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AUTHOR Johnson, Joan E.; Ricciuti, Henry N.
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ABSTRACT

This study analyzes infant distress (fussing and crying) and the resulting responses of caregivers in an infant day care nursery. Six babies (mean age 4.8 months when the study began) and their caregivers were observed in seven sequences of observations over a total span of 10 months. Each sequence of observations took place on six days during a 2-week period. In the last month of observation two babies had left the nursery, reducing the sample to four. The observational method used for collecting data was basically an event sampling procedure. For each distress episode, the observer recorded the baby's name, the nature of the distress (fuss, cry or scream), the name of the caregiver who intervened and the specific actions she took to soothe the infant (from a behavior list), and when the distress had ceased for as long as thirty seconds (the end of that episode). The list of caregiver behaviors was based on pilot observations indicating which caregiver behaviors were most likely to occur when a baby showed distress. Results are discussed for the frequency and duration of fussing, crying, and mixed distress episodes, and for caregiver latency of response, nature of initial response, number of interventions, and order of appearance of caregiver responses within a single intervention. Tables and graphs of data are included. (SB)

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Crying and the Relief of Distress in an
Infant Day Care Nursery

Joan E. Johnson and Henry N. Ricciuti

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Since it is becoming more and more common for parents to have their young babies cared for outside the home at least part time, concern about the quality of the environment in day care situations is understandably great. One of the main concerns of caregivers responsible for groups of young babies is to understand and administer to their individual needs in a sensitive manner. Many of these needs can be taken care of before the infant has a chance to become uncomfortable or bored, but often this is not possible and the baby may express his discomfort by fussing or crying. This is true, of course, whether a baby is being cared for in a day care environment or at home, but in a group care situation, it may be somewhat more difficult to minimize or to respond promptly to infants' distress. There are more babies for the caregiver to get to know, and even after the infants' individual needs are understood, caregivers may have to attend to more than one infant at a time.

Relatively little systematic information is available concerning the frequency of occurrence of fussing and crying in infants in group day care situations, the major reasons for such distress, and how caregivers deal with it. It would be helpful to know more about such questions as the following: How do particular caregivers cope with various kinds of distress? Do they have a kind of comforting routine they use whenever a baby cries, or do they individualize the relief of distress according to the characteristics and needs of the particular infant? Are some soothing procedures generally more common than others, as well as more effective than others? To what extent

do the patterns of distress shown by the babies change with increasing age from the first few months of life? Do the caregivers' comforting practices change accordingly? How do the nature and frequency of infant distress and the caregiving practices for managing distress vary between group day care and natural home situations?

The present study was an exploratory effort to understand a few of these questions, specifically as related to a day-care environment, - the Cornell Infant Nursery. Our purpose was to gather some information about the incidence of distress in the nursery, and to study several aspects of the process of soothing which caregivers used for distressed babies, by observing the responses of the caregivers to episodes of infant distress over a period of ten months. It was also hoped that individual differences between the caregivers in their handling of infant distress could be assessed, along with the effectiveness of various intervention strategies. However, it was not possible to carry out these more detailed analyses in the parent exploratory study.

Method

Sample

Six of the ten babies enrolled in the Cornell Infant Nursery from September 1972 to July 1973 were used as subjects for these observations. The youngest and oldest babies were excluded from observation, so that the age variation in the study sample was only two months. The mean age of the sample was 4.8 months when observations began in October 1972, and 13.8 months at the end of the study in July 1973. The sample babies consisted of three

boys and three girls; one of each sex was in the nursery for half the day, the rest were full-day babies. In the last month of observation two babies had left the nursery, so the sample at that point was reduced to four.

Data collection

The observational method used for collecting data was basically an event sampling procedure. Observation sessions were scheduled on six days over a two week period, in each of the following months: October, November, December 1972, and January, March, May, and July 1973. On each observational day, the nursery playroom was observed for a standard amount of time. Initially, this was 4½ hours per day, but after the nursery had been in operation for about five months, it was found that not enough incidents of distress were being observed, so the time was increased to six hours a day, yielding a total of 194 hours of observation. To increase the likelihood of observing distress episodes, about two-thirds of the observation hours were scheduled in the afternoons, with one-third of the hours in the morning.

The observation days were divided among five observers, each of whom spent the particular day in the observation booth for the assigned hours, ready to record her observations whenever a distress episode occurred in one of the sample infants. A distress episode was defined as beginning when any sample infant started to fuss or cry and ending when these negative vocalizations had stopped for a least thirty seconds. The observer did not record the incident if the distress was clearly a response to a regular caregiver routine such as changing diapers, or if it began in the sleeping room, which was unobservable.

For each distress episode, the observer was asked to dictate into a tape recorder the kind of distress, - whether fuss, cry, or scream (extremely rare), and also to indicate whenever there was a clear change from fuss to cry or vice versa. In order to make the observations as similar as possible, across different observers, and to facilitate subsequent transcribing, a standardized narration procedure was followed. The format for recording required that for each episode, the observer indicated a) the baby's name, b) the nature of the distress (fuss, cry or scream), c) the name of the caregiver who intervened and the specific actions she took to soothe the infant (from a behavior list), and (d) when the distress had ceased for as long as thirty seconds, which was the end of that episode. The observer also included, at convenient opportunities during the episode, the time of day, the location of the baby, and the reason for the distress, if known.

Pilot observations had shown which caregiver behaviors were most likely to occur when a baby showed distress, so a list of these behaviors was drawn up and used by all observers. The list of caregiver acts was quite complete, and included the following: Distant Talking, Near Talking (arm's length), Smiling, Making a Face, Picking Up, Holding, Carrying, Showing Object, Giving Object, Giving Pacifier, Touching, Physically Playing, Changing Position, Removing the Source of Irritation (pin, other baby, etc.), Putting to Sleep, Changing Diaper, Feeding, Rocking, Bouncing, and No Response. It was possible, of course, for a caregiver to talk while simultaneously engaging in another action. The observer tried as well as possible to indicate the correct order in which various caregiver behaviors occurred.

Results

Data analysis

The analysis of data for this report was focussed on two major areas of concern, the babies' distress, and the caregivers' responses to that distress. Of the two, the babies' distress was by far the easier to analyze and describe. The analysis consisted of determining the frequency of different kinds of distress episodes per observation hour for each of the seven observation periods from October 1972 to July 1973. Similarly, the mean duration of the different kinds of distress episodes was determined (from the audio tapes) and plotted over the months of observation. The distress episodes consisted of three kinds: fuss only, cry only, and "mixed" episodes which contained more than one kind of distress. Since the reasons for the infants' distress were often not clear to the observer, no systematic analysis of this issue was possible in this study.

Analysis of the caregiver's response to the infant's distress was somewhat more complicated. The caregiver's initial response, it's latency, and the nature of the overall intervention by the caregiver were the three main areas of concentration. It was felt that judgments of the effectiveness of these interventions could not be made with confidence in this exploratory study. For the latency of the caregiver's response, analyses were made of the mean latency to different kinds of distress, and the relation of latency to the duration of the distress episode. The general analysis of the caregiver's initial responses consisted of an examination of the frequency of each type of response and their distribution with respect to different kinds of distress.

A closer examination of the nature of the overall interventions by caregivers was the remaining area of analysis. It became apparent early in the study that a caregiver often did not carry out a long stream of behaviors without interruption until the baby was quieted. She sometimes would respond for a short time, go about some other activities, then come back to the distressed baby, perhaps several times. It seemed important in attempting to describe the caregiver's behavior toward a distressed baby to consider these sequential caregiving approaches, which were identified as discrete "interventions". A criterion interval of fifteen seconds was established as the pause required between successive soothing behaviors by the caregiver before a new intervention was identified. This was not as artificial a criterion as it may sound, since such pauses often occurred naturally in the caregiver's response. Another method was also used to define the occurrence of a new intervention. In a mixed distress episode, when the nature of the infant's distress changed, the caregiver's subsequent behaviors were also considered a new intervention. Again, this was not a contrived manner of coding the data. In many cases, after the caregiver had responded to the baby and then moved away, the babies' distress state also changed prior to the caregiver's return. Thus, the first means of defining a new "intervention" often coincided with the second.

The baby's distress

The frequency of fussing, crying, and mixed distress episodes for the six sample babies per hour of observation is shown in Figure 1, for each of the months of observation. Since only four of the six sample babies were

left in the program during the July observation period, the frequency for that month was adjusted by multiplying by $6/4$.¹

Fussing episodes occurred the most often, initially between two and three times an hour, on the average (at 4.8 to 6.8 months), then decreasing to between once and twice an hour, except for a substantial rise in July (at 13.8 months). Crying occurred considerably less frequently, hovering at about once per observation hour most of the time, except for an increase to almost two in May (at 11.8 months). The mixed distress episodes were quite infrequent, occurring less than once an hour. The changes in all these frequencies over time followed a rather similar pattern: there was a general decline from October to January (4.8 to 7.8 months), followed by a slight increase in May (11.8 months) and the rather sharp rise in July, for fussing only. The graph for total distress episodes thus shows a clear U-shaped curve, with the frequency for the last two months as high as for the first two. The frequency of all distress episodes for the six babies per hour of observation was 4.5 in the earliest months, reached the lowest level at 2.8, and then increased to as high as 4.9 (estimated).

The mean total distress frequency per child, as shown in Figure 2, was about once an hour at most, and as little as .7 an hour.² The curves for the three kinds of distress episodes are quite flattened as compared to Figure 1, but the total distress curve still has a moderate U-shape.

Figure 3 gives the variations in frequency per hour from the first to second week of each observational period, for the sample group. Thus,

¹Month-to-month variations in number of infants present before July were not sufficiently great to warrant adjustment of total frequencies of distress episodes.

²Mean frequencies per child were obtained by averaging the individual infant's frequency-per-hour measures. Since all infants were not equally represented in total hours observed for the pooled data in Figure 1, these mean-per-child values differ slightly from values obtained if one were to divide the pooled values by six.

Figure 3 involves the same data as Figure 1, but with each monthly point of Figure 1 being represented by two weekly points in Figure 3. As the graph shows, week-to-week frequencies were not very consistent, varying by as much as 2.6 episodes for the total distress data. These trends led to the decision to focus on the more reliable two-week monthly totals in the major analyses.

With regard to the duration of distress episodes (Figure 4), fussing, which was the most frequent type of distress, had the shortest mean duration, as could be expected: it remained almost constantly at around 50 seconds over the period of the study. The mixed distress episodes, which were the least frequent, were the longest in duration particularly in October and November (about 4 and 3 minutes), after which there was a sharp decline in duration to about one to one and one-half minutes. Crying episodes were intermediate in duration, staying at around one minute after declining from a high of about two and one-half minutes in October.

The Caregiver's Response

Latency: The amount of time between the beginning of the baby's vocal distress and the caregiver's first response (latency) was determined from the

Table 1
Frequency distribution of latency
of caregivers' response

	Latency Times					
	0-10 secs.	11-30 secs.	31-60 secs.	61-120 secs.	121-180 secs.	3 mins. +
f	492	120	38	24	7	5
%	71.8	17.5	5.5	3.5	1.0	0.7

audio tapes of the observations. The frequency distribution of latencies for all types of distress combined is shown in Table 1. The latencies ranged from 0 seconds (or immediate response), to seven minutes, with 72% of them being ten seconds or less, thus indicating that in the large majority of instances, caregivers responded very promptly to episodes of infant distress. Another 17% were between 11 and 30 seconds, and the rest of the latencies (11%) were over 30 seconds.

Figure 5 presents the latencies to fussing and crying separately over the ten month period. These latencies were obtained from all episodes, including the mixed ones, because even these episodes began with either fussing or crying, and the caregiver was responding to that initial distress. In general, except for the first and last month, caregivers responded more quickly to a cry than to a fuss. Cry latencies averaged less than ten seconds from December to July, following a sharp decline from substantially longer latencies in the first two months. The fuss latencies showed a similar, but less sharp decline from values of 17 and 16 seconds during October and November, dropping off to an average of about 14, with a final low value of seven seconds in July.

Analysis of the relationship of the latency of the caregiver's response to the duration of the baby's distress following that response suggests that the quicker the caregiver is to respond, the shorter the duration of the baby's subsequent distress. Table 2 presents two-way distributions for the three types of distress episodes, according to latency and duration. The positive association between latency and duration is particularly clear in the Fuss table (where the Chi-square was significant at $p < .01$). The Cry table shows the same general trend, with the distribution also being significantly non-random ($p < .05$). However, the two-way distribution for the Mixed responses did not yield a significant Chi-square value.

Nature of initial responses to distress: Of the 24 possible responses of the caregiver which the observers had catalogued during the pilot observations, only ten occurred frequently enough to be included in the major data analyses. These were: Near Talking, Distant Talking, Picking Up, Holding, Showing Object, Giving Object, Changing Position, Touching, Removing the Source of Irritation, and Feeding. The main general analysis of these responses consisted of determining their frequency of occurrence as initial responses of the caregivers to babies' distress, and whether initial responses to a fuss were different from responses to a cry.

Table 3 shows the frequency of occurrence of the ten most common responses to fussing and crying (for fuss, cry, and mixed episodes, as in the case of the latency analysis). It is apparent that generally speaking, caregivers were most likely to Distant Talk than anything else (40% of all responses), with Near Talking (30%) and Picking Up (14%) occurring next most frequently. These three categories comprised approximately 84% of all the caregiver responses given. Showing or Giving Object (combined) was the only other category occurring with any appreciable frequency (5%).

There were some interesting differences in the relative frequency of these responses as reactions to Fuss or Cry (over-all Chi-square for this table indicates a significantly non-random distribution, $p < .001$). Caregivers are more likely to Distant Talk when the infant is fussing (47%) rather than Crying (30%), and somewhat more likely to Near Talk in response to Cry (32%) than to Fuss (28%). Picking Up is also a considerably more common response to Cry (21%) than to Fuss (9%), as is the case for Holding, although this occurs very infrequently. Finally, Showing and Giving Object, although occurring relatively infrequently, appear more often as responses to Fuss than to Cry.

Because two different caregiver responses sometimes occurred almost simultaneously (especially when Near or Distant Talking were involved), and observers may have had some difficulty judging which was the first response, the analyses just described were repeated for the pool of first and second caregiver responses combined. The trends revealed by these analyses were very similar to those just summarized for the first response only (and the overall Chi-square value was also highly significant).

Number of interventions by caregiver: The next analysis was directed to the number of successive interventions made by the caregiver in responding to distress episodes (see page 5 for definition of "intervention"). Table 4 shows the frequency distribution as well as percent occurrence of the number of interventions made by caregivers to distress episodes over the seven observational periods. For the total frequency over the year, 11.4 percent of the time there was no intervention made by the caregiver and the distressed infant quieted by himself. Most of the episodes were responded to by single interventions (65%), and a few (14%) by two successive interventions. Only 9% of the distress episodes involved three or more interventions by the caregiver. There was no strong pattern of changes over time, although there appeared to be some tendency for caregivers to respond more often with single interventions and less frequently with two or more interventions as the infants grew older (particularly by July, when the mean age was 13.8 months).

Order of appearance of caregiver responses within a single intervention: The final analysis reported here focussed on the order of appearance of successive caregiver responses in the case of those distress episodes eliciting only a single intervention containing more than one kind of response. Table 5 gives the number of times each of eight common caregiver

responses occurred as the 1st, 2nd, 3rd or 4th response within a single intervention. Separate tabulations are presented for responses to fussing and to crying.

This analysis suggests that some caregiver responses are much more likely than others to occur as the first or second response to distress, while some are more likely to appear as later responses in the intervention sequence. Moreover, this pattern varies somewhat depending on whether the caregiver is responding to fussing or crying in the infant. For example, in response to fussing, Distant and Near Talking occur primarily as 1st or 2nd responses (even more often than expected on the basis of the generally greater frequency of 1st and 2nd responses than 3rd or 4th). On the other hand, Holding appears predominantly (31/38), and disproportionately, as a 3rd or 4th response in the intervention sequence when fussing is involved. In reaction to crying, however, as compared with fussing, Near Talk shows a tendency to shift toward more frequent appearance as a later rather than early response, while at the same time Picking Up and Holding show an increasing tendency to appear as early responses. (The proportion of Picking Up responses occurring 1st or 2nd in the sequence increases from 42/62 for fussing to 71/81 for crying; for Holding the corresponding increase is from 7/38 to 25/51.) It is interesting to note, also, that Showing or Giving Object, while occurring generally less often as responses to crying than to fussing, tend to appear predominantly as later responses when crying is involved, rather than earlier as is the case with fussing. Finally, Rocking, which is an otherwise infrequent response, does appear in the intervention sequences in response to crying, but predominantly as a 3rd or 4th response (12/14). (The over-all Chi-squares for Table 5 indicate clearly non-random distributions of frequencies, $p < .001$, for both fussing and crying).

Where there were two interventions by the caregiver, it seemed reasonable to look for changes in quieting strategy from the first to the second intervention. Unfortunately, there were too few instances of double interventions to permit meaningful analysis because of variations in related circumstances such as the source and nature of the distress, etc. Informal inspection of the sequences of caregiver behaviors in successive interventions revealed little in the way of obvious relationships, although this would be an important question for subsequent study.

Discussion

The analysis of infants' distress and how caregivers responded to it has yielded some interesting findings which help clarify some important aspects of the ecology of one particular infant nursery. The nursery did not emerge in these results as a place where infants were crying and fussing much of the time. On the average, there were three to five episodes of distress per observation hour in a sample of five to six babies over the course of a ten month period, beginning when they were 4.8 months of age. This represented less than one distress episode per baby per hour during waking periods. Since the observation periods were set to cover times of day when distress episodes were most likely to occur, the frequency per hour would probably have been even less if the whole day had been considered.

As one might expect, fussing was generally more common than crying, but its duration was considerably shorter. Episodes of mixed distress were the least frequent, but lasted longest. It is interesting to note that during the first few months of observation, as the infants' age increased from about four and one-half to seven and one-half months, there was a

general decline in the frequency of distress (especially fussing), and an even sharper decline in the duration of the crying and mixed episodes. These time-related changes may be due in part to the increasing age of the infants, and to their increasing adaptation to the infant nursery. The decline may also be partly attributable to the caregivers becoming more familiar with the infants and more able to respond promptly to distress (as suggested in the declining latency of caregivers' responses over the same period).

It is difficult to explain the increase in fussing in the last month of observation (July) which, along with slight increases in the other distress episodes from March to May gives the total curve a U-shaped form. Perhaps the increase in fussing at around 12 to 14 months is attributable in part to the infant expressing more brief irritations or demands for help as he tries increasingly to capitalize on his growing ability to control his own environment. On the other hand, the increasing fussiness in July may also have been due in part to altered situational conditions, as the heat of the summer came on and the infants spent more time in an outdoor area.

It will be recalled that nearly 90% of the time caregivers made some sort of soothing response to infants' distress; moreover, their responses were made very quickly, the majority of times within ten seconds. While at first glance these findings may suggest a picture of excessive attentiveness to even minor fussiness by the caregivers, a more careful examination shows that although the caregivers were very aware of an infant's distress they often provided only a minimum of help at first, for example by talking from a distance (which was the most common initial response to distress). This approach was often a conscious effort on the caregivers' part as they tried to promote self-soothing and did not always rush to an infant's side when he fussed.

Caregivers responded differentially to fussing and crying, in terms of the specific patterns of response behaviors shown, as well as the speed with which they responded. In general, the response to fussing was more moderate. The caregiver, having recognized the more moderate distress of fussing, probably often did not feel the need for immediate intervention, waited a few seconds to see if the infant would quiet himself, and if he did not she provided primarily non-contact interventions to sooth his distress. A crying episode, on the other hand, indicated to the caregiver a more pressing need to which she responded more quickly with body contact such as Picking Up and Holding. It is interesting to recall that the shorter latencies tended to be associated somewhat with shorter durations of subsequent distress, suggesting that if the caregiver waits too long to intervene, soothing may become more difficult.

The longer latencies in the early months of the study may have been due to caregivers' relative unfamiliarity with individual infants' needs, as well as to their having to attend to more incidents of distress during these months when the frequency and duration of distress episodes were somewhat higher. The shortest July latencies may have been partly the result of the fact that there were two fewer babies in the nursery to be cared for.

In the caregivers' response patterns there also tended to be an order in which certain responses tended to occur, and the order was slightly different depending on the distress. These differences were shown mainly in the earlier order of appearance of Picking Up and Holding, and the later appearance of Showing and Giving Toys during the crying episodes. Once again, it was the more direct, effort-involving responses which seemed to be given priority in responding to a cry.

As mentioned earlier, there were too few instances of multiple interventions by caregivers to permit meaningful analyses of the sequences of these interventions and their relative effectiveness, but these are questions worth further investigation. Similarly, it would be helpful if we could better understand how the caregivers make their judgments about the nature of the infant's distress and what they regard as the best soothing approaches under various conditions.

Table 2

Relation of latency of caregiver's response to duration of subsequent distress for Fuss, Cry, and Mixed Episodes*

FUSS EPISODES

Latency	Duration			Totals
	up to 30 sec.	31-60 secs.	1 min.+	
up to 10 secs.	(129) 142	(50) 39	(46) 44	225
10-30 secs.	(29) 24	(11) 18	(10) 9	51
over 30 secs.	(15) 8	(6) 10	(5.5) 9	27
Totals	174	67	62	303

Chi-square $p < .01$

CRY EPISODES

Latency	Duration		Totals
	up to 60 secs.	1 min. +	
up to 10 secs.	(119) 127	(51) 43	170
over 10 secs.	(31) 23	(13) 21	44
Totals	150	64	214

Chi-square $p < .05$

MIXED EPISODES

Latency	Duration			Totals
	up to 1 min.	1 to 3 mins.	3 mins.+	
up to 10 secs.	(24) 18	(20) 23	(12) 15	56
10-60 secs.	(13) 16	(11) 9	(6) 5	30
1 min plus	(7) 10	(5) 4	(3) 1	15
Totals	44	36	21	101

Chi-square n.s.

* Entries are frequencies of episodes (theoretical frequencies in parentheses)

Table 3

Frequencies of ten most common initial responses of caregiver to infants' fussing and crying, summed over the year

Caregiver's initial response	FUSS		CRY		FUSS & CRY	
	N	%	N	%	N	%
Distant talking	152	.47	76	.30	228	.40
Near talking	92	.28	79	.32	171	.30
Picking up	30	.09	53	.21	83	.14
Holding	4	.01	8	.03	12	.02
Showing object	13	.04	6	.02	19	.03
Giving object	8	.02	3	.01	11	.02
Changing position	3	.01	5	.02	8	.01
Touching	12	.04	10	.04	22	.04
Removing Irritation	8	.02	5	.02	13	.02
Feeding	5	.01	5	.02	10	.02
Total	327	1.00	250	1.00	577	1.00

Table 4

Frequency and percentage of distress episodes responded to by caregiver with one or more interventions, by month of observation

FREQUENCY OF DISTRESS EPISODES

Month of observation	Number of interventions by caregiver								Total
	None	1	2	3	4	5	6	>6	
October	14	70	21	8	4	0	0	4	121
November	9	38	12	7	0	0	0	1	67
December	15	64	15	3	4	1	0	0	102
January	4	39	10	3	1	0	0	0	57
March	14	80	14	4	4	1	0	0	117
May	17	86	20	7	2	2	0	0	134
July	9	88	11	8	0	0	2	0	118
Total	82	465	103	40	15	4	2	5	716

PERCENTAGE OF DISTRESS EPISODES

Month of observation	Number of interventions by caregiver						Total
	None	1	2	3	4	>4	
October	11.6	57.9	17.3	6.6	3.3	3.3	100.0
November	13.4	56.7	17.9	10.5	0.0	1.5	100.0
December	14.7	62.8	14.7	2.9	3.9	1.0	100.0
January	7.0	68.4	17.5	5.3	1.8	0.0	100.0
March	12.0	68.5	12.0	3.4	3.4	.9	100.0
May	12.7	64.2	14.9	5.2	1.5	1.5	100.0
July	7.6	74.6	9.3	6.8	0.0	1.7	100.0
Total	11.4	65.0	14.4	5.6	2.1	1.5	100.0

Table 5

Number of times various caregiver responses occurred as the 1st, 2nd, 3rd, or 4th response in single interventions

	FUSSING					CRYING					
	Order of Appearance				Total	Order of Appearance				Total	
	1st	2nd	3rd	4th		1st	2nd	3rd	4th		
Distant talking	48	24	9	0	81	24	7	2	0	33	
Near talking	50	34	12	11	107	44	26	24	17	111	
Picking up	14	28	16	4	62	40	31	10	0	81	
Holding	1	6	17	14	38	6	19	13	13	51	
Showing object	6	15	4	2	27	}	0	9	10	5	24
Giving object	3	13	3	1	20						
Changing Position	2	4	7	3	16	2	3	12	4	21	
Touching	6	16	6	5	33	6	19	11	8	44	
Rocking	--	--	--	--	--	0	2	3	9	14	
Total	130	140	74	40	384	122	116	85	56	379	

FREQUENCY PER OBSERVATION HOUR

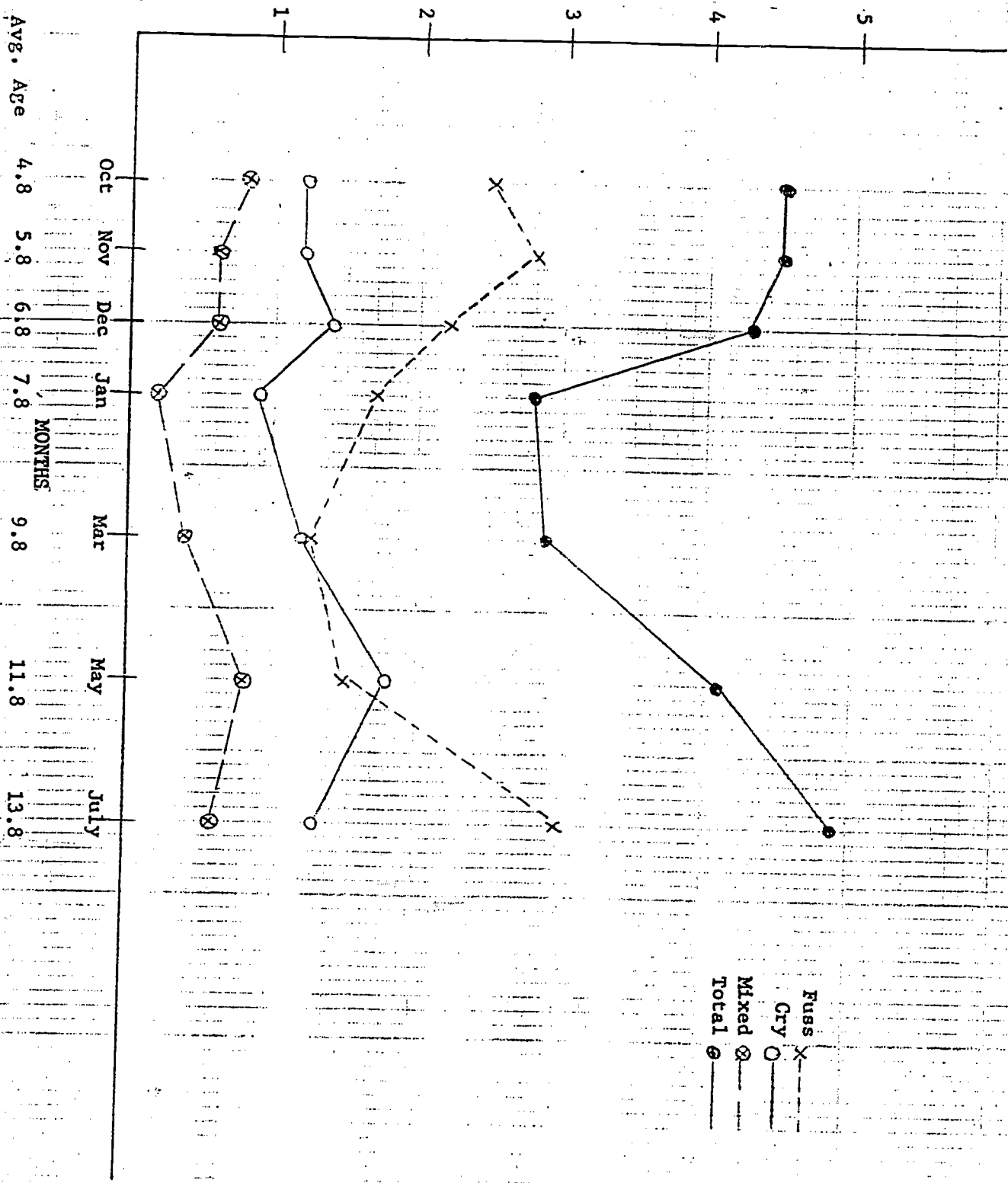
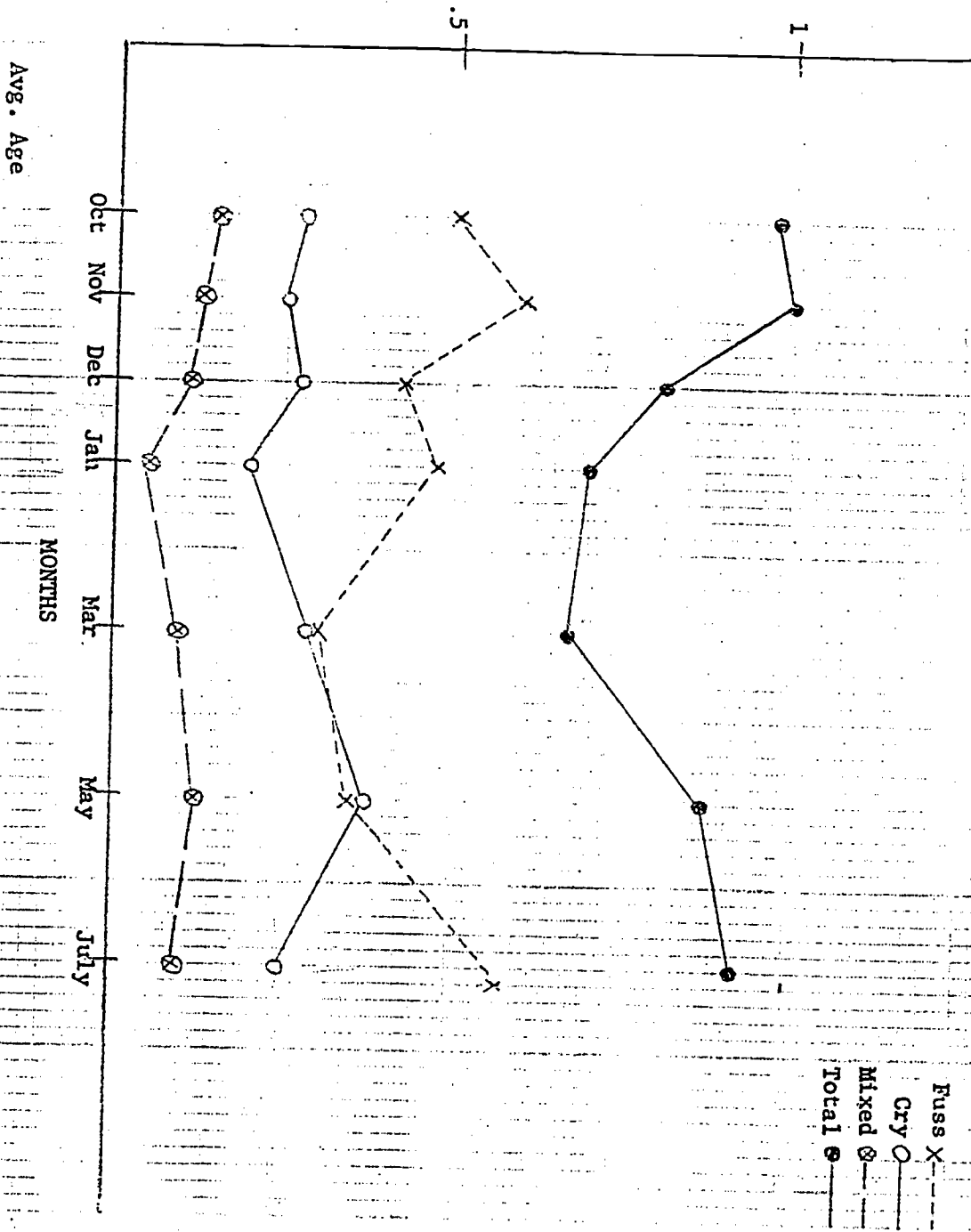


FIGURE 1
FREQUENCY OF DISTRESS EPISODES - GROUP DATA

MEAN FREQUENCY PER OBSERVATION HOUR

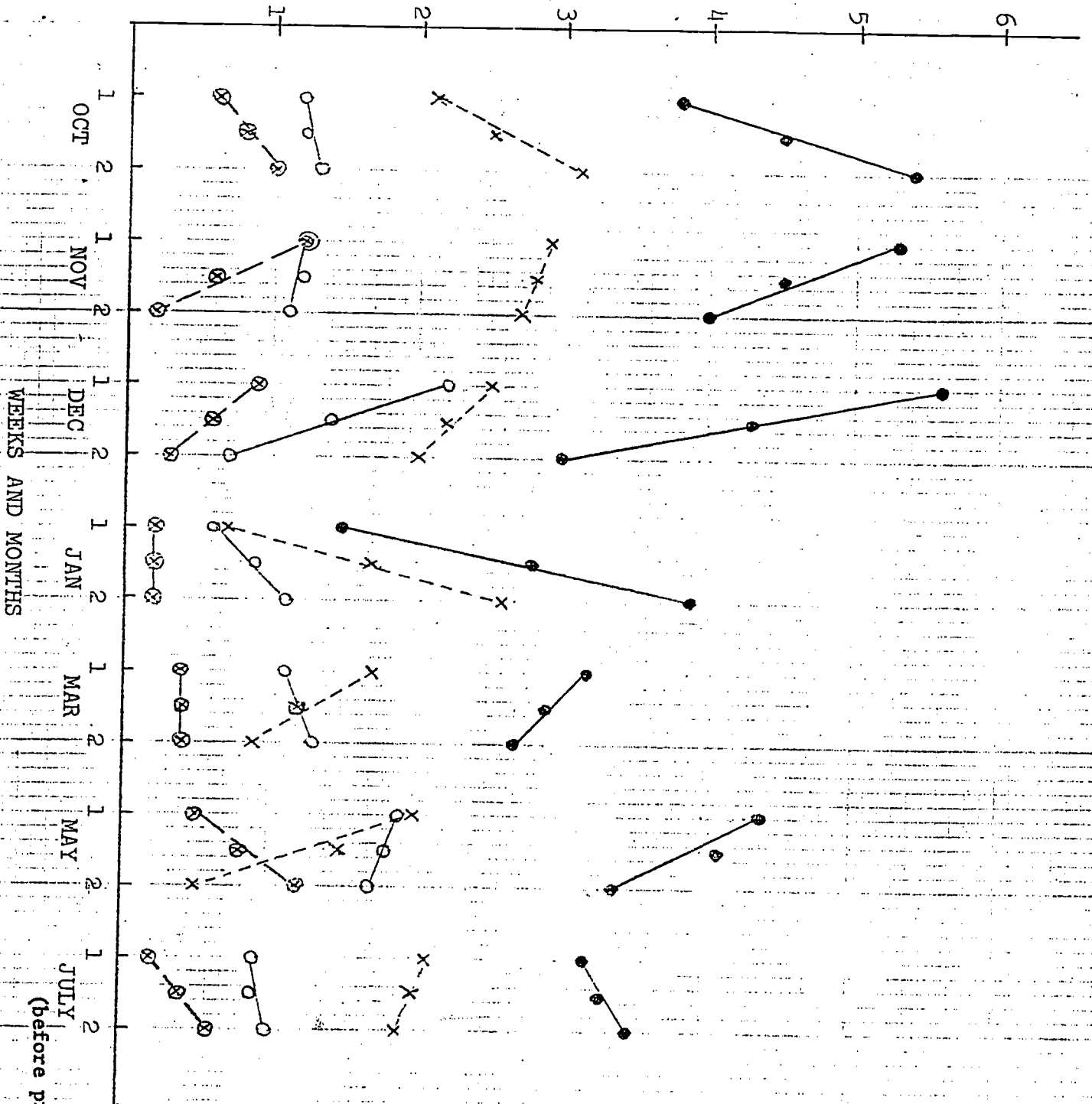


MEAN FREQUENCY OF DISTRESS EPISODES PER CHILD

FIGURE 2

FREQUENCY PER OBSERVATION HOUR

FIGURE 3
CONSISTENCY OF KINDS OF DISTRESS EPISODES WEEK BY WEEK
GROUP DATA



Fuss X
Cry O
Mixed ⊗
Total ●

MEAN DURATION IN MINUTES

Avg. Age

MONTHS
Oct
Nov
Dec
Jan
Mar
May
July

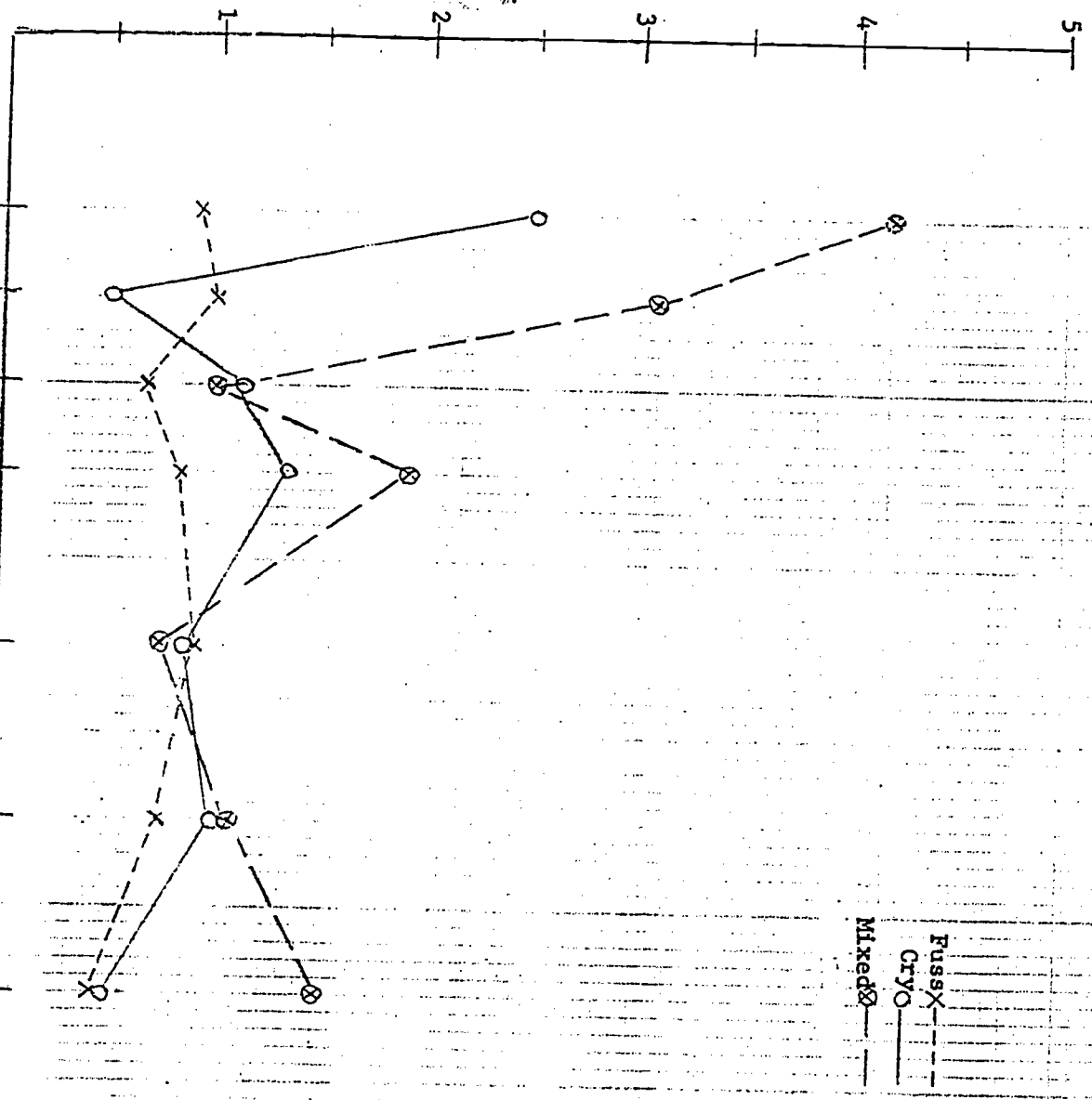


FIGURE 4
DURATION OF DISTRESS EPISODES

Fussys
 Cryos
 Mixed

FIGURE 5
LATENCY OF RESPONSE TO DISTRESS

