciuti, 1969; Skarin, 1977); and the developmental necessities for the emergence of stranger fear, i.e., object-constancy, attachment, visual motor co-ordination. They then take these findings one step further by posing the point of inquiry - what are the consequences of stranger anxiety/fear for other present and future behavioural systems? Like attachment, they stress that the fear of strangers must be viewed as a dynamic organisational construct and not as a static developmental milestone or trait as many have regarded it (Rheingold and Eckerman, 1973; Corter, 1971; Rheingold, 1969; Benjamin, 1961; Kagan, 1970; Stevens, 1971).

Bretherton and Ainsworth (1974) identified three behavioural systems that interact with the stranger fear-wariness system in an organised complementary fashion. These other three systems are : the affiliative system; the attachment system; and the exploratory system.

Confronted by the stranger, both the fear-wariness and the affiliative system are evoked - wariness may be evidenced to greater or lesser degree, as would affiliation e.g., initial gaze avoidance followed closely by a smile or greeting response to the stranger. Bretherton and Ainsworth (1974) observed that those infants who readily approached the stranger with little or no wariness, soon crawled back to the mother from where they could continue their positive overtures. With the mother present the

attachment system becomes operant - the infant uses the mother as a secure base from which to explore the stranger (Main, 1973). Exploration thereby enters the infant's behavioural repertoire. Exploration is of an active, manipulative nature when a novel inanimate object is involved, however, physical manipulation seems to be replaced by visual exploration and observation in response to a novel person (Bretherton and Ainsworth, 1974; Rheingold and Eckerman, 1974). In Bretherton and Ainsworth's study fear of the stranger inhibited exploration of toys and promoted attachment behaviour. Ricciuti (1969) and Bronson (1972) found that when seated in the mother's lap infants responded more positively to strangers, further supporting the secure-base attachment-exploration interplay.

The quality of the attachment relationship has been noted to be of major importance in determining a child's separation anxiety and healthy exploration (Ainsworth, 1979; Ainsworth et al., 1977). Because the behavioural systems (attachment, separation anxiety, exploration, stranger fear) are inter-related, one may deduce that the quality of the mother-child relationship is equally important for infants' reaction to strangers. Similarly, the fact that brief-and long-term mother-child separation affects attachment, dependancy, security and competence, one can assume that a child's reactions to a stranger will also be affected by separation (Sroufe, 1977). With a secure attachment, uncomplicated by conflict

resulting from separation (protest, despair, detachment) the infant will be able to use the mother as a secure base from which to explore the environment and from whom comfort and encouragement can be obtained in the presence of strangers or in strange environments. The issue is not whether strong fear of strangers indicates insecure attachment or vice versa, but rather the focus is on the interaction of the behavioural systems and how they support, complement or inhibit one another (Sroufe, 1977; Bischof, 1975; Waters et al., 1975).

Brief daily separation, i.e., day-care and nursery school attendance may, as outlined above, affect stranger reactions. The research findings have again been contradictory.

Moore (1971, cited in Bowley, 1973) found that children who had remained with their mothers until five years of age and had not attended a preschool centre, in later years were likely to be over-sensitive to criticism and timid with peers. He concluded that from the age of three years, peer interaction in a preschool setting is beneficial rather than harmful.

Similarly Ricciuti (1974), in a study comparing one-year olds who had attended day-care and those who had been reared at home, found that the home-reared were particularly sensitive to and fearful of strangers. Conversely, the day-care children hardly showed negative reactions to strangers. He concluded that previous experience with a variety of strange adults outside the

home was important in determining a more positive reaction to strangers in general.

Contrary to the above findings, Blehar (1974) found that the two and a half-year old day-care children in her study avoided the stranger more frequently than their home-reared contemporaries who eventually accepted the stranger. Blehar therefore concluded that, contrary to popular belief, day-care does not promote independence and social competence in young children.

Morgan and Ricciuti (1969) did not find a significant correlation between three to twelve month infants' stranger responses and the frequency of past exposure to various strangers and strange situations. Bronson (1972) provided support for this finding. Similarly, Ricciuti and Poresky ((1973, cited in Ricciuti, 1974) found no difference in response to strangers when mother was present, between day-care and non-day-care one year-old infants. An important variable determining the infant's reactions was the nature of the stranger's approach, i.e., gradual or sudden. An even more essential factor was the presence or absence of the mother, Ricciuti and Poresky (1973) found that there was substantially (but not significant) greater negative reaction to the stranger immediately following the mother's departure in the day-care group. The mother's return was necessary before the time period of intended absence was complete for several day-care children but not for any of the home-reared group. With the mother's absence, separation effects confound stranger reactions, i.e., the

and the number of actions impeded. The tendency toward aggression following frustration has been supported by Maslow (1941); Rosensweig (1941) and Buss (1966).

Conversely, Barker et al. (1941) and Wright (1943) found that young children were inclined to behave regressively rather than aggressively. In the course of learning, Ausubel (1956) found that frustration becomes associated with fear, insecurity, anxiety, submission, avoidance, dependency, compensatory satisfaction and regression. Sears (1972) indicated several behavioural systems activated by frustration of which aggression was only one. The other behaviours evoked by frustration were inhibition, regression, depression and displacement.

Maier and Ellen (1959) discussed the differences between motivated behaviour and frustration-induced action. Motivation in a problem-solving situation was described as characterized by variability, constructiveness and freedom of choice. Frustration in a problem-solving situation was described as including destructiveness, rigidity and immature behaviour. However, the response to frustration was noted to vary for different individuals according to their past experiences, sex, constitution and present situation. Yet, generally, it was concluded that frustration does result in persistent maladaptive responses when available options are actually present. Maier (1956) termed the perseveration of maladaptive strategies "abnormal fixations" of which frustration is one cause.

There has been substantial evidence indicating sex

differences in the handling of frustration (Goldberg and Lewis, 1969; Jacklin, Maccoby and Dick, 1973; Van Lieshout, 1975; Maccoby and Feldman, 1972; Feiring and Lewis, 1979). Culture plays a part in the expression of frustration by men and women. Maier and Ellen (1959) and Marquart (1948 cited in Maier and Ellen, 1959) found that when frustrated men tend to become hostile and aggressive, whereas women are more likely to cry (regression).

Goldberg and Lewis (1969) reported that boys cope more successfully with frustration than girls. Conversely, Jacklin et al. (1973), Van Lieshout (1975) and Maccoby and Feldman (1972) found that after 18 months of age boys tended to show an outburst of negative emotion in a frustrating situation more often than the females in their study. Maccoby and Jacklin (1974) also reported that the frequency of negative affect in response to frustration declines at a faster rate in girls compared to boys.

Feiring and Lewis (1979) found that age as well as sex was an important variable in determining children's reactions to frustration. At two years of age, when confronted with a physical barrier, girls were found to exhibit greater problem-solving behaviour while boys were more emotionally upset. From 13 to 25 months, the amount of stress decreased in both sexes, indicated by a decrease in crying, self-stimulation and fretting. The researchers hypothesized that this decrease was due to the development of more mature instrumental coping responses. Although there was development in both sexes, girls were

found to have developed at a faster rate with the use of more mature instrumental action and language in solving the frustrating problem. In stress situations girls generally evidenced a higher level of cognitive functioning.

As there still remains ambiguity concerning the influence of sex on the development of frustration tolerance, sex was included as an independent variable in the present study.

So far, definitions of and reactions to frustration have been elucidated and found to be basically in accord. The most important indication to emerge is that the ability to tolerate frustration is seen as a sign of healthy personality adjustment (Zander, 1944; Feiring and Lewis, 1979; Bandura, 1973). Matas et al. (1978) in their study investigating the development of competence and autonomy in young children, found that movement toward autonomy was indicated by a child's ability, when frustrated in a problem-solving situation, to remain involved and to examine alternative strategies before giving up efforts to solve the problem. Flexibility, resourcefulness and the ability to use an adult's assistance without becoming overly dependent were also found to be essential qualities in constructive problem-solving and handling of frustration.

As already noted in the first and present chapters, secure attachment allows for positive emotional development and problem-solving ability (Main, 1974; Sroufe,

1979; Matas, 1977; Matas et al., 1978; Arend et al., 1979).

The aim of the present research, however, is not to examine the relationship between quality of attachment and frustration tolerance, but rather between frustration tolerance and the quantitative and qualitative effects of mothering.

Ausubel(1958) put forward the opinion that a child is not so fragile that occasional or brief postponement of need satisfaction is seriously traumatic, especially if the child's general environment is essentially benevolent. Therefore, if applied to the child attending a half-day or full-day preschool centre, one could assume that even though the caretakers cannot attend immediately to each child's needs in the group, thereby causing frustration, if the child's relationship with the parents, particularly the mother, is characterized by responsiveness, acceptance and understanding, the child's general social-emotional and cognitive functioning should not suffer.

Macrae and Herbert-Jackson (1976) compared a group of home-reared children with a group who had attended day-care for different lengths of time, and found that there were no differences in frustration tolerance between the groups. He did, however, find that the children who had attended day-care for 15 months were superior in problem-solving and the ability to plan (two aspects of the ability to tolerate frustration) to those who had attended day-care for only six months. Schwarz, Strickland and Krolick (1974), in contrast to Macrae and

to know what are reasonable demands on others, and to acquire the ability to be self-critical and to restrict hedonistic urges. He found that permissive parents fail to provide conditions necessary for these developments as they give in too readily to the child's demands. They do not structure the limiting and restrictive aspects of the child's world necessary for the development of realistic goals, accurate self-perception and an awareness of the boundaries of acceptable behaviour in the child. The over-protective parent was found to have the same failing in child-rearing.

Block and Martin (1958) found support for Ausubel's findings in their study investigating the relationship between frustration and ego-control. They found that an unstructured, indulgent and inconsistent environment can prevent the development of ego-control with resulting poor control that continues from infancy through childhood to adulthood. They found that the under-controlled child expresses his desires directly and impulsively, is unable to master his frustrations and does not take social reality factors into account. This results in disorganized inadequate handling of frustration and problem-solving, characterized by destructiveness and aggressive attacks on the obstacle; one could label this process low frustration tolerance. An over-controlled, strict environment was found to result in over-controlling children, who coped adequately with frustration and continued to play constructively but who were too restricted and inhibited in

CHAPTER III

THE QUANTITY OF INTERACTION IN THE MOTHER-CHILD RELATIONSHIP

"What is believed to be essential for mental health is that the infant and young child should experience a warm, intimate and continuous relationship with his mother (or permanent mother-substitute; in which both find satisfaction and enjoyment" (Bowlby, 1951). The research on institutionalized children and on those who have experienced different degrees of disruption in the relationships with their mothers, has demonstrated the necessity of continuity and permanence in that relationship (Rutter, 1972, 1979; Yarrow, 1961; Robertson, 1971; Freud and Burlingham, 1944; Peres and Obers, 1950).

Quantity of interaction has been examined within the maternal deprivation framework. Yarrow (1964) identified four types of maternal deprivation :-

1. institutionalization;
2. short-term and long-term separation from the mother or mother-substitute;
3. multiple mothering;
4. distortions in the quality of mothering.

Within this framework, Bowlby (1969) hypothesized that daily separations (day-care attendance) would have a cumulative damaging effect on child-mother attachment and on general child development. Woods (1972) and Eys and Hoffman (1963) have supported this hypothesis. Since the Second World War there has been an increase in the number of working mothers and the number of day-care centres. The

focus of research in maternal deprivation has thus shifted from the severe situation of total mother absence to the more commonly occurring daily separation (Hoffman, 1961, 1974, 1979; Stoltz, 1960; Harell and Widley, 1975; Tizard, 1975; Jaugh, 1974).

This chapter will concern itself with the effects of : institutionalization; the working mother on the adolescent, the school-going child and the preschooler (full-time and part-time daily separation); multiple mothering; substitute care arrangements, i.e., the nursery school and day-care centre/crèche. Yarrow's (1964) fourth dimension, the quality of mothering, will be the focus of Chapter IV.

3.1. Institutionalization

The residential nurseries and institutions in which most of the early maternal deprivation studies were carried out, were characterized by an impoverished physical environment, constant changes in caretakers, low caretaker-infant ratios, and adequate attention to the physical needs of the infants, i.e., feeding, clothing, toileting, etc., but with little or no social stimulation or interaction. The infants were therefore subject to sensory, environmental and social deprivation (Yarrow, 1964).

Sensory deprivation in adults and animals has been demonstrated to have serious effects, such as hallucinatory behaviour and psychotic-type manifestations, with severe developmental retardation (Davis, 1947; Tizard and Rees, 1975; Stone, 1954; Spitz, 1946; Texler, Mendelson, Liederman and Solomon, 1958). However, environmental and social depri-

vation are more salient in residential nurseries. The need for stimulation and the formation of attachment are both dependent on a baseline amount of interaction between caretaker and infant (Sroufe, 1979). These, in turn, allow for cognitive and social-emotional growth. They are also supportive of one another. The quality and quantity of maternal stimulation in part determine the nature of the child's attachment to the mother; secure attachment allows the infant to use the mother as a secure base from which to explore and to seek further stimulation, resulting in ego-competence and control over the environment. (Ainsworth et al., 1979; Bowlby, 1977). High stimulation by the mother has been found to result in much exploratory behaviour and a low fear of the unfamiliar (Moss, Robson and Pedersen, 1969; Robson, Pedersen & Moss, 1969; Rubenstein, 1967).

Numerous deficits have been reported in institutionalized children who have not experienced a one-to-one relationship with a particular caretaker for any length of time. The degree of disturbance has depended on the length of time spent in the institution, the age institutionalized, constitutional factors and the amount of individual attention received. Yarrow (1961) and Bowlby (1973) also emphasize the importance of the quality of the mother-child relationship and family situation prior to separation of the child from the mother and home.

In comparison with their home-reared counterparts, institutionalized children have been found to be intellec-

tually deficient in several areas (Dennis and Hajarian 1957; Fischer, 1953; Skeels, Updegraff, Wellman and Williams, 1938) : language retardation (Dupan and Roth, 1955; Freud and Burlingham, 1944; Rheingold and Bayley, 1959); defects in time and spatial conceptualization and disturbances in abstract thought (Bender, 1947; Goldfarb, 1943). The intellectual deficits are most probably a result of low levels of stimulation. The deficiencies in social-emotional growth and personality development can probably be attributed more to the absence of an attachment relationship. Bowlby (1944) in his study of juvenile thieves used the term "affectionless characters" to describe the majority who had been reared in institutions or had experienced long-term hospitalization without substitute mothering and who evidenced a "lack of affection or feeling for anyone". Bender (1947) found that children with similar backgrounds evidenced an inability to establish warm, intimate personal relationships and he described this as a psychopathic behaviour disorder. Freud and Burlingham (1944) in their observations of nursery children during World War Two, who had grown up as a group without much adult interaction, found that those children lacked normal social sensitivity and discrimination. They would respond in the same manner to both familiar and strange adults and were unable to respond emotionally in a discriminating appropriate manner. Bender (1947) and Goldfarb (1943) found institutionalized children to be very impulsive, aggressive and anti-social without the normal anxiety or guilt associated with their

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behaviour. They had low frustration tolerance, a lack of goal-directed behaviour and low achievement motivation. Beres and Obers (1950) found a distortion in psychic structure and immature ego and poor superego development in their study of the effects of institutional care on young children.

Tizard (1975) followed up the development of the two-year-old institutionalized children used in their earlier study (Tizard and Tizard, 1971; Tizard and Rees, 1975). They found that at the ages of two and four these children were more clingy and inconsistent in their attachment than home-reared children. At four years of age they were also more indiscriminately friendly to strangers and attention seeking. At the age of eight years they were still described as strongly attached to their housemothers yet they also tended to seek attention excessively from other children. At school they were described as attention-seeking, restless, disobedient and unpopular. Dixon (1978, cited in Rutter, 1979) studied the school behaviour of institutionalized children and found them disruptive, attention-seeking, unpopular and frequently involved in fights with the other children. They approached teachers and peers more frequently than home-reared children but their social interactions were inappropriate and unsuccessful. Rutter (1979) interprets these findings as indicative of a deficit in the development of selective bonding in infancy. Therefore excessive clinging behaviour need not indicate strong attachment.

It can be concluded that the lack of a specific

enduring attachment relationship in the formative years predisposes a child to deviations in the cognitive, social and emotional areas of character and personality development. The quantitative dimension of the interaction between the institutionalized child and the care-taker(s) has been noted to be severely lacking. Therefore modern orphanages and institutions have set about to change this state of affairs. The "cottage system", in which $\pm$ ten children of differing ages live with a housemother or houseparents, allow for a closer approximation of normal family life with greater opportunity for each child to be treated individually and given more attention and time with the adult-caretaker. In general, caretaker-child ratios have been improved together with an attempt to allocate certain children to a specific and relatively consistent caretaker. Hopefully, some degree of attachment will prove to be better than none at all, or rather that the degree of disturbance will be less severe.

3.2. The Working Mother

The number of working mothers throughout the world is steadily increasing (Hoffman, 1979; Etaugh, 1974; Anderson 1980). The full-time and part-time employed mother naturally cannot be available to the child for as many hours daily as the non-employed mother. As already noted, the number of hours spent in interaction with the child is important for adequate cognitive and social-emotional development.

The research on the effects of the working mother on the child is permeated by contradiction and controversy. Hoffman (1974) has warned of the disadvantages facing the child of the working mother due to less time available for interaction and stimulation. Robinson and Robinson (1971) and Woods (1972) found that the total time spent in child-care for non-working mothers was greater than that for working mothers. Conversely, Goldberg (1977) found that working mothers tended to compensate for their longer absence, and time spent in intense interaction with their children equalled that of non-working mothers.

Most of the research has focused on the effects on the adolescent and school-going child. Negative, positive and neutral effects have been reported. It has been suggested that maternal employment affects the mother's ability to develop close, mutually satisfying relationships with the child (Hoffman, 1963; Burchinal and Rossman 1961, Yudkin and Holmes, 1963). Moore (1963) reported that working mothers showed patterns of emotional rejection toward their children. Yarrow, Scott, DeLeeuw and Heinig (1962) found that satisfied non-working mothers obtained higher adequacy of mothering scores than working-mothers. However, unsatisfied non-working mothers scored the most poorly. They concluded that a woman's general role satisfaction increases her effectiveness as a mother. This was supported later by Gold and Andres (1978) and Hoffman (1974). Hoffman (1979) found that overcompensation by working mothers, sometimes due to guilt, often results

in underdiscipline and overindulgence. Moore (1975) indicated an overall negative effect of full-time employment during boys' preschool years. They were found to be more intellectual but more conforming, fearful and inhibited as adolescents.

In terms of sex-role identification, maternal employment has been found to have a negative effect on sons but a positive effect on daughters. Particularly in the lower classes maternal employment seems to undermine the status of the husband and sons do not see their fathers as strong identification figures (Gold and Andres, 1978; Hoffman, 1974; Dits and Combier, 1966). This could be due to the fact that the mother works out of necessity and the father is not the principal bread-winner. Daughters of working mothers in all social classes evidence stronger achievement-motivation, higher self-esteem, they are more extrovert, independent and better adjusted socially than daughters of non-employed mothers (Gold and Andres, 1978; Hoffman, 1974, 1963). Etaugh (1980) and Hoffman (1979) have emphasized the tendency for non-working mothers to overinvest in their children. Without achievement and interests of their own, their children become the central focus. Ambivalence on the mother's behalf toward her child's growing need for privacy, independence and achievement, may then hamper the child's normal tendency toward autonomy and competence as a young adult (McCord et al., 1963). Therefore, for the adolescent, as well as for the mother herself, maternal employment has generally been found to have only a

positive influence (Hoffman and Manis, 1978; Ittaugh, 1980; Gold and Andres, 1978; Hoffman, 1979).

Little or no differences between the children of employed and non-employed mothers have been reported as frequently as the positive and negative effects. Schooler (1972) found that maternal employment had not affected young adult males at all in general psychological well-being. No relationship of maternal employment to personality characteristics (Burchinal, 1963) or to delinquency (Roy, 1963) in adolescent males was found. Similarly no significant differences were found between children of working and non-working mothers in leadership and disciplinary problems (Glueck and Glueck, 1957), self-actualization achievement (Dawson, 1970); home and emotional adjustment, introversion-extroversion, and neuroticism (George and Thomas, 1967); psychosomatic symptoms (Nye, 1963); academic achievement (Schreiner, 1963; Schooler, 1972) and dependency (Siegel, Stolz, Hitchcock and Adamson, 1959).

During infancy and the preschool years the amount of sensory and interpersonal stimulation is a vital consideration for normal cognitive and social-emotional development (Schaffer and Emerson, 1964; Kagan, 1970; Lewis and Goldberg, 1969; Moss, 1967). Mutual responsiveness in the mother-infant relationship is essential for secure attachment of infant to mother as well as for bonding of the mother to the infant (Bronfenbrenner, 1973; Yarrow, 1964; Bowlby, 1958; Spitz, 1945; Hess, 1970). Therefore maternal employment i.e., full-day or part-time absence of

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the mother, would seem to be a highly critical issue during a child's first five years. Yet there has been very little research on the effects of the working mother on the infant and preschool child. The effects thereof are generally discussed in the light of multiple mothering and substitute care arrangements which shall be dealt with shortly.

The studies using maternal employment as an independent variable, in the few preschool studies, have reported contradictory findings. Yarrow et al. (1962) and Von Mering (1955) found that the working mother supports early independence in her children to the degree where the reverse is likely to occur. McCord, McCord and Verden (1962) in their research on dependency in young children, concluded that parental rejection, over- and under-control and punishment for dependency behaviour all encourage dependency. Yarrow (1962) found that working mothers were inconsistent in discipline despite the fact that they tend to be greater disciplinarians than non-working mothers, a finding supported by Von Mering (1955) and Powell (1963). The non-working mother has the time to set limits and to follow-through to see that they are maintained. This may account for Moore's (1964) findings that children of working-mothers conform less to rules and are less upset by parental discipline. Moore (1963) also found that children of mothers who had worked from when the child was very young, showed attachment of a dependent nature to their parents and several symptoms of insecurity e.g.,

nail-biting and bad dreams. He also found patterns of maternal emotional rejection.

Contrary to these findings no differences in antisocial behaviour, anxiety (Nye, Perry and Ogles, 1963) or in dependency (Hoffman, 1960; Rouman, 1957; Siegel, 1959, 1963) in preschoolers of working and non-working mothers were found. However, Rouman (1957) did find that the working mother's children had difficulty in maintaining their independence from others, were less certain of being liked, and evidenced more withdrawal than children of non-working mothers. Chu (1970) in his study of employed and non-employed Taiwanese mothers and their preschool children, reported no differences in the severity of feeding problems, frequency of bed-wetting, aggressive and dependency behaviour or conscience development. The only difference was the higher incidence of attention demands by the children of the working mothers. Gold and Andres (1978) and Gold, Andres and Glorieux (1979) found that children of employed mothers were better adjusted socially but the sons had lower IQ scores than those of unemployed mothers. Less maternal stimulation available is a possible explanation of these findings. Owen and Chase-Landsdale (1978, cited in Ainsworth, 1979) reported that maternal employment was unrelated to preschoolers' competence but they found that the most competent children in their subject sample had mothers who were sensitive to the difficult situation of their children.

No differences were found in the quality of mothering between working and non-working mothers in a study by Cohen (1971) and by Hock (1979). However in Cohen's study, at the age of two years the children of the non-working mothers engaged in more positive interactions, verbalised more and their performance on standardized developmental tests were superior to the children of working mothers. Conversely Schubert, Bradley-Johnson and Nuttal (1980) found no differences in non-vocal communication between employed and non-employed mothers and their 15-17 month-old infants.

There have only been a few attempts to compare the effects of part-time and full-time maternal employment, and again the results are contradictory. Hoffman (1963) listed several reasons why part-time is superior to full-time employment : the mother is less likely to feel the strain of combining two roles in terms of time and energy; guilt should be minimum as part-time work allows for equal involvement in the mothering role; part-time employment is less likely to convey an impression of the father as a failure, particularly as part-time work is often voluntary rather than necessary; by being employed the mother still presents the daughter with a positive identification model; involvement and achievement outside the home allows for a greater sense of self-fulfilment in the mother, enabling her to perform the maternal functions in a confident, self-assured manner; during the child's adolescence, part-time maternal employment allows the child greater autonomy

without the precipitation of a psychological crisis for the mother due to a sense of emptiness, rejection, etc. Gold and Andres (1978) found that both types of employment if involving minimal role conflict can have a positive effect on everyone concerned, however full-time employment was noted most likely to cause strain and thereby have negative effects. Collins (1975) found that there were no differences between children of non-working and full-time working mothers, but that the children of part-time working mothers evidenced poorer adjustment due to the instability of work roles in the family.

The conclusion has been reached that maternal employment is too vague and unspecified a variable to be used wholistically (Hoffman, 1963). The attitude of the husband, the mother herself and other family members to the mother working, family relations and stability, socio-economic status, the age of the child at which the mother started working, and substitute care arrangements are just some of the associated issues that demand recognition and clarification. The sex of the children has also emerged as a determining factor. Stoltz (1960), Hoffman, (1961, 1974), Siegel et al. (1959) and Etaugh (1974) have all emphasized the importance of assessing the effects of maternal employment separately for the sexes. Many have also come to the conclusion that the quality of family relations and in particular of the mother-child relationship is more important than mere availability and amount of interaction (Schaffer and Emerson, 1964; Etaugh, 1980; Hoffman, 1979;

Sanders, 1972; Ainsworth, 1973). It is clearly established that maternal employment is by no means synonymous with maternal deprivation as earlier hypothesized (Hoffman, 1963, 1974; Nye et al., 1963. Yudkin and Holmes, 1963; Yarrow, 1964; Woods, 1972).

Together with the quality of the mother-child relationship (to be examined in Chapter IV), the most important factor which is likely to influence the developing child of the employed mother, is the substitute care arranged. There are several options open to the employed mother : day-care centres, nursery-schools, "nannies", grandparents or other family members at home, and family day-care. What are the conditions offered by each and what effects do they have on the preschool child?

3.3. Day-care and Nursery-School Attendance

Family day-care, whereby a child is placed with the mother of another child together with six to ten children, is not very common in South Africa and therefore shall not be included as an independent variable. Care by a "nanny", grandmother or other family member will also be excluded as the child is still relating on a one-to-one basis and may form a dual attachment; this is quite different from the group-care situation of the day-care centre and nursery-school wherein up to ten or more children may be assigned to one caregiver.

First, the influence of half-day nursery-school attendance will be documented. Second, the more serious and controversial effects of group day-care on young children

will be covered, taking into account the important variables of age at entry, sex of the child, multiple mothering and the effects of kibbutz-style day-care.

The aims of a day-care centre and of a nursery-school are fundamentally different (Swift, 1974). The day-care centre, although often including a half-day nursery-school programme, attempts to offer the child substitute mothering, dealing with basic emotional and personality development. The nursery-school, on the other hand, is basically an educational pre-formal-education institution, focusing primarily on intellectual, cognitive and social development. At no stage is the teacher viewed as a substitute mother-figure.

Research on the two institutions has therefore focused and reported on different dimensions of child development, with a fair overlap. The effects reported of day-care attendance are chiefly in terms of mother-child attachment and the ongoing relationship, reactions to daily separation, reactions to peers and strange adults, dependency, language and intellectual progress. The effects of nursery-school attendance documented deal most frequently with physical and motor development, the development of social skills and adjustment, cognitive and intellectual performance, and linguistic development. What both day-care and nursery-school studies have in common is a quantitative change in the mother-child relationship.

The nursery-school's objective is to provide a setting

wherein young children can develop : (1) warm relationships; (2) confidence and security; (3) active experience based on reality; (4) independence and autonomy; (5) successful peer integration and interaction (Isaacs, 1952). More specifically, the nursery-school offers training in the control and handling of organic needs, e.g., eating, toileting, dressing, etc.; in gross and fine motor development, e.g., jumping, climbing, painting, construction of toy materials; in self-discipline and control; in achieving a balance between dependence-independence, egoism and consideration of others, and in language and intellectual progress (Sears and Dowley, 1963). Obviously these aims are much more specific and structured than those of a day-care centre and therefore the studies comparing children at nursery-school to those at home with their mothers are more clear cut and less contradictory.

Many parents send their children to nursery-school with the belief that they will be better prepared socially, emotionally and intellectually for formal schooling. Andrus and Horowitz (1938) found that the longer children attended nursery-school the more confident they became emotionally, with increasing signs of independence and assertiveness indicated by less conformity to adult authority. Joël (1939) found support for these findings. Horowitz and Smith (1939) equally found that submissive and oppressive behaviour decreased in direct proportion to time spent at nursery-school.

In opposition to these findings, Horowitz (1940)

reported that the longer a child attended nursery-school, the greater was his need for the love, support and attention of adults. Brown and Hunt (1961) also reported negative effects of nursery-school attendance - school teachers rated post-nursery school children less able to adjust to various school activities and playmates and to be personally less harmonious than children who has not attended nursery-school.

In some respects nursery-schoolers have been found to be at an advantage, whereas in other ways they are at a disadvantage. For example, Peterson (1938) found that nursery-school children demanded more attention and competed more but were more cooperative, easier to get on with, responded more to others and contributed more constructively to group activities than non-nursery-schoolers. Skeels et al. (1938) similarly found nursery-school children to be more constructive, spontaneous and to have stronger frustration tolerance than the home group. However, after 18 months to two years at junior school, the non-nursery-schoolers caught up and all differences dissipated so that it became impossible to distinguish the two groups.

Most junior school teachers have reported the same occurrence - superior nursery-school progress does not place a child in a long-term advantageous position. Developmental and maturational factors are primary. Only where the home environment of a child is particularly deprived will nursery-school attendance prevent cognitive and social damage.

There are many other studies on the effects of nursery-school attendance on the social, cognitive and linguistic development of children (Sjöglund, 1969). The findings are generally consistent with those enumerated here and therefore the results of all the research shall not be listed. Further, the focus of the present research is on the mother-child relationship and what a diminishment in time of possible interaction may imply. As nursery-school attendance is only for ± 5 hours per day from the age of three, one could presume that this quantitative disruption would not be terribly damaging. The present research will put this presumption to the test.

Full day-care offers a more complex and interfering introduction to the mother-child relationship and will now be dealt with.

Day-care studies have found that the age of the child at entry is a major variable. Blehar (1974; 1977) reported different effects of day-care attendance on young children who had started either at 25 months or at 35 months of age. She examined play behaviour, separation and stranger reactions in the strange-situation procedure in four groups of children: a 30-month old group who had been enrolled at 25 months in day-care; a 30-month old group reared by their mothers at home; a 40-month old group who had been enrolled at 35 months in day-care, and a 40-month old group reared at home by their mothers.

Blehar found that in terms of play behaviour all groups decreased in activity during the experimental procedure;

however, the older day-care group decreased the most, followed by the younger home group, then the younger day-care group, with the older home-care group showing the least diminishment in play throughout the procedure. In terms of separation reactions, the older day-care group was found to cry significantly more than their home-care contemporaries. The 30 month day-care children also tended to cry more frequently than the 30 month home-care group but the difference was not significant. Oral behaviour, indicative of anxiety, was significantly greater in the day-care groups. Searching was very marked in the 40-month old day-care children and slightly less so for the younger home-care children.

The day-care groups were found to maintain the greatest distance from mother during interaction which was, at first, interpreted as indicative of independence. However, the negative correlation between distance and reunion behaviours, whereby the day-care children evidenced the greatest amount of proximity seeking but also the greatest resistance to the mother's approach suggesting ambivalence, was seen rather to be a sign of a qualitative disturbance in the mother-child attachment relationship heightened by the stress of separation.

The day-care children were equally more distressed by the stranger's approach than the home-care groups. The day-care children, particularly the 40-month olds, were more avoidant of the stranger, their aversion increasing during the separation periods, whereas the home-care groups'

apprehension decreased in subsequent separation episodes.

To summarize, Blehar (1977) found that there were strong indications of disturbance in attachment formation in children attending a day-care centre. They exhibited distant interaction during the pre-separation period, more distress and orality during separation, greater avoidance of and ambivalence toward the mother on reunion and stronger avoidance of a stranger than children reared at home by their mothers. Developmental age differences were found : the younger day-care children (entry at 25 months) were less likely to search for the mother, to protest her absence or to seek proximity on reunion, than their home-reared contemporaries; the older day-care group (entry at 35 months) were more anxious throughout the strange procedure, and evidenced greater proximity to, coupled with stronger avoidance of and resistance to the mother (indicating ambivalent-anxious attachment) than the older home-care group. Blehar concluded that day-care from an early age $\pm$ two years) results in a withdrawal from and avoidance of the mother, and day-care from $\pm$ three years of age results in an anxious-ambivalent attachment relationship. Detachment is a more severe development as it cuts off future close interpersonal relationships. Therefore one could conclude that day-care at an early age presents a greater disruption of the mother-child bond despite the superficial indications of healthier adjustment in the younger group.

Blehar's (1977) results are in accord with those of

Robertson and Bowlby (1952) who found that one and a half to two year old children were more likely to exhibit detachment following repeated separations, while older children were more likely to exhibit anxious attachment behaviours. Ainsworth (1973) found that repetition of minor strange situations sensitizes rather than habituates one-year-olds to separation and therefore interferes with the attachment relationship.

Further support for the importance of the age factor in daily separation reactions comes from a study by Kearsley, Zelazo, Kagan & Hartmann (1975) who reported that infants who started daycare at $3\frac{1}{2}$ months adjusted more easily than infants who started at $5\frac{1}{2}$ months. At 13 months, the reaction became even more negative and several infants refused to eat and fretted so much that their stay had to be terminated.

Contrary to Blehar (1977), Bowlby and Robertson (1952), Ainsworth (1973) and Kearsley et al (1975), Brown and Caldwell (1973) found that early enrolment (before 3 years of age) was not associated with a higher incidence of social and emotional disturbance compared to later enrolment (3 years plus). Overall, they found that day-care did not have a deleterious effect on social and emotional adjustment.

Portnoy (1977) and Portnoy and Simmons' (1978) research also failed to support the hypothesis that different patterns of attachment result from different rearing environments, (home-reared, day-care from three years, family

day-care till one year then day-care from three years). Doyle (1975) reported no evidence of weakened or insecure attachment due to daily separations. The only difference found between day-care and non-day-care children was that the day-care group initiated fewer social interactions than the home-care group. No difference was found in reactions to strangers due to day-care attendance by Doyle (1975) and by Caldwell, Wright, Honig and Tannenbaum (1970). Ragozin (1980) and Wilcox, Staff and Romaine (1976) similarly found that day-care infants of ± 15 months evidenced the expected heightened attachment behaviours and positive affect when reunited with the mother following daily separations. They concluded that day-care did not damage the mother-child attachment relationship. Similarly, Schwarz, Krolick and Strickland (1973) reported that early day-care enrolment (± 1 year) did not lead to emotional insecurity, and that the early group in fact reacted to the new setting with greater positive affect than the group enrolled at 3-4 years of age.

In addition to the influence of age on children's reactions to day-care attendance, the sex of the child has also been found to affect the adjustment and was therefore included as an independent variable in the present study.

Portnoy (1977) reported that day-care males cried more at separation from mother and were more resistant and avoidant of the strangers whereas the day-care females explored to a greater extent throughout the strange-situation procedure and avoided the mother to a greater degree

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on reunion. Moskowitz, Schwarz and Corsini (1977) found that the day-care compared to home-care males functioned more independently of the mother in her presence whereas the home-care group centred much of their attention on the mother. No group differences were found for the females. Cornelius & Denney (1975) supported these findings.

Moore (1964; 1969; 1975) followed up children who had attended a day-care centre and found that the day-care boys became more active, aggressive and excitable whereas the home-care boys became more nervous and tightly controlled with strong identification with adult standards. The female group difference was less clear. Day-care girls demanded more maternal attention and revealed aggressive feelings through fantasy play rather than overtly. Home-care girls became more fastidious about cleanliness and preferred calm unconflicted play activities. The results seem to support Schwarz et al (1974) and Moore's (1975) general findings that home-care children develop stronger consciences and identity with and internalise adult cultural norms to a greater degree than day-care children.

One of the most frequent reasons given by mothers for placing their children in day-care, is the belief that the child's ability to socialize, to share and to become independent will be encouraged by the separation from the mother and early placement in a peer group setting. However, as already mentioned, the so-called greater independence of the older day-care group in Blehar's (1974,

1977) study appeared to be a defensive manoeuvre evoked in the children by the ambivalence entering the mother-child relationship due to repeated separations. Independence was exhibited at the expense of the mother-child attachment relationship and not due to healthy development.

In the same framework Main (1973; 1977) and Blanchard and Main (1979) interpreted the avoidance of the mother in a strange situation as indicative of anger and conflict, not of independence. The failure to exhibit attachment behaviour in a strange situation is not a sign of lack of attachment development, but rather a sign of the inhibition of the attachment system. The continued exploration of the room and objects by their subjects during separation was interpreted as displacement activity (similarly to the Ainsworth et al (1977) findings). Hinde (1970) equated exploration, within a stressful situation, to grooming in non-human subjects as a reaction to conflict and insecurity. Gaze avoidance on the approach of a stranger was also found to be a result of conflict and was an attempt to lower the arousal level in the child (Bronson, 1968; Sroufe et al., 1974; Waters et al., 1975).

Studies focusing on peer relationships and social adjustment have reported confusing results. Schwarz et al., (1973), Mills (1975), McCutcheon and Calhoun (1976) and Fowler (1972) found that day-care attendance had a beneficial effect on the social relationship between the child and its mother, on the development of social

skills and on the child's peer interaction. Not all the studies found such clear-cut effects. Schwarz et al., (1974) reported that the day-care children compared to the home-reared group, were more aggressive, motorically active and less co-operative with adults. They concluded that early day-care has a positive effect on peer adjustment but that it may slow down the acquisition of adult cultural values and norms. Moore (1964; 1975) similarly found that day-care children and adolescents who had attended day-centres as children, were less concerned about parental disapproval. This suggests a possible devaluing of the parent as an identification figure and as someone really concerned with the child.

Rubenstein and Howes (1979) compared two groups of 18-month old infants reared at home or in a day-care centre in terms of social interaction and play behaviour. They concluded that peer interaction greatly mitigates the possible negative effects of maternal separation and diminishment of time in one-to-one infant-mother/caregiver interaction. Greater peer interaction was also found to increase the competence of play and frequency of positive affect. The infant's autonomy from adult caregivers was also reported to be facilitated by the availability of peers due to the provision of alternative social partners. However, whether greater autonomy from adults is a desirable development at all presents a highly controversial query. Freud and Dann (1944) certainly did not find peer attachment to be an adequate substitute for adult mothering.

in normal social and emotional adjustment.

The ability to socialise adequately with peers throughout life is as important as a good relationship between a mother and child. Nevertheless, they are independent functions, the relationship between the two indicating general psychological health, and they are therefore not to be created as substitutes for one another. Blehar's (1977) study indicated that daily maternal separations, despite adequate peer availability resulted in stronger avoidance and fear of strangers rather than facilitated novel interpersonal interaction.

Similarly, Tizard and Tizard (1971) and Heinicke and Westheimer (1965) found that children in brief residential care were more afraid of strangers than children reared at home. Johnson (1977) equally found that the availability of peers did not facilitate social development. No difference in time spent in social and non-social tasks by 3-year-old day-care and home-care children were found. Johnson concluded that social behaviour is primarily a function of age and maturation and that the setting is relatively unimportant - the superiority reported of social and cognitive skills of day-care and nursery-school children over home-reared children has been found to dissipate during the first few years at junior school rendering it impossible to distinguish between the children with and without pre-school experience (Skeels et al., 1938; Sjölund, 1969). In terms of intellectual and cognitive growth Harper (1978) and Winnett, Fuchs, Moffatt

and Nerviano (1977) found no difference between home-care and day-care children. McRae (1975), however, reported that non-day-care children's intellectual performance was superior.

Day-care attendance has been found to have a negative effect on language development (Johnson, 1977; Rubenstein and Howes, 1979; Bates, 1975). Peer interaction rather than adult-child verbal interaction was found by Bates (1975) to have a limiting influence on language production and comprehension. Rubenstein and Howes (1979) distinguished the category of imitating, expanding and recasting to be the only aspect of adult speech to affect infant's responsive speech. They found that the home-care infants responded verbally to a significantly greater proportion of the mother's speech and initiated verbal exchanges more often than the day-care infants to care-givers' and peers verbal overtures. Johnson (1977) also found that although day-care children co-operated with other children to a greater degree, the home-reared children engaged in conversation more often. Johnson attributed this finding to the more frequent encouragement, stimulation and elaboration offered by the mothers compared to the caregivers of the day-centre. Rubenstein and Howes (1979) similarly reported that the day-care children's verbal exchanges were of a factual and informational nature whereas the home-reared children entered into reciprocal discussion as well as factual learning repartees.

The only circumstance in which day-care attendance

has been consistently found to be beneficial is in the case of environmentally deprived children. High quality day-care programmes, i.e., structured intervention rather than general substitute caretaking, are reported to prevent general psychological, social-emotional and particularly cognitive declines (Caldwell et al., 1970; Clarke and Clarke, 1976). However, many day-care centres, including those used in the present research, are poor to average in the opportunities and staff conditions offered to the community.

The biggest limitation of day-care centres is the high turnover of caretaker staff resulting in instability of the general setting for the child. Other weaknesses are the low caregiver-child ratio and the poor training of the caregivers in child development and rearing. Research has been undertaken to determine the effects of instability in caretaking in terms of caregiver consistency and the quality of care offered compared to home-care by the mother.

Cummings (1980) carried out a study to determine whether consistent caregiver presence results in the attachment of the child to the caregiver. He found that the children clearly preferred stable caregivers in the day-care setting but in the strange laboratory setting the caregiver was not treated as a substitute for the mother at all. The children remained upset in the presence of the caregiver in the mother's absence and often did not even approach the caregiver. In the day-care centre, the children accepted the caregivers and did not cry or follow

the departing mother, but the ability to use the caregiver as a secure base in a distressing situation was lacking. One can therefore conclude from Cummings' (1980) research that dual attachment to caregiver and mother does not occur, despite the preference exhibited for stable caregivers.

Support for Cummings' (1980) conclusions comes from research by Ragozin (1980) and Wilcox et al. (1976). Ragozin (1980) found that day-care children clearly preferred the presence of the mother to that of the caregiver. Their attachment behaviours increased markedly following the daily separation and their general attachment was of a normal, expected pattern. Wilcox et al. (1976) compared the effects on day-care 15-month-old children of individual and multiple assignment of caregivers. Like Cummings, they found that the children with a stable, individual caregiver did not show any preferential attachment to that caregiver and interacted equally with all adults available, as did the children with multiple caregivers.

The possibility of dual-attachment raises the issue of Kibbutz-style child-rearing, in which children are cared for by a few caregivers away from the mother for the greater part of the day, from a very early age.

In contrast to the lack of attachment found between day-care children and their caretakers, evidence has been reported for the development of dual attachment of the Kibbutz children to their mothers and caretakers. Fox

(1977) found that kibbutz children related to their mothers and caretakers as "interchangeable attachment figures, providing a secure base for the infant...." (page 1228). Separation protest and proximity seeking on reunion were of equal intensity in response to separation from both the mother and caretaker, but reunion behaviour was endowed with slightly greater positive affect in relation to the mother. The primary attachment figure was still therefore the natural mother.

In order to test the primacy of the mother as an attachment figure in the kibbutz setting, Maccoby and Feldman (1972) conducted a study comparing kibbutz-raised children and children of American nuclear families. They found that the maternal attachment patterns in both groups were similar. On separation from the mother they both cried when left with a stranger and when left alone. The explanation for the similarities found was that on a kibbutz the mother herself cares for the infant during the first six months of life and then sees the child for several hours daily. Another factor accounting for the similarity in attachment of kibbutz infants compared to American infants is that the kibbutz environment provides a familiar setting with familiar peers and adults. Daily absence of the mother is not a true separation and cannot be equated with day-care separation which involves placement away from home and family. Maccoby and Feldman (1972) found that kibbutz children were more afraid of strangers than the home-reared American children and

accounted for this finding by noting the relative absence of true strangers encountable in the kibbutz network, in addition to the familiarity of community members. They concluded that multiple mothering does not facilitate a decrease in stranger fear.

Several studies have concentrated on the longitudinal effects of kibbutz child-rearing and despite Bettelheim's (1971) dire warnings of deleterious consequences, the findings have been optimistic : kibbutz children compared to children of nuclear families have been found to be more emotionally stable and mature (Rabin, 1957); to have greater self-confidence and fewer signs of emotional disturbance (Irvine, 1952); to be more open, friendly, generous and willing to share, to have a more positive attitude to their families and to exhibit less sibling rivalry (Rabin, 1957). A negative finding was that kibbutz children, as a result of the group upbringing and ideology, had more diffuse self-identities (Rabin, 1957).

Many researchers of both day-care and kibbutz environments have come to the conclusion that the quality of mothering, both pre-daily separation and during the separations, is the most vital determinant of whether the attachment relationship and separation reactions become pathological or not (Kagan and Whitten, 1970; Moore, 1975; Main, 1977; Rubenstein and Howes, 1979; Fox, 1977; Hoffman 1979; Wyatt, 1977; Schaffer and Emerson, 1964; Ainsworth, 1973; 1977). Mere availability of a mother-figure is not

sufficient, particularly if the mother is unhappy and under strain in the full-time mothering role. Maternal responsiveness and involvement in child-directed activities other than basic caretaking, are essentials for the child's healthy psychological development. Therefore, the quality of the mother-child relationship, as well as the quantity of mother-child interaction was used as an independent variable in the present study.

The present chapter has dealt with the effects of different degrees of quantitative changes in mother-child interaction. Permanent and long-term separation of mother and child, in the case of institutionalized children, have been found to result in severely disturbed cognitive and social-emotional development. The increasing number of working mothers and the increasing occurrence of daily mother-child separations due to day-care attendance has raised the query of whether the institution-type deviations can be generalized to the less severe situations. The conclusion reached is that this is not the case. Nevertheless, the research findings have been extremely controversial and contradictory, reporting negative, neutral and positive effects of the quantitative disruption of the mother-child relationship due to preschool centre attendance. Sex and age of the child have been found to be important variables. However, the quality of the mother-child relationship has been pointed to as the most vital influential factor. Therefore Chapter IV will concern itself with the quality of the mother-child relationship and its effects on child development.

CHAPTER IV

THE QUALITY OF THE MOTHER-CHILD RELATIONSHIP

In the 1950's and through the 1960's to the start of the 1970's, the effect of parental child-rearing attitudes and behaviours on the child became a central focus of attention (Sears, Whiting, Nowlis and Sears, 1953; Becker, 1964; Schaefer, 1959; 1965; Siegelman, 1965; Baumrind, 1967; 1971; Goldberg, 1977; Becker, 1967).

The validity of conceptualizing the mother-child relationship solely in terms of the maternal contribution was questioned (Bell, 1973; Lewis and Lee-Painter, 1973; Brazelton, 1970; Clarke-Stewart, 1972; Sander, 1969). The relationship began to be seen as reciprocal in nature, i.e., that mother and child are both determining and shaping forces (Stearn, 1977; Hoffman, 1975; Bell, 1974; Martin, 1975; Osofsky and Connors, 1979; Vaughn et al., 1980). However, together with this trend, the need to continue examining certain maternal variables remained.

The earlier research on maternal/parental factors illustrated fairly consistent findings with the dimensions of warmth-hostility and acceptance-rejection emerging as the most enduring and influential for child development (Becker, 1964; Schaefer, 1965; Hatfield, Ferguson and Alpert, 1967; Sears, 1970; Coopersmith, 1967; Graybill, 1978; Clarke-Stewart, 1972). In addition, proponents of Bowlby's (1969; 1973) ethological theory of attachment have focused on the vital importance of maternal acceptance and responsiveness in the development of a secure

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attachment of the infant to the mother (Ainsworth, 1973; Stayton, 1971; Stayton and Ainsworth, 1973; Rutter, 1979; Stayton et al., 1973).

Studies of institutionalised children have found that absence of mothering often results in detachment (Casler, 1961; Ainsworth, 1962; Bowlby, 1953). However, attachment and the development of competence and social-emotional adjustment have been found to depend on the quality of mothering rather than the amount of time spent in interaction with the infant (Bee, 1967; Rheingold, 1960).

Research on the quality of mothering has used $\pm$ three bipolar dimensions - acceptance-rejection, permissiveness-restrictiveness, autonomy-control. The findings have been basically consistent. Parental punitiveness has been found to be positively related to aggression expressed by children (Sears et al., 1953; Becker, Paterson, Luria, Shoemaker and Hellmer, 1962). Winder and Rau (1962) found parental punitiveness to be related to social deviance in pre-adolescent boys. The findings of Chorost (1962) and Hatfield et al. (1967) indicated that authoritarian, strict parental control and low parental warmth resulted in overt adolescent hostility. Conscience formation in the child was a variable heavily examined in the light of parental attributes. Sears et al. (1957), Hoffman and Saltzstein (1967) and Burton, Maccoby and Allinsmith (1961) found that high praise, use of reasoning and little physical punishment resulted in high conscience in the child.

Parental restrictiveness in dealing with children

under the age of six has been found to have an inhibitory effect on the child, resulting in conformity, a reduction in imaginativeness, aggression, dominance and competitiveness with an augmentation of fearfulness and dependency (Baldwin, 1947; Becker, 1967; Baumrind and Elack, 1967; Kagan and Moss, 1962; Sears, 1961; Becker, 1964). At a later age (6-10 years) restrictiveness led to more hostile and aggressive behaviour exhibited by the child. However, this was discovered to decrease in time to be replaced in adulthood by passivity and suppressed hostility with a high level of anger and retaliation in response to frustration. In a warm context, restrictiveness would result in prosocial aggression, whereas in a cold, rejecting climate antisocial aggression would be the norm. Permissiveness, on the other hand, fostered socially outgoing, aggressive, independent and friendly children.

Warmth vs Hostility (Becker, 1964) and Acceptance vs Rejection (Schaefer, 1965) have been used interchangeably, as the definitions used have often overlapped considerably across different research projects (Brownlee, 1980). Warmth has been defined as: accepting, approving, child-centred, offering understanding, emotional support, affection and sharing with a sensitive responsiveness to the infant's signals and provision of a high level of stimulation (Martin, 1975). Hostility includes rejection, ignoring and neglect.

McCord, McCord and Howard (1961) found a significant positive correlation between parental rejection and

aggression in children. Martin and Hetherington (1971) supported this with their findings that aggressive boys had punitive inconsistent parenting with low maternal acceptance. Overall maternal rejection has often been found to be a significant key variable leading to child aggression (Chorost, 1962; Sears, 1957; Martin, 1975; Kagan and Moss, 1962; Lesser, 1952). Clarke-Stewart (1972) Roe (1954); Slater (1962) and Siegelman (1965) reported support for the hypothesis that parental rejection results in withdrawn, introverted children, whereas children of supportive, accepting and warm parents demonstrate ego-strength and extroverted behaviour. Martin (1975) pointed out the possibility that the child's withdrawn, inhibited nature may well provoke dislike on the part of the parent. However, support for the belief that the mother is the more dominant partner and thereby more likely to be responsible for the continuation of inhibition and withdrawal in the child has been found by David and Arrel (1961); Becker (1964) and Bowlby (1969).

Childhood conduct disorders and delinquency have also been examined in the light of parental rejection (Armentrout, 1971; Cord et al., 1959; Shulman, Shoemaker and Moelis, 1962). Armentrout (1971) in fact found rejection to be the most consistent factor in childhood maladjustment, low acceptance leading to high maladjustment. This was supported by Roussell and Edwards (1971) who found rejection played a major role in the development of adult psychopathology.

Conversely, expressed parental warmth, acceptance and involvement has been positively correlated with accelerated intellectual development (Bayley and Schaefer, 1964; Caldwell, 1967; Stern, Caldwell, Herscher, Lipton and Richmond, 1969); improved academic achievement (Hess, 1970; Wolff 1963) increased verbal ability (Becker, 1964) and flexible thinking (Buss, 1966). Maternal warmth has also been found to relate positively to initiative in play exhibited by the child (Antonovsky, 1959); exploration and manipulation (Yarrow and Goodwin, 1965); a better ability to cope with stress (Yarrow, 1963) and the development of internal control (Kathovsky, Crandall and Good, 1967).

From the ethological theory and research on attachment certain maternal qualities have emerged as essential in the development of healthy attachment - sensitivity, responsiveness and acceptance (Ainsworth, 1973, 1979; Ainsworth, Bell and Stayton, 1974; Bowlby, 1969; Honig, 1971; Stayton and Ainsworth, 1973, Blehar, Lieberman and Ainsworth, 1977, Sroufe, 1979).

Acceptance of another as a separate, autonomous individual with particular needs, wishes and motives is a prerequisite for the ability to be sensitive and appropriately responsive (Stayton and Ainsworth, 1973; Porter, 1954). The distortion of the maternal perception of the infant is often due to the projection onto the infant of the maternal ideal-self, leading to a non-recognition and non-acceptance of the infant's constitutional and developing characteristics (Klein, 1952). The child is then likely

to fail to develop feelings of self-worth, of efficacy and a positive self-concept and will tend to comply to other's expectations and demands. Coopersmith (1967) and Baumrind (1967) found parental warmth and acceptance to be a key variable, together with consistency and use of reward in discipline, in determining self-esteem in children. Cold, rejecting inconsistent parents had children who were withdrawn, dependent, passive and hostile. Sears (1970) also found parental warmth to be the most significant contributor to a positive self-concept in children, and Graybill (1978) found that children who viewed their mothers as accepting had high self-esteem.

Maternal sensitivity has been defined as being "tuned in" to the child's needs, wishes and intentions. "Tuned in" refers to the ability to read a child's signals and a knowledge of what and how to meet and satisfy them. Maternal responsiveness refers to the tendency to respond immediately to these signals (Fein and Clarke-Stewart, 1973).

Maternal sensitivity and responsiveness have been found to result in happier vocalization (Martin, 1975); better overall emotional development (Ainsworth and Bell, 1974; Robertson, 1962; Goldberg, 1977), greater verbal ability (Buss, 1966); cognitive development (Lewis and Goldberg, 1968) and intelligence (Weikart and Wiegerink, 1968; Stayton, Hogan and Ainsworth, 1971). Sensitivity and responsiveness have been isolated as essential variables related to infant crying and the balance between attachment

and exploratory behaviours (Ainsworth and Bell, 1970; Clarke-Stewart, 1972; Ainsworth, 1979; Stayton and Ainsworth, 1973; Ainsworth, et al., 1978; Matas et al., 1978).

Mothers' responses to infant crying has generated much theoretical and empirical conflict. Freud (1917, 1926) warned against the practice of responding to all an infant's needs immediately. In his work, "Inhibitions, Symptoms and Anxiety", he stated :

"The undesirable result of 'spoiling' a small child is to magnify the importance of the danger of losing the object (the object being a protection against every situation of helplessness) in comparison with every other danger. It therefore encourages the individual to remain in the state of childhood...." (Freud, 1926, p.167.)

Several social-learning theorists believe that a mother who picks up her crying baby acts as a reinforcer of future crying and dependency (Schaffer and Emerson, 1964; Etzel and Gewirtz, 1967; Gewirtz, 1969; Sander, Stechler, Burns and Julia, 1970). Martin (1975) put forward the hypothesis that maternal warmth and responsiveness to crying carried through to an older age results in dependency rather than extraversion. However, Hatfield, et al. (1967) did not find a significant relationship between maternal warmth and dependency in boys. Independence and warmth in boys was significantly related to a warm mother-son relationship within which the mother rewarded initiative and achievement behaviour.

Overall, the evidence to support the notion that too much attention results in demanding, overdependent,

and exploratory behaviours (Ainsworth and Bell, 1970; Clarke-Stewart, 1972; Ainsworth, 1979; Stayton and Ainsworth, 1973; Ainsworth, et al., 1978; Matas et al., 1978).

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Overall, the evidence to support the notion that too much attention results in demanding, overdependent,

anxious-attachment has been insignificant (Bowlby, 1977). Both Bowlby (1973) and Ainsworth (1969) have attempted to discredit the "theory of spoiling" by emphasizing the intraorganismic conditions that operate in addition to environmental shaping conditions and responses. Ainsworth (1969) points out that one cannot ignore the internal conditions which activated the cry and which may activate future crying, the other attachment or attention-demanding behaviours available to the infant, or the whole context of the mother-child interaction.

With regard to the other attention-demanding behaviours, behavioural research that has attempted to extinguish crying, has found that other communicatory signals have been strengthened (Etzel & Gewirtz, 1967). The findings coincide with the Bell (1971) and Ainsworth et al. (1972) findings that responsiveness to all communication signals, e.g., smiling, eye contact, and vocalization, results in diminished crying, despite responsiveness to crying being maintained.

Bell (1974) and Ainsworth et al. (1972) found that maternal unresponsiveness to crying in the first 3/4 year resulted in an increase in crying in the next quarter. Conversely, the babies who cried the least in the last three months of the first year were those whose cry had been most consistently responded to. Bell and Ainsworth's (1972) findings indicated that the amount of crying was positively and significantly related to a history of maternal ignoring and delay in responsiveness to cries.

Stayton and Ainsworth (1973) reported that the infants in their study who evidenced frequent separation protest, had significant histories of maternal unresponsiveness to crying and insensitivity to signals in general. They interpreted these findings as indicative of the infant's distrust in the mother's accessibility.

Freud (1938) regarded the infant-mother relationship as the prototype of all future relationships. Therefore it can be assumed that if the first relationship with the mother has allowed the infant to trust her accessibility, responsiveness and support at all times, he should be predisposed optimistically to expect those conditions in future relationships (Ainsworth, 1972, 1979; Sroufe, 1979; Stayton and Ainsworth, 1973). The infant would have internalized the "good object" (Klein, 1952); developed "basic trust" (Erikson, 1950); and would have a secure base from which to explore the environment (Bowlby, 1969, 1970). Thus the quality of mothering is of paramount importance.

Ainsworth et al. (1977) in a study using the Strange Situation Procedure found that Group A, the Anxious-Avoidant attached infants, had mothers who seemed to have a strong aversion to close bodily contact, who were rejecting, and often angry yet restricted in the expression of affect. They were relatively unresponsive to infant signals and communications.

Main (1973, 1979) and Blehar, Ainsworth and Main (cited in Ainsworth, 1979) have interpreted the relationship between maternal

characteristics and the anxious-avoidant nature of the babies' attachment. Due to the mother's rigidity and compulsiveness, their dislike of physical contact, their irritation with the babies' demands and marked rejection and unresponsiveness to signals, the experience of close proximity and of being held becomes unpleasant and frustrating for the infants. Their resistant ambivalent behaviour to the mother's attempts at contact are then seen as a defensive manoeuvre against the expression of anger toward the mother as well as protection against further rebuff. Group A babies were observed to be angry infants at the end of the first year compared to Group B and C infants. Bowlby (1969) has stated that rebuff results in intensified attachment behaviour. Sroufe and Waters (1977) presented evidence that Group A infants indeed did experience distress during attachment-provoking episodes, i.e., at separation and reunion. However, their distrust in their mothers' ability to soothe and comfort them, due to insensitivity, unresponsiveness and rejecting experiences in the past, results in avoidance of the mother and displacement of their attachment anxiety. In the strange-situation these infants continue in their exploratory play at high intensity; however, it appears that this is due to displaced anger and anxiety rather than the result of genuine, spontaneous interest. Connell (1976), Main (1977), Main and Londerville (1978, cited in Ainsworth, 1979) and Matas (1978) have noted that there are consistent deficiencies in exploratory behaviour and cooperativeness with inappropriate

aggression in the second year of life of these infants resulting in problems with further relationships with adults.

The mothers of the Group C infants - attached in an Anxious Ambivalent manner - were relatively insensitive to infant signals but were far less rejecting. They showed no aversion to bodily contact but held their babies awkwardly with little affection. Feeding or routine times were almost the only occasion for holding their babies. The infants in general cried more than Group B infants and they exhibited more separation and stranger anxiety. The poor sensitivity and responsiveness of these mothers, manifested by their poor timing in interrupting the children's activities due to a focus on their own needs rather than the child's, results in mistrust on the child's behalf with regard to the mother's accessibility and ability to meet his needs. Ambivalence and conflict therefore enter the relationship, particularly in relation to physical contact. Resistant behaviour representing an angry ambivalence is then observed (Ainsworth et al., 1978). Together with this behaviour, clingy dependency is also noted. This anxious dependence has been seen as a handicap to the infant's ability to separate and explore his environment (Main, 1973, 1977). Group C's cognitive development was thereby slower than that of Group A and Group B. Matas (1978) found they had poor frustration tolerance, were over-reliant on their mothers and generally incompetent in problem-solving tasks. Connell (1973)

reported that these infants were so distressed by novel stimuli that they were totally ineffectual. One could hypothesize the development of a negative self-concept, passivity and dependence in later life.

The mothers of the securely attached infants (Group B) have been found to be sensitively responsive to infant signals and communication, emotionally expressive, to hold their infants tenderly and carefully, to be accepting and co-operative rather than rejecting and interfering (Ainsworth et al., 1978). Bell (1974) found these mothers to be more positive and appropriate in their interactions with the child, to be more affectionate and to have superior communication. Waters et al. (1980) added support to these factors as did Main (1977). Connell (1976) found that mother-child dyads in the B Group had longer periods of interaction than those of Group A and C.

Thus, the maternal qualities of the mothers of the Group B babies have been related to several indications of healthy development in the young child. The infant's interaction with the mother tends to be more harmonious, marked by co-operation and more willing compliance to the mother's requests (Stayton et al., 1971; Matas and Londerville, 1978, cited in Ainsworth, 1979; Matas, 1978). In this sense they are more easily "socialized". They are also more eager and willing to interact with unfamiliar adults (Main, 1973, 1977).

The most important feature together with, and resulting from secure unanxious attachment, is the infant's ability

to use the mother as a secure base to propagate exploratory behaviour. Group B babies explored more effectively and positively than Group A and C infants (Main, 1973; 1977), they were more enthusiastic, affectively positive, persistent and exhibited higher frustration tolerance in problem-solving tasks (Matas, 1978). They also scored higher on developmental tests in the first and later years (Ainsworth and Bell, 1974; Bell, 1974; Main, 1973, 1977). Therefore secure attachment nurtures both social-emotional and cognitive development.

What the infant actually gains from a secure relationship with the mother is a belief in the accessibility and responsiveness of his human counterparts - the ability to trust in himself and in others, a sense of effectiveness and control over his environment together with a feeling of being a valuable, worthwhile member of humanity. He can thereby afford to interact with his environment in a self-confident, independent and self-assertive manner.

Infants assessed at 12 months as securely attached were found at the age of two to evidence a greater amount of symbolic play and in the problem-solving task, to be more enthusiastic, affectively positive and persistent, to be less actively oppositional to mother's help, to be less easily frustrated, and to cry and show negative affect less often, than the anxiously attached infants (Matas et al., 1978; Waters, 1978; Main, 1977). At 3½ years of age securely attached children evidenced greater peer competence and ego-strength/effectiveness than their

anxiously attached counterparts (Waters, Wippman and Sroufe, 1979; Lieberman, 1977). At the age of 4½ to 5½ years children who had been classified as securely attached (Matas et al., 1978) scored higher on measures of curiosity and ego-resilience - "the ability to respond flexibly, persistently and resourcefully" (Block and Block cited in Arend, Gove and Sroufe, 1979; Arend et al., 1979).

To summarise, this chapter has presented a rationale for the use of maternal acceptance and responsiveness as measures of the quality of mothering. The relationship between maternal acceptance and responsiveness and child development and behaviour has been examined. Overall, it was found that accepting, responsive mothers had secure, non-anxious children who explored their environments enthusiastically and whose reactions to maternal separation, strangers, problem-solving and frustration, were appropriate and adaptive. High quality mothering was also found to result in healthy negotiation and resolution of later developmental tasks.

Therefore, one could hypothesize that the average four-year-old's anxiety at separation from his mother and in reaction to a stranger as well as his general level of competence and frustration tolerance, should all indicate the nature of the relationship he has had with his mother. Have the quality and/or the quantity of that interaction indeed influenced the above-mentioned factors? This is the query with which the present research is concerned.

CHAPTER V

RATIONALE FOR THE PRESENT STUDY

The present study concerns itself with the issue as to whether part-time or full-time substitute care, as opposed to full-time mothering, places a child at a disadvantage emotionally and socially. As revealed in the previous chapters, the responses to the inquiry have been extremely controversial and contradictory.

The issues around which most of the controversy has raged are:- (i) attachment, i.e., the definitions of attachment versus dependency, attachment as a unified, static trait versus a behavioural organizational construct (see Chapter I); (ii) separations, i.e., the effects of long-term, brief and daily mother-child separation in terms of separation anxiety and subsequent pathology (see Chapter II); (iii) social development, i.e., stranger anxiety/wariness/fear, peer and adult relationships, frustration tolerance and general coping ability (see Chapter II); (iv) the importance of the quality of the mother-child relationship, i.e., maternal acceptance, responsiveness and sensitivity are more important for healthy child development than other maternal qualities (see Chapter IV); (v) the quality of substitute care arrangements, i.e., child-caretaker ratio, sufficient social and cognitive stimulation, trained staff (see Chapter III).

It has been strongly hypothesized that the development of child-mother attachment is severely interfered with due to the daily separation of mother and child

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