This study focuses upon some aspects of the social behavior of 2-year-old children being reared in long-stay residential nurseries. These children are compared with working class 2-year-old children being raised in two-parent homes in which the mother is not working full-time and there are no older siblings of preschool age. All children were observed within 2 weeks of their second birthday. Each child was assessed in his own living room on these items: (1) response to strangers, (2) response to separation from mother or nurse, (3) mother's enumeration of child's attachment to various persons, (4) behavior patterns such as thumbsucking, nailbiting, (5) emotional involvement of mother or nurse, (6) assessment of child's experiences, (7) number of caretakers, and (8) number of child contacts. The children living at home were significantly more friendly than the nursery children. Home-reared children displayed attachment behavior towards a select circle of individuals, while the nursery children generally showed attachment to anyone who spent time with them. Although the nursery children are in contact with more adults, the home children meet adults in a greater variety of situations. The home children more frequently visited cafes, shops, rode in cars and buses; and nursery children more often were read and sung to, played with sand, dough, paints, and wheeled toys. No evidence of marked behavioral disturbance was seen in either group. (AJ)
The social development of two year old children in residential nurseries.

Jack Tizard and Barbara Tizard.

Introduction.

This report describes one of a series of studies we are currently undertaking into the development of young children in different types of residential care. The overall purpose of the research is to explore relationships between

(a) the organisational structure of different types of residential nursery

(b) the patterns of staff/child interaction found in establishments which are differently organised and

(c) the behaviour and development of children of different ages in differing types of establishment.

The present study focusses upon some aspects of the social behaviour of two year old children who are being reared in long stay residential nurseries. They are compared with working class two year old children who are being brought up in their homes by both parents in a relatively favoured environment, in which the mother is not working full-time and in which there are no older sibs of pre-school age.
Concern in medical and psychological circles about the possible damage to the development of young children growing up in institutions has led in recent years to great changes in the organisation of British residential nurseries. The most important of these have been the increasing emphasis placed on retaining links with the family, and the attempts to approximate institutional care more closely to the family pattern. The typical British residential nursery today contains fifteen to twenty five children; it is organised into a baby unit and two or three "family groups" of six children. The "family groups" contain children of a mixed age range from about twelve months to the upper age limit of the nursery, which varies from four and a half to seven years. Each group has its own suite of bedroom, bathroom and living room, with its own nurse, often called "the family mother", and assistant nurse. Two staff are on duty with the group each day. The living room is furnished in a home-like style, with adult rather than kindergarten furnishings, and is plentifully supplied with toys; outside is a large garden containing further play equipment. Staff on duty eat with the children, and the children have individual clothes and some toys of their own. Most nurseries are characterised not only by a high standard of physical care but also by a concern with the psychological well-being of the children.
Despite attempts to approximate to family life the residential nursery
differs in important respects from a real family environment. In the study
reported below an attempt is made to assess the effects of the residential
environment on the social development of children of two.

Selection of the nursery group. The records of the three largest voluntary
societies in England which provide residential care for deprived children
were searched for children approaching the age of two years whose medical
records showed that they had been healthy full-term babies, with no complications
of pregnancy or difficulties during or after delivery, who had had no
subsequent serious illness or hospitalisation, and who had entered a residential
nursery in good health before the age of four months and had not been
subsequently moved. The experimental group was formed of the first fifteen boys
and fifteen girls located who satisfied these criteria, provided that five of the
boys and five of the girls were coloured. This proviso was made because large numbers
of coloured children are taken into residential care and it was wished to compare
the intellectual development of the white and coloured children. (Tizard and Joseph,
in press).
All but one of the children were illegitimate. Half of them were visited by their mothers, who hoped to care for them later, and did not wish them to be fostered meanwhile. The other half had been offered by their mothers for adoption, but this had not been considered feasible because of the child's colour, or because of some instance in the family history of epilepsy or mental illness. In only one case was this schizophrenia. It was hoped to foster these children eventually. No I.Q. data on the parents were available, and the occupation of a quarter of the fathers was unknown. One third of the mothers were in skilled white collar occupations, mostly as secretaries or bank clerks. All but one of the coloured children were of mixed race, with white mothers.

The contrast group. The files of the local health authorities in two London boroughs were searched for the names of fifteen boys and fifteen girls approaching the age of two who had been healthy full-term babies, and not subsequently hospitalised. In order to ensure some homogeneity of culture only white English children were chosen, and only those where the father was known to belong to the General social classes I, II, III (b) - V, i.e. skilled, semi-skilled and unskilled working classes. For practical reasons two further
provisos were made; the mother must not work full-time, since our visits were made during the day, and there must be no older pre-school sibs (i.e. three or four year olds) at home, since a pilot study had shown that reliable assessment was impossible if there was an older pre-school child present. One third of the group were in fact only children, eight had a younger sib, and the rest had older sibs at school. Not all of the families approached initially by post took part in the study. Despite subsequent visiting most of the non-respondents could not be contacted, probably because the mother had gone to work or the family had moved. Three refusals were obtained. The group is thus in no sense a sample, but may be considered illustrative of small well-functioning London working class families. Two of the fathers were unemployed, and the housing was often poor by English standards - nearly half of the families had no access to a bathroom, more than half had only one bedroom, so that the children slept with the parents, and two families were living in condemned housing that was about to be demolished. Most of the families lived in two or three rooms in a house shared with one or two families; only 30% lived in blocks of flats.
Assessment procedure. All children were seen within two weeks of their second birthday, and equal proportions of home and nursery children were seen in each of the two weeks preceding and following their birthday.

All the children were assessed in their own living room, with their mother or most familiar nurse present. 60% of both home and nursery children were visited by one experimenter, and 40% by the other. Both experimenters were women.

Response to strangers. For the first five minutes of the interview the child sat on his mother's or nurse's lap, whilst she chatted to the experimenter. The experimenter then made a series of standardised overtures to the child and rated his response. The assessment scale was adapted for use with two year olds from one devised by Rheingold (Rheingold & Bayley, 1959) for younger children. First the experimenter turned to the child, smiled, and said "Hullo". Secondly, she opened a picture book and said "Would you like to come and look at it?" Thirdly, she smiled at the child and said "Would you like to come over here and sit on my lap and see?" At each of these three stages, and also at the end of the initial five minutes chat, she rated the child's response to her on the following 7 point scale:

1 - cries or runs away; 2 - turns head away [definite avoidance] or clings to mother;
3 - sobered, stares solemnly; 4 - no response; 5 - looks coy, or half smiles / comes reluctantly with urging; 6 - definitely smiles / comes straight away without smiling;
smiles and vocalises / approaches smiling. Possible scores thus ranged from 2 to 28. At the end of the interview the final two stages of this test were repeated.

Response to separation. After a few minutes further conversation, the experimenter asked the mother or nurse to leave the room briefly, with the door ajar. The child's response to this separation was then rated on the following four point scale; 1 - child follows, looks miserable. 2 - child follows, no emotion shown. 3 - child stays, looks miserable. 4 - child stays, no emotions shown. At the end of the interview the mother or nurse was again asked to leave the room, and the child's response was rated.

Attachments. These were assessed by the use of a scale adapted for older children from one devised by Schaffer for babies (Schaffer & Emerson, 1964).

The mother or nurse was asked the following questions; 1 - "Is there anyone the child is particularly fond of?". 2 - "Who does he go up to of his own accord and climb on their lap?". 3 - "If he is sick or hurts himself, does he go to any particular person, or ask for them?". 4 - "Is there anyone he follows round the house, because he wants to be with them?". 5 - "Does he cry or
protest if any particular person leaves the room?". 6 - "Does he run to be picked up if anyone enters the room?". 7 - "Does he cry or protest if any of these people leave the house?". 8 - "If any of these people had been away (a) for the day (b) for several days, is he clinging or difficult or hostile?". The first question was treated as a lead-in, and not scored. That is, in order to be included in the list of preferred persons, the child must show one of the specified forms of attachment behaviour to substantiate the statement that he was "Fond of him". Anyone mentioned in response to questions two and three was given a score of one. Each of the remaining questions was asked about all the people so far named and others, e.g. "Does he like to follow you around the house?...and his father as well?...what about his grandmother?...would he follow his grandfather?...does he like to follow anyone else?", and the answers for each person were rated on a 4-point scale from 0, never or hardly ever to 3 - usually. A list of preferred persons was thus drawn up for each child, on the basis that he showed at least one of the specified forms of attachment behaviour in their presence. The preferred persons could receive scores ranging from 1 to 20, and the person with the top score was the child's favourite.
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Behaviour patterns in certain key areas were investigated by asking the mother or nurse the frequency of such habits as thumb-sucking, nail-biting, head-banging, and rocking; how often the child had wet and soiled himself in the past two weeks; how often he had woken in the night in the past two weeks; whether he had food fads, messed about with his food, refused to try new food, or demanded to be spoonfed; whether he showed acute fear in any situation; how often he had temper tantrums and whether he was a problem because of destructiveness, jealousy, or attacks on other children.

Emotional involvement of mother or nurse. An attempt was made to measure this by asking whether the child ever really upset them, and whether they ever felt really cross with him or worried about him.

Assessment of experiences. The mother or nurse was then asked whether the child ever had certain experiences, and if so how often, and her answers were rated for frequency on a three or a five point scale. The experiences enquired for fell into three categories: (1) - play experiences, such as the frequency of walks, or playing outdoors, watching T.V., being read to and sung to, and using certain play materials such as large wheeled toys, pencils or crayons, water and sand; (2) - social experiences, such as visiting other houses and having a meal with another family; (3) everyday aspects of the adult world, such as shopping, going in cars, buses and cafés. Finally the mother or nurse was given a diary for the next seven days, and asked to make a note of all adults with whom the child came into contact.
number of caretakers. Enquiries were made about the number of people who had
looked after the child, i.e. given him general care including feeding, bathing
and putting to bed - a) since the age of four months b) in the past six months.
Only people who had cared for him for at least a week, or for at least one day
a week for a period of months were included.

number of child contacts. Enquiries were made about the number of children
with whom the child had played in the past two weeks.
RESULTS:

Response to strangers. The children living at home were significantly more friendly than the nursery children. After the experimenter had been in the room for five minutes 86.7% of the home children approached her when invited, but only 50% of the nursery children. ($X = 7.7, p < .01$) 53.3% of the home children then climbed on her lap but only 26.7% of the nursery children ($X = 4.44, p < .05$).

The mean score of the home children on the whole scale was 19.17, 64.09, and of the nursery children 15.63, 63.83, ($t = 3.34, p < .01$).

Although wary, none of the nursery children showed marked fear until they were invited to sit on the experimenter’s lap, when 20% of them cried and ran away. No home children did this. By the end of the session, when the invitation to approach the experimenter was repeated, the nursery children had become much bolder and 80% were willing to do so. However, whilst 30% of the home children approached eagerly on this occasion, none of the nursery children did so ($X = 8.37, p < .01$). Similarly whilst 36.66% of the home children smiled and chatted as they climbed on the experimenter’s lap at the second invitation, no nursery child did this cheerfully, ($X = 27.60, p < .001$) and two ran away and cried.
Response to separation. When left alone with the experimenter six nursery children ran out of the room on the first occasion, but no home children did this ($\chi^2 = 4.63, p < .05$). At the end of the session five nursery children were still unwilling to stay alone with the experimenter, but all the home children stayed cheerfully ($\chi^2 = 3.39, \text{N.S.}$).

Attachments. Home children. The mean number of persons the home children were said to show attachment behaviour towards was $4.13, \sigma 1.68$. Parents and grandparents were mentioned most often. In 20 cases the top scorer was the mother, in another five cases both parents scored equally, in four cases (two boys and two girls) the father received the highest score, and in one case, where the father was away from home, the maternal uncle. The most frequently reported expression of attachment was following round the house; $66.7\%$ of the children were said to follow at least one of their favourite persons most of the day, and a further $20\%$ were reported to follow her several times a day. Distress at brief separation from their mother, which is such a marked feature of younger children, was already waning in these two year olds.

$50\%$ of them were reported as usually crying if they saw her leave the house, and a further $10\%$ sometimes did so. However, only $6.7\%$ of the children usually cried
if their mother left the room, although a further 36.7% sometimes did so.
Only 13.3% of the group sometimes ran to be picked up if their mother came
in the room, and none did so often. A third of the children were sometimes left
for the day by their mothers with friends or relatives, but only one child was
described as clinging or difficult on her return. None of the children had
experienced longer separations within the past two months.

Attachments of nursery children. A mean number of persons to whom the child
showed attachment behaviour could not be calculated for the nursery children,
since in every case the list of preferred persons included "anyone he knows well".
This was an ill-defined but numerically large category, comprising most of
the nursery staff including cleaners and gardeners. The readiness with which a
person was admitted to this category varied. Thus in some cases children were
described as crying when "anyone who had spent a little while playing with them"
left the room; but more often their attachments were confined to "anyone he knows
well: but he won't go willingly to new staff for a week or so".
The number of persons the nursery children showed an attachment to was therefore large, but within this group all of them had preferences. The favourite person [i.e. the top scorer on the questionnaire] was usually someone whom the child saw somewhat infrequently. Thus if the child's natural mother visited at least once a week, she was always described as the preferred person; the child would be very excited to see her and distressed when she left. However, if her visits were less frequent the child would usually run from her and cry when she arrived. In many of the nurseries a "special nurse" system operated. Each member of staff had one or two children whom she paid special attention to, taking them out in her free time, buying them little presents, sometimes putting them to bed, or taking them to her home for a week-end. Since the staff and child were rarely in the same group, on most days they would probably only spend a few minutes together. The special nurse was invariably the child's preferred person, unless his mother visited frequently, but as described above the children also showed attachment behaviour to numbers of other staff.

The intensity of the attachment behaviour to both the preferred person and the rest of the staff was much greater than that shown by the home children. Thus, 33.3% of the nursery children were said to usually cry when their favourite person left the room, and a further 46.7% to sometimes do so; 30% were said to sometimes cry when any staff working with them left the room. 60% of the nursery
children were said to usually run to be picked up when their favourite person came into the room, and a further 33.3% sometimes did so. Over half the children [53.3%] were said sometimes to run to be picked up when any staff they knew well came in the room. On the other hand according to the nurses the children accepted that they go off duty: and 18% of the children were said to cry if they saw their favourite nurse leaving the house. They were unlikely to know if she was out for the day, but 26.7% were said to be clinging or to "play-up" on her return after a few days holiday. Following around the house, a characteristic form of behaviour in home-reared two year olds, was not allowed in most nurseries.

Contacts. 66.7% of the mothers and 76.7% of the nurses completed detailed records of the child's contacts with adults during the week following our visit. The mean number of casual contacts [i.e. brief exchanges with strangers, e.g. in shops and buses] was 9.4, 5.7 for the home children, and 8.3, 6.9 for the nursery children. The range in both groups was from 2 to over 20, and it seems certain that these contacts were often under-reported. Aside from casual contacts, the nursery children came into contact with more adults than the home children.
The mean number of other contacts, i.e. with familiar people, or longer contacts with strangers, was 12.65, 6.5.96 for the home children, and 21.92, 67.02 for the nursery children. \( t = 3.98, p < .001 \). During the course of the week most nursery children would be spoken to by all the nursery staff, including cooks and cleaners, and by voluntary workers, and in some cases friends and relatives of other children and staff. The home children would typically see their grandparents, aunts and uncles, neighbours, and parents' friends.

Although the nursery children are in contact with more adults, their adult world is relatively undifferentiated in that the majority of people they know are uniformed or aproned females. Moreover the home children meet adults in a greater variety of situations. During the course of the week all the home children visited at least one other house with their mothers, and 60% of them spent at least one period on their own with a relative or neighbour whilst their mother went shopping. No nursery child visited another house in the course of the week.

Experiences. Confirmation of the more limited neighbourhood circle of the nursery child was obtained for the whole sample by questionnaire. 90% of the home children, but no nursery children were said to visit another house at least once.
a week, 43.3% of the nursery children had not, in fact, been in another house for at least six months. The nursery staff made determined efforts to widen the children's experiences in other directions, but the mean score of the home children for "experiences of the adult world", (frequency of visits to cafes, shops, rides in cars and buses ) was significantly larger. \( t = 4.89, p < .001 \). On the other hand the mean score of the nursery children for play experiences was higher, although not significantly so, than that of the home children, \( t = 7.0, p < .001 \). Nursery children were more often read to and sung to than the home children, and more often played with sand, dough, paints, and wheeled toys.

**Behaviour Patterns.** No evidence of marked disturbance was seen in either group. 90% of the nursery children, but only 33.3% of the home children, were said sometimes to suck their thumb or finger \( (x^2 = 20.4, p < .001) \). However, 46.7% of the home children still had a bottle and 30% a dummy, whilst no nursery child was offered these substitutes. There was no significant difference in the incidence of nailbiting, tics, nervous habits, headbanging, or rocking reported by mothers and nurses, although playing with genitals was reported significantly more often by mothers \( (x^2 = 8.15, p < .001) \).
There was no significant difference in the incidence of mealt ime problems—refusal of new foods, demands to be spoon-fed— which were infrequent in both groups. Sleep disturbances were much commoner amongst the home children; 36.7% of the home children, but only 3.3% of the nursery children, had woken during the night at least five times a week in the previous two weeks. The incidence of temper tantrums was high in both groups, but did not differ significantly between them [at least one tantrum a day; home group, 43.3%, nursery group 53.3%]. Fewer nursery children were toilet trained; 93.3% were still wet at least once a day, but only 60% of home children [X^2 = 9.32, p < .01] and 86.7% still soiled themselves at least once a week but only 56.7% of home children [X^2 = 6.65, p < .01]. Destructiveness (tearing up books, scribbling on walls, etc.) jealousy, fearfulness [panic in certain situations, e.g. when meeting dogs] were reported with equal frequency in both groups.
Emotional involvement of mothers and nurses.

Not unexpectedly, significantly more mothers than nurses said they often felt really cross with the child [66.7%; 26.7%, $\chi^2 = 9.64$, $p < .01$], that he often really upset them [36.7%; 13.3%, $\chi^2 = 4.36$, $p < .05$] and that they didn't always feel happy about the way they had handled him [56.7%; 23.7%, $\chi^2 = 6.94$, $p < .01$]. More mothers than nurses smacked the child at least once a day [56.7%; 26.7%, $\chi^2 = 5.55$, $p < .02$] and told the child they wouldn't love him if he was naughty [23.7%; 3.3%, $\chi^2 = 5.19$, $p < .02$].

Numbers of caretakers.

The mean number of persons who had looked after the nursery children for at least a week since the age of four months was 24.37, $\sigma$ 5.52, and in the last six months, 11.33, $\sigma$ 3.55. The comparable figures for the home children were 2.23, $\sigma$ 0.57, and 2.17, $\sigma$ 0.70.

Number of child contacts.

76.6% of the nursery children had played with eleven or more children in the past two weeks. This was because all the children in the nursery usually played together in the garden, and because at certain times of the day two "family" groups might be pooled. Only 20% of the home two year olds had played with as many as eleven children ( $\chi^2 = 22.85$, $p < .001$).
DISCUSSION.

The gross emotional disturbance which had been described in children reared in large groups in inadequately staffed institutions (e.g. Flint, 1967) was not found in these two year old children. To be more precise, disturbance was not reported by their nurses, but in subsequent observational studies in thirteen residential nursery groups (Tizard, Joseph, Cooperman & Tizard, in press) nothing was seen to contradict this finding. Gross disturbance amongst young nursery children, in the authors' experience, is not seen in children who enter residential care of the type described in early infancy. In certain respects, however, the development of the nursery children differed from that of home-reared London working class children. Fewer two year olds had achieved control of their bowels and bladders, despite systematic attempts at training, usually begun at the age of 9-12-months. Language retardation was present but was not in most cases severe (Tizard and Joseph in press). Thumb and finger sucking were much commoner in the nursery, but many home children still had a feeding bottle or dummy. Sleep disturbances were rare amongst nursery children. The major area of difference between the two groups lay in their relationships with their caretakers and with strangers. Nursery two year olds were less willing to approach or to stay alone.
with strangers than were home-reared children, and with familiar adults they were in certain situations more clinging. Their social behaviour might thus be considered in some respects immature, except that unlike a home-reared 16-month old child they tended to show attachment behaviour to a wide range of adults. However, their attachments, although somewhat diffuse, were not indiscriminate: each child had a hierarchy of preferences, as did the home-reared children.

Despite attempts to approximate to family life differences between nurseries and real families are so numerous that a variety of possible explanations for the atypical behaviour of nursery children can be advanced. Among the differences measured in this study were the lack of neighbourhood experiences of nursery children, the multiplicity of their caretakers and peer contacts, and the lesser emotional involvement of their caretakers. The shyness of the nursery children is most readily accounted for in terms of the narrower range of their social experiences. Although they have contact with larger numbers of both adults and children than do home children, these occur mainly within the physical setting of the nursery, with the child in his familiar peer group.
Our experimental social situation, in which the child was alone with two adults, one of whom was a stranger, is one which is much less familiar to the nursery child than the home child. The home-reared two year old comes into contact with fewer people, but he is used to meeting them in a wider variety of settings, and even to staying alone in other peoples' houses. Some support for this argument comes from the significant correlation found within the nursery group between experiences of the outside world [visiting, going to shops, etc.] and willingness to approach a stranger. \[ r = +.427, \ p < .02 \].

The difficulty of the nursery children's attachments is not unexpected in view of their multiplicity of caretakers. In all the nurseries which we visited large numbers of staff care for the children, on average, twenty four nurses had looked after each of our two year olds. During a five day observation period we found than an average of 5.6 nurses \[ \text{range } 4 - 14 \] had worked on each group. This figure excludes night staff, unless it was their responsibility to dress the children, and nursery school staff. The large numbers stem in part from the practice of partially staffing the nurseries with students who work only...
three days a week, and who move from group to group. However, aside from this, an ever decreasing working week, lengthening staff holidays, and the needs of staff to move because of marriage, promotion, or a variety of personal reasons, mean that multiple caretaking is an inescapable aspect of residential care.

No attempt was made in any of the nurseries we visited to reduce the number of adults handling each child by assigning the care of particular children within the group to particular members of staff. Thus a child might be dressed by a different nurse each day, and if four nurses worked on one group during the day a child might be dressed by one, toiletted by a second, taken for a walk by a third, and put to bed by a fourth. It was not uncommon for child care tasks to be allocated by seniority - e.g. the most junior nurse on duty would be assigned the task of dressing any child who had wet his bed, or changing children who were subsequently wet or soiled. It is therefore not surprising to find that the nursery children's attachments were more diffuse than those of home-reared children; the two year old nursery child cannot predict who will look after him each day and indeed any one of the nursery staff may at times care for him.
The caretaking in the nurseries we visited tended to be not only multiple but detached. That is, the staff ten to avoid prolonged verbal or physical one-to-one interactions with children, and to discourage, usually by distraction, any attempts by a child to engineer such an interaction. In a subsequent five day observational study in thirteen nursery groups staff talk was found to express pleasure or affection only 2% of the time, and displeasure or anger only 3% of the time. Affectionate physical contact was seen only 1.3% of the time. In reply to questioning, few nurses admitted to experiencing the frequent feelings of anxiety and hostility towards their charges which many mothers described. During testing we frequently had to ask mothers not to prompt, assist, or berate their children, but this was never necessary with the nurses.

There would appear to be no inevitable reason why multiple caretaking should be impersonal, but we found the social climate of the nurseries implacably opposed to the development of one-to-one relationships, outside the "special nurse" system. The problem of what kind of relationship should exist between children and the staff caring for them was discussed with the matron in charge of each nursery visited.
Almost all of them believed that close relationships should not be allowed to develop, because these were potentially damaging to the children and created difficulties for the staff. It was argued that if a child became closely attached to the nurse who gave him day-to-day care, he would suffer a great deal when she left or went off duty, and he would find it difficult to relate to his mother or foster mother if he left the nursery. From the point of view of the staff, since they work for a limited number of hours each week, and in addition since most nurseries are training centres, numbers of different people must handle the children and their work is made very difficult if the child cries for one particular nurse. Moreover, if the staff working with the children are encouraged to become “involved” with them acute rivalry problems develop within the group and the children become more difficult to manage. The “good” nursery child is therefore one who makes few demands on the staff, but responds to all; the “difficult” child who makes demands of a particular nurse is considered spoilt, and both nurse and child are unpopular.

In this situation one would expect the children’s attachment behaviour to be not only diffusely directed but very weak, if not indeed extinguished from lack of reinforcement. In some nurseries, in fact, to year olds appear to be uninterested in adults; they spend the day playing in a self-contained and usually contented manner with toys. However, our study showed that the attachment
behaviour of the majority of the nursery children was more intense than that of the home children, unlike the home-reared two year olds they often ran to be picked up when staff entered the room, and cried when they left. To account for this finding one must suppose that some intermittent reinforcement of attachment behaviour occurs; it is especially likely to occur in those nurseries with a "special" nurse system. This system represents an interesting attempt to compensate for impersonal group care by giving each child a nurse who is responsive to his demands outside the group situation. If the group nurse is like the metapalet in a kibbutz nursery, who gives impartial but impersonal care, the "special" nurse corresponds to the kibbutz mother. She does not work on his group, takes no responsibility for his daily life, but only "sees him to spoil him", as one put it. The depth of the relationship is very varied. Unlike the kibbutz mother, however, the "spécial" nurse spends minutes rather than hours each day with "her" child, appears at irregular intervals, disappears for days or weeks when off duty, and leaves the district when her training is complete.
Assuming that the child's attachment behaviour is intermittently re-inforced, it seems likely that it is tied to the immature form of demanding attention when the adult enters and leaves the room by the lack of autonomy of the nursery child. In the private family the two year old has typically long ago abandoned crying when his mother leaves the room; instead he follows her round the house. In almost all nurseries the two year old is not allowed to follow staff, but may only leave the room "en bloc" with his group for a particular purpose. The home-reared two year old can confidently predict the return of his mother, should he leave the house without him. In the nursery the staff come and go at irregular and unpredictable intervals, often disappearing for days, or weeks, or indeed for ever. In these circumstances the two year old has as little control over the source of his social satisfactions as a non-mobile infant, and it is not surprising to find that his attachment behaviour assumes an immature form.

We found no evidence that the nursery child, at two, attempts to form attachments to other than adults. All the children had one or two soft toys of their own, but only 20% of them insisted on taking them to bed, and it was rare to see toys being carried around: the most frequent bedtime comfort was thumb sucking.

At twenty four months other children were seen as rivals or ignored. In our observational study we found that nursery children aged 24-29-months, although always surrounded by other children, spoke to them only 3.6% of the time.

These observations relate only to children of twenty four months in a particular
social organisation. We have reason to believe that the children's relationships with each other, and with adults, change as they get older, and that the nature of their social relationships depends on the way in which residential care is organised rather than on "institutional" care as such. In subsequent work we have attempted to compare the behaviour of children who are being cared for in nurseries which have differing social structures.
References.


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