Research on Child Sexual Abuse:<br>A Pilot Study of<br>Interactions of Non-Abused Children with<br>Anatomically Correct Dolls

# Research on Child Sexual Abuse: <br> A Pil ot Study of Interactions of Non-Abused Children with Anatomically Correct Dolls <br> Project 非115-84-CG-01 

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Abigail B. Sivan

## SU MMARY

The sexual abuse of children has been identified as a major problem in our society. A technique of ten used in the investigation of such abuse is an interview using anatomicallycorrect (sexually explicit) rag dolls. Although testimony based on the use of these dolls is of ten accepted in the courtroom, no data exist which provide inf ormation about the interaction of normal (non-abused) children with these dolls. Without normative data, interpretations of observations of abused victims remain open to significant criticism as subjective.

The purpose of this research was to initiate the development of a technique for collecting data about the interaction of normal (non-ref erred) midwestern children with anatomically-correct dolls. Their responses were recorded and analyzed for the type of interactions observed and type of terms used by children of different ages and gender for sexually related body parts.

One hundred forty-four children ages three to eight years were observed as they played with a family of anatomically-correct dolls. In addition, the subjects were interviewed about the dolls and their body parts. The child's interactions in the playroom were recorded by audiotape. Simultaneously, an observer recorded a running commentary describing the child's behavior. Transcripts of the audiotapes were content-analyzed and an analysis of sequential events was also conducted.

The data collected suggest several things:

1) sexually explicit, anatomically-correct dolls are not the most salient or desirable toys when placed in a playroom with other toys;
2) aggression in general, and toward the dolls in particular, is a rare event, comprising much less than $1 \%$ of the observed interactions;
3) girls play with the dolls more than boys;
4) the presence of a female interviewer as opposed to a male interviewer encourages play with the dolls;
5) younger children (three to four year olds) play less with dolls when an adult is present in the room than they do when the adult is absent;
6) younger children are more likely to leave the room or ref use to stay alone af ter the doll interview than are older children;
7) the event most likely to precede a given event is the same event itself;
8) no significant antecedents of dolls events are noted other than the repetition of the same event mentioned above; neither are significant antecedents found for wandering about or leaving the room;
9) younger children give more labels for body parts than do older children;
10) girls appear less willing than boys to speak about body parts; girls use fewer correct names for body parts than do boys;
11) children offer a large variety of names for body parts Which are of ten different from those offered by their parents;
12) some body parts are not labelled by the majority of children;
13) parent questionnaires indicate that most, if not all, subjects have ready access to dolls, stuffed animals or action figures and that these toys are utilized in regular play activities.

It was clear to the investigators upon completion of this pil ot st udy that more elaborate and extensive studies must follow in order to explore differences in the interactions of nonabused and abused children. Data obtained from larger studies could serve as training material for improving the methods used by protective service workers, law enforcement officials and mental heal th workers intimately involved in investigations of abuse. Moreover, development of a free play/observational methodology for investigating the behavior of children suspected of abuse may have advantages over the of ten criticized interview methodologies.

## BACKG ROU ND

The sexual abuse of children has been identified as a major problem in our society. A technique of ten used in the investigation of such abuse is an interview using anatamicallycorrect (sexually explicit) rag dolls. Many of the investigators who use the dolls have limited knowledge of normal child development and child behavior; even those who do possess ample experience with children lack specific comparison data which describe the typical interactions (behavioral and verbal) of nonabused chilaren with the dolls. Without these data, the use of observations of the doll play of investigated children as significant evidence in judiciary proceedings may be open to challenge in court. Professionals who work daily with children maintain that the play of abused children is substantially different from that of normal (non-referred) children. However, to our knowledge, no investigator has explored the free play of non-referred children with these dolls, al though in the past year two sets of guidelines have emerged for standarizing interviews with sexually abused children $(2,12)$. The intent of this study was to develop a methodology for the collection of free play data on non-abused children.

More specifically, this pil ot study focused on the collection of normative data about the interaction of normal (non-referred)
midwestern children, ages three to eight years, with anatamicallycorrect dolls. The data collected may permit more objective interpretation of the behavior of children suspected of having been abused who are evaluated, in part, by observations of interactions with anatomically-correct dolls. Sexually-abused children of ten use idiosyncratic terminology when referring to sexual parts and their play with the dolls is said to be different from that of same-aged peers.

The rationale for using doll play with children and adults who are unable to speak directly about events in their lives is well documented in the literature on child play and therapy (1, 3, 4, 5). Rag dolls provide an excellent stimulus for play because they are close in their human characteristics to the reality of the child and yet not limited by predefined roles as are action figures such as those from "Star Wars" or "Annie."

In recent years, the use of doll play has been expanded. For example, anatomically-correct dolls have been introduced as play objects which promote the exploration of interpersonal relationships, personal identity and perceptions of traumatic events such as abuse. Although anatomically-correct dolls still await acceptance by the general doll-buying public, they have been accepted as educational tools, especially for special populations
such as the mentally retarded (6) and have been utilized by law officers and social workers who have the legal responsibility of interviewing children following reports of alleged sexual abuse (7, 8). The dolls have al so been employed diagnostically as projective stimuli tools by child therapists for the exploration and promotion of self-expression, self-perceived adequacy, sexual identification and family relationships.

## METHODOLOGY

This research was conducted in two phases. In the first phase, nine children were observed and interviewed. Information from this pre-pil ot phase allowed adjustments in the technical procedures and observational methodology before the larger phase of the research was conducted. In the second phase, 144 children were observed. The sample was stratified for gender of the child (male, female), age of the child (three and four years, five and six years, seven and eight years) and gender of the interviewer. Socioeconomic status was to be based on a consideration of education and occupation with Hollingshead (9, 10) levels I, II and III equivalent to high status and Hollingshead levels IV and V equivalent to low status. However, all attempts to find a low status group in the greater Iowa City area met with failure. This finding was reinforced by the 1985 Census data which indicated that Iowa City was the most literate, highest educated community in the ration and state data show this county as having the lowest unemployment rate (less than $2 \%$ ).

Subjects
All children in both phases were volunteers whose parents also agreed to their participation. Children became participants
in the study through a variety of channels. Some of the parents responded to initial media coverage of the project (See Appendix A for sample newspaper articles). To recruit other children, a letter giving a detailed description of the research and a notice for a bulletin board were sent to primary physicians (pediatricians and family practitioners) and to preschools and day care centers in the area. Follow-up telephone contact was made with the physician or preschool/day care center director. In some centers, specific information about the project was duplicated and sent home with the children. In addition, many children were recruited through advertisements run in two local weekly (shopper) papers. Other sources of subjects included a notice on a bulletin board at the University of Iowa School of Nursing building, families of other participants, and colleagues of the research project staff.

Parents responding to the advertisements contacted and talked with the project staff by telephone. Their questions were answered and they were provided by mail with the same statement of information about the study as is presented on the informed consent forms. After approximately two weeks, during which time the parents were able to review this statement, they were recontacted. At that time, if the parents so wished, an appointment was made to include their children in the study.

Seven to ten days before the scheduled appointment, a reminder letter and map depicting the location of the Clinic were mailed to each child's parents. Full informed consent was obtained from parents and children directly before participation in the study. The description of the project and consent forms are included in Appendix B. Sample newspaper advertisements are shown in Appendix C. Table 1 depicts the stratification of the sample with the group numbers in Roman numerals and Table 2 depicts the age distribution of the subjects.

Insert TABLE 1
about here

Insert TABLE 2
about here
$9.7 \%$ of the children were only children; $47.9 \%$ were only or oldest children. All the fathers reported at least a high school education; $63.2 \%$ had at least one college degree and $72.1 \%$ held semi-professional or professional jobs. Two mothers did not complete high school; $60.5 \%$ had at least one college degree and $43.8 \%$ held semi-professional or professional jobs. $40.3 \%$ of the mothers were either homemakers or students. No information was gathered concerning the marital status of the parents.

TABLE 1: Stratification of the Sample (group numbers in Roman numerals)

| Sex of | Interviewer Age | Boy Sex of |  | Girl |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  | FEMAL E | MAL E | FEMALE | MAL E |
|  |  |  |  |  |  |
| 3-4 |  | I | II | III | IV |
|  |  | $n=12$ | $n=12$ | $\mathrm{n}=12$ | $n=12$ |
| 5-6 |  | V | VI | VII | VIII |
|  |  | $n=12$ | $n=12$ | $n=12$ | $\mathrm{n}=12$ |
| 7-8 |  | IX | X | XI | XII |
|  |  | $n=12$ | $n=12$ | $n=12$ | $n=12$ |

$N=144$

TABLE 2: Mean (and range) Age of the Subjects in Months

Sex of Interviewer


## CONDUCT OF THE RESEARCH

After informed consent was obtained, the children were administered Form L of the Peabody Picture Vocabulary Test-Revised (11) to insure adequate receptive language skills for their age (IQ equivalent score above 85). Table 3 depicts the age equivalent scores on the Peabody Picture Vocabulary Test Revised.

Insert TABLE 3 about here

While the chilaren were completing the PPVT-R, their parents were introduced to the dolls and administered a short questionnaire about the child's preference for particular play activities, the terms used for sexually-involved body parts in their particular family, and the demographic data needed to make an assessment of socicconomic status (see Appendix D). The questions about play activities arose out of an interest in Whether children might be more or less skilled in certain activities because of their previous experiences with dolls. Collecting the data involved observing and recording children's interactions with the dolls under several conditions.

## TABLE 3: Scores on the Peabody Picture Vocabulary Test - Revised (age equivalents in months; group number in Roman numerals)

## Sex of Interviewer

## FEMAL E

MAL E


The investigators are aware that these conditions do not mirror those used in child abuse irvestigations. Such investigations generally involve asking many leading and situation-specific questions af ter a very short period of free play with the dolls. It was felt that such a protocol for this normative study would inhibit the range of behavior usually exhibited by children in free play with dolls. In addition, the investigators felt that leading questions were not within the scope of the proposed study and that such questions create the situation of "framing" children. For this reason, direct comparison of interview data obtained from abused and nonabused children must be considered a subject for further research. The conditions were designed specifically with the intent of helping the child feel comfortable in the unfamiliar surroundings of a clinic playroom while at the same time broadening the base for observations.

In a playroom, the children were presented with a family of four dolls: two dolls with adult features and clothes (one male, one female) and two smaller dolls with child features and clothes (again, one male and one female). The dolls (from Analeka Industries) are constructed of cloth and all their body parts are proportional. They have removable clothing and their genitalia are visible only when the clothes are removed. Other toys also
present in the playroom included: a doll bed and blanket, a large wooden car, a plastic wagon, a Fisher-Price picnic basket, a book, a set of large wooden dominoes, a number puzzle (Matchmates), and a teapot. The room contained several tables, several small chairs, a large chair and a small bookcase (backed) against a wall. The objects were arranged in a standardized manner before each subject entered the testing room.

In the first of four conditions, the children were allowed to play with the toys and dolls in the presence of an unobtrusive adult who sat on the sidelines and occupied him/herself with paperwork while the child explored the playroom. The adult did not interfere with the child's free interaction and gave minimal answers to any comments addressed to him/her. His/her presence was intended to provide the child with security in this new setting. This condition lasted seven minutes.

In the second condition, the adult excused her/himself and left the playroom telling the child he/she would return shortly. This condition allowed the child to interact with the dolls without an adult present and provided an opportunity to examine Whether an adult's presence was an inhibiting factor in the development of the child's play activity. If the child became uncomfortable ("anxious" as defined by parental concern or
observable tears, etc.), left the room or seven minutes had lapsed (whichever occurred first), the third condition was begun.

In the third condition, the same adult returned to the playroom and conducted a standard interview (see Appendix E) with the child using the dolls. The interview consisted of 1) asking the child how the dolls differ from the ones she/he has at home or has played with previously, and 2) asking the child for names of specific body parts, starting first with parts such as the head, neck, arms, etc. and proceeding to body parts involved in sexual activity. The child was asked about the child doll simil ar to her/himself first, then the other child doll, then the "mother" doll and lastly, the "father" doll.

After the interview, the adult again left the room and the subjects were observed for five more minutes of free play (without the adult present). The difference between this fourth condition and the second one was that in this condition, the dolls were left undressed, perhaps serving as a stimulus for a different kind of play.

Parents of the subjects were encouraged to observe the play and interview through a one-way mirror so that they could relate to the child's experience should questions arise after the session. At the end of the procedure, the parents were given the opportunity to discuss their observations and any questions they
had with one of the observers. The parents were encouraged to reflect on the aspects of the play they found particularly interesting and their concerns if any arose. They were also asked if they wanted to see the results of the study. Ten parents requested a copy of the study results.

Subjects were paid a sum of $\$ 10.00$ for their time and effort. Sessions took place on weekends and evenings so as not to disturb the regular routine of families. Efforts were made to work around the University schedule of home football and basketball games. All the prepil ot sessions involved the principal investigators as did many of the later sessions. However, once the observers were trained, only they did the observations. A number of people were involved in the interviewing. One of the principal investigators (Sivan or Schor) was "on call" during all sessions in the event that any difficult situations arose such as the disclosure of abuse. A beeper was used for contacting the "on call" person. Needess to say, such a disclosure would have been handled according to the guidelines of the institution and reported accordingly. It is gratifying to report that no cases of abuse were discovered during the study.

## TECANICAL CONSIDERATIDNS

The entire session with each child and the dolls was recorded in the following manner: the child had a wireless microphone clippea to his/her alothing upon entering the playroom. Transmission of the audiosignal was received in the observation room next to the playroom by an FM receiver. The principal investigator had previously employed the technology of wireless FM transmitters in research with children. In that study, the subjects quickly adapted to the situation and wore the transmitters throughout the morning in a kindergarten classroom; no adverse reactions to wearing the transmitter were observed. However, during the relatively short time in which the subjects wore the microphones in this study, the equipment proved to be more intrusive than it had been during the longer period of time. Another microphone might better be utilized in replications.

The verbalizations of the child were recorded on one channel of a stereo tape recorder. Simul taneously, an observer in the observation room gave a running account of the child's behavior (interaction with the dolls, location in the room, etc.) on a second channel of the same stereo recorder. A mixer was added to the stereo set-up so that a second tape recorder could be used to play a signal tape marking one-minute intervals for the data
analysis. A diagram of the technology involved as well as a list of equipment used are presented in Appendix F.

DATA ANAL YSIS
Interobserver reliability was initially developed during the pre-pilot phase involving the first nine children. During this time, the two observers worked with the staff to devel op an observation scheme which could be used reliably.

The observation scheme used descriptors in the form of phrases containing an actor, a verb, an object and, if hel pful, a body part used to accomplish the action. Doll actions were considered a priority over other actions. Variables such as location and intensity of action were considered but discarded as either not useful or unreliable. A list of the descriptors used by the observers is given in Appendix $G$.

Observers were instructed to give a running account of the events in the playroom. When an activity was repeated, the phrase "again" could be used. No particular interval was used in making the observational statements. This fact (the use of a nonstandard interval) turned out to be detrimental to later data analysis. If a more exact time interval had been used, then a more standarized coding system using each observation could have been developed. Because of this inexactness (i.e., lack of fixed timing for noting observations), the second observation could not be considered identical to the first. For this reason, it is
highly recommended that any replication of the procedure be done using a standard time interval such as ten seconds.

For this pil ot study, interobserver reliability was obtained by having the two trained observers both observe several sessions and record their observations. Industrial earphones were employed so that one observer did not hear the second speaking. Reliabilities were calculated initially only on doll events. It proved difficult enough to obtain reliability estimates using this limited set of observations as the observers recorded different numbers of events. The reliabilities were calculated using doll events on which both observers agreed on occurrence; reliability coefficients ranged from 80 to $95 \%$. When sessions did not involve the dolls, reliabilities were calculated on the non-doll events. These coefficients also ranged from 80 to $100 \%$.

The use of videotapes throughout the study may have been advantageous for the purposes of assessing reliability and storing data. However, without elaborate technical facilities and substantial financial investment in equipment, videotaping within the play room itself would have been disruptive not only to the naturalistic setting but also to the ease with which the children approached it. Certainly, videotaping should be considered in the larger studies that are expected to be generated upon completion of this pil ot research.

Copies of several observation protocols are presented in Appendix J.

The tapes of the children's statements and observer's commentary on the children's play were transcribed by a secretary and the transcripts used for further coding. There were occasional probiems with the child's microphone and at times, the child was inaudible. For this reason, very little was made of the talking chil dren did during the sessions. However, there were times when the child's speech made a difference. For example, when a child was reading a book aloud, it could be considered the activity as "task-oriented" play as opposed to mere "exploration" of the book.

The following codes were used in coding the transcripts, with the implication that the child was always the actor/subject of the coded phrase or action.
I. Activities/Verbs included:
11. exploration/imagination (touches, holds, moves, inspe cts)
12. imagimation (caretaking, feeding, moving cars)
13. task orientation (playing by rules, reading)
14. dressing/undressing
15. throws/kicks
II. Objects included:
21. dolls
22. toys
23. people (self, others)
24. environment
25. clothes
26. microphone
III. Other category included:
97. talking (when initiated by child)
98. wandering, sitting or doing nothing
99. Withdrawal (opening door, exhibiting fear)

The transcripts were coded in one minute intervals. Each interval was assigned three codes encompassing the activities that occurred during that period of time.

Interrater reliability of the coding procedure was calculated by duplicating one randomly chosen transcript in every group and coding it twice. Interrater reliabilities for all events (doll and non-doll) ranged from 83 to $100 \%$ with a mean of 90.7 and a median of 90.5 . Doll events were easily coded; most difficulty was encountered in trying to determine when the microphone was interfering, when a child was wandering about the roón, as opposed
to exploring some aspect of the room itself, such as the bl ackboard.

A number of empirical questions about the interaction of normal children with the anatomically-correct dolls were consiaered in the content analyses of the transcribed protocols. These questions were intended to provide an objective framework r'or prof essionals and nonprofessionals to employ in their observations of interactions of abused children with dolls. The categories of behavior to be considered were not unusual; rather, they concern aspects of children's interaction which are typically observed and included in schemas for the observation of child behavior. Behavior such as aggression, withdrawal, prosocial approaches, goal oriented activity and imaginative play are easily coded and have face validity for professionals who work with children on a regular basis. Moreover, these are behaviors which are sometimes noted by workers to be abnormal with abused chil dren.

Specifically, the following questions were addressed in the derivation of the coding categories and the analysis of the data:

1. In what ways did the children interact with the dolls? Do they exhibit particular themes in their interactions such as caretaking or creative role playing?
2. Were there differences in the children's interactions which are systematically related to age or gender?
3. Were there differences in the children's interactions with the dolls when an adult was present or absent?
4. Did the gender of the adult present affect the child's interactions?
5. For what amount of time did these dolls keep the child's interest and is this related to age or gender?
6. What vocabulary did the children use for labeling body parts? Did this vocabulary differ systematically for children of different ages or gender? Did most children use the same terminology as their parents?

These questions have clear alinical implications for professionals who are asked to relate observations of children's play as a part of an investigative evaluation of the emotional and intellectual competence of an abuse victim. For example, regressive phenomena are of ten assumed to be indicators of mal adjustment in response to stress. The data gathered was intended to provide the professional with empirically-based information about age-appropriate interaction.

A second approach to the analysis of the data on audiotape was an analysis of sequences of behavior. Analyses of this type are often used in studies of children's behavior, and the utility
of this approach was also explored in this pil ot research. The sequence of coded observations was noted to allow the examination of probable and nonprobable sequences. For example, what are the probabilities that, following contact with the dolls, the child will undress the dolls, engage in aggressive behavior or return to play with them?

RESUL TS
The data were analyzed using a number of chi-square tests (SAS package), and significant differences were found on all but a few tests. The large number of significant differences may be, in part, an artifact of the large number of observations considered. For this reason, the findings are presented below in terms of trends and descriptions rather than significance levels. The few non-significant findings will be emphasized.

During the coding of the data, it was shown that seven theoretical observational combinations were not used. These were: imaginative play with people, imaginative play with the enviroment, imaginative play with doll clothes, imaginative play with the microphone, throwing or kicking people (self or others), throwing or kicking the environment, and throwing or kicking the microphone. Of note was the fact that kicking or throwing the dolls was never observed when the dolls were undressed and that kicking or throwing the doll clothes was only observed under this condition. Throughout the discussion, "conditions" will be used to delineate the three settings in which the observational data were collected. Condition one had an adult present; condition two had no adult in the room with the child; condition four was af ter the interview when the dolls had been undressed and the adult had lef the playroom. It should be noted that no behavioral


#### Abstract

observations were collected while the child was being interviewed about names of doll body parts.

Of great interest is the finding that the dolls occupied little of the chil dren's time. Across all three conditions, the highest percentage of time the dolls were seen occupying the interest of the children was 25.60. Table 4 which follows depicts the percentages of doll as opposed to non-doll events for all 144 children across the three conditions.


Insert TABLE 4
about here

Only four categories of doll activities were observed in the chilaren's interactions with the dolls. These were: exploration (inspecting, touching, hol ding, moving, looking), role play (feeding, caretaking), dressing, and kicking or throwing (aggression). Exploration was the most of ten observed category of activity under conditions one and two, whereas dressing was the most frequently observed category or activity under condition four (see Table 5).

# TABLE 4: Percentage of Doll vs. Non-Doll Events 

 for 144 ChildrenConditions
I
II IV

Doll
17.81
19.65
25.60

Events
Non-Doll
82.19
80.35
74.40

Under all three conditions, aggression (kicking or throwing) toward the dolls had a frequency of less than $1 \%$ of the observed interactions. In fact, the frequencies were so low as to be notable. Under conditions one and two combined, 16 aggressive events towards the dolls were observed in a total of 5583 (doll and non-doll) events. Feeding was the most popular roletaking activity with the dolls. Table 5 which follows depicts the percentages of different types of doll activities observed under the three conditions for boys and girls.

As is obvious from the table above, girls played with the dolls more than boys under all three observational conditions. Girls also were more influenced by the changing circumstances of condition four and engaged in more dressing behaviors with the dolls When the dolls were presented undressed.

TABLE 5: Percentages of Doll Activities for 144 Children

Conditions
I
Boys Girls Boys Girls Boys Girls
Doll Activity

| Exploration | 6.46 | 10.24 | 5.34 | 10.20 | 7.13 | 8.48 |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Role Taking | 1.72 | 4.16 | 3.26 | 6.12 | 1.15 | 2.15 |
| Dressing | 2.06 | 10.38 | 2.36 | 11.18 | 3.95 | 30.76 |
| Aggression | .21 | .33 | .45 | .16 | -- | - |
| Total | 10.45 | 25.11 | 11.41 | 27.66 | 12.23 | 41.39 |

The gender of the interviewer also had an effect on the children's interaction with the dolls. Across all three conditions, children played with the dolls more when a female interviewer was present. Table 6 depicts this finding.

Insert TABLE 6 about here

In contrast to the gender variables, the age of the child had a differential effect on the interactions between the children and the dolls. Younger chilaren interacted significantly less with the dolls than did older children under the first condition only; and in conditions two and four, no significant differences were found among the three age groups: three to four year olds, five to six year olds, and seven to eight year olds. These findings are depicted below in Table 7 .

Insert TABLE 7
about here

TABLE 6: Percentage of Doll vs. Non-Doll Events for Female and Male Interviewers

Conditions

|  | I |  | II |  | IV |  |
| ---: | :--- | ---: | :--- | :--- | :--- | :--- | :--- |
|  | Female | Male | Female | Male | Female | Male |
| Doll | 20.97 | 14.71 | 24.63 | 14.14 | 27.30 | 23.57 |
| Events |  |  |  |  |  |  |
| Non-Doll | 79.03 | 85.29 | 75.37 | 85.86 | 72.70 | 76.43 |

TABLE 7: Percentage of Doll vs. Non-Doll Events for Three Age Groups

Conditions
I II IV

| Events | Doll | Non-Doll | Doll | Non-Doll | Doll | Non-Doll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ages |  |  |  |  |  |
| 3-4 | 11.17 | 88.83 | 16.39 | 83.61 | 25.27 | 74.73 |
| 5-6 | 20.06 | 79.94 | 20.35 | 79.65 | 24.12 | 75.88 |
| 7-8 | 22.57 | 77.43 | 21.53 | 78.47 | 27.06 | 72.94 |

Examining individual observational categories under the various conditions yields several trends. Under the first two conditions (i.e. before the dolls were undressed), the most frequent activity regardess of age or sex of the child or gender of the adult was exploration of the other toys in the playroom. This remained the most popular activity for boys under the fourth condition as well. Girls, however, switched their focus to dressing the dolls under the fourth condition. In addition, a notable increase in wandering asound the room was noted by both boys and girls in the fourth condition. As noted earlier, age had little effect on the chilaren's interactions with the dolls. In contrast, however, a notable effect was seen in the youngest group (three to four year olds); these children more than any other age group refuse to stay alone in the playroom during the fourth condition. These responses comprised $5.10 \%$ of their total responses during the fourth condition. The percentages of responses in each category comprising over $5 \%$ of the total responses are presented $f$ or each condition and age group in Table 8 below.

TABLE 8: Percentages of Responses in Observational Categories
for Three Age Groups

## Conditions

|  | Age | $\begin{aligned} & \text { EXP } \\ & \text { Dolls } \end{aligned}$ | $\begin{aligned} & \text { EXP } \\ & \text { Toys } \end{aligned}$ | EXP Clothes | EXP <br> Mícr. | RP Dolls | $\begin{aligned} & \text { RP } \\ & \text { Toys } \end{aligned}$ | $\begin{aligned} & \text { DRT } \\ & \text { Acty. } \end{aligned}$ | $\begin{aligned} & \text { DSG } \\ & \text { Dolls } \end{aligned}$ | WND | LR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 3-4 | 6.37 | 57.43 | . 18 | 2.77 | 2.03 | 3.97 | 1.94 | 2.31 | 21.42 | . 18 |
|  | 5-6 | 10.24 | 56.81 | 1.43 | . 92 | 3.38 | 5.12 | . 10 | 6.35 | 13.61 | . 31 |
|  | 7-8 | 8.29 | 57.43 | . 89 | 1.43 | 3.52 | 1.43 | 1.05 | 10.48 | 13.05 | . 10 |
| II | 3-4 | 6.39 | 52.22 | . 83 | 3.75 | 6.67 | 4.58 | 1.81 | 3.19 | 15.56 | 2.36 |
|  | 5-6 | 7.62 | 46.44 | . 75 | 3.62 | 3.87 | 4.00 | 5.62 | 8.86 | 12.48 | 1.87 |
|  | 7-8 | 8.72 | 46.32 | 2.10 | 2.63 | 3.99 | 1.68 | 6.20 | 8.19 | 17.54 | . 21 |
| IV | 3-4 | 8.49 | 32.06 | 1.70 | 3.61 | 1.91 | 4.88 | 0.00 | 14.86 | 23.57 | 5.10 |
|  | 5-6 | 5.46 | 26.06 | 4.40 | 6.69 | 1.76 | 3.35 | 2.11 | 16.90 | 27.11 | 2.99 |
|  | 7-8 | 7.94 | 24.71 | 6.47 | 4.26 | 1.18 | . 88 | 3.24 | 17.94 | 26.03 | 1.97 |
| Overail | 3-4 | 6.82 | 50.53 | . 70 | 3.25 | 3.47 | 4.35 | 1.50 | 5.19 | 20.01 | 1.89 |
|  | 5-6 | 8.18 | 45.82 | 1.92 | 3.24 | 3.15 | 4.31 | 2.47 | 9.76 | 16.50 | 1.49 |
|  | 7-8 | 8.35 | 45.19 | 3.28 | 2.57 | 3.09 | 1.38 | 3.43 | 11.56 | 17.93 | . 48 |
|  | EXP= Exploration Mi cro= Mi croph one $\mathrm{RP}=\mathrm{Role} \mathrm{Pl}$ ay |  |  | DRT=Goal Directed Acty=Activity DSG=Dressing |  |  |  | WND=Wandering <br> LR=Leave Room |  |  |  |

Of note are those few categories which have a low but interesting frequency. Specifically, these include: an increase in wandering and exploration of the microphone by the older children in the fourth condition. A final table showing the percentages of responses per condition, category of observation and group (age and sex of child, gender of adult interviewer) is presented in Appendix H .

The sequential analysis of the data was done by calculating the probability that one event would follow another specified event. Again the data was studied by examining the differences in such probabilities as a function of the conditions, the age and sex of the child, and the gender of the adult interviewer. Initially only those activities occurring more than $5 \%$ of the time overall were examined. In all three conditions, the event most likely to precede a given event was the same event itself. This finding indicated that the observation system was not random; children tended to repeat an activity many times in the course of an observational session. Moreover, these probabilities were not insignificant; for all children, the probabilities for repeating events ranged from 69.43 to 91.71 . Simil ar values were obtained when the sample was broken down in the twelve groups and again significance occurred only when considering events which followed themselves.

A numper of interesting but very low frequency events were al so examined. These included ascertaining the antecedents of all doll interactions, as well as the antecedents of wandering or leaving the room. Only those events with percentages over . 25 were examined and only those categories that had an absolute frequency of 5 or more observations were considered.

Under condition one, exploration of the dolls was preceeded by exploration of the dolls in $51 \%$ of the occurrences; role playing with the dolls was followed by exploration of the dolls in $35 \%$ of the occurrences; throwing or kicking the dolls was followed by exploration of the dolls in $25 \%$ of the occurrences. Role playing with the dolls was followed by role playing with the dolls in $41 \%$ of the cases; dressing the dolls was followed by dressing the dolls in $80 \%$ of the cases; kicking or throwing the dolls was followed by kicking or throwing the dolls in $37 \%$ of the cases. Wandering was preceded by exploration of the microphone in $25 \%$ of the occurrences; wandering was followed by wandering in $74 \%$ of the cases.

Under condition two, exploration of the dolls was followed by exploration of the dolls in $38 \%$ of the cases; role playing with the dolls was followed by role playing with the dolls in $58 \%$ of the occurrences; throwing or kicking the dolls was followed by role playing with the dolls in $29 \%$ of the cases. Dressing the
dolls was preceded by playing with the doll clothes in $35 \%$ of the occurrences; dressing the dolls was preceded by dressing the dolls in $64 \%$ of the cases. Wandering was preceded by wandering $69 \%$ of the time; aggression (kicking or throwing the dolls) was preceded by wandering in $29 \%$ of the occurrences.

Under condition four, exploration of the dolls followed exploration of the dolls in $45 \%$ of the occurrences; role playing with the dolls followed role playing with the dolls in $31 \%$ of the occurrences. Playing with doll clothes was followed by dressing the dolls $30 \%$ of the time; dressing the dolls was followed by dressing the dolls in $84 \%$ of the occurrences. Exploring the enviroment was followed by wandering in $35 \%$ of the occurrences; exploring the microphone was followed by wandering in $25 \%$ of the occurrences; wandering preceded itself $76 \%$ of the time. No antecedents of leaving the room were found.

Two additional analyses were done. The first involved examining the words/labels given by the children for the sexually related body parts during the interview part of the study. The second involved examining the parents' responses to the questionnaire on child toy usage.

As will be recalled, during an interview in the playroom, children were asked to label the body parts of the four dolls.

The interview protocol is shown in Appendix E. The children's labels/names as well as their parents' names for selected body parts are given in Appenaix I. Inspection of these lists suggestions that there are some body parts for which most children, irrespective of age, have no consistent name, i.e. scrotum. Girls appeared to be either less willing to talk than boys or to have less exact terminology; girls of all ages labelled vagina and penis less accurately than boys. Of note is the observation that younger chil dren tend to give more responses than older children. This finding may reflect a compliance in younger children who feel they must answer when asked for additional labels. On the other hand, it may reflect an inhibition on the part of older children who felt that the interview itself was unusual and were therefore less willing to put forth more than a minimal effort.

Overail, the children provided nearly 3,000 labels or names for breast, vagina, penis, scrotum, buttocks, and anus. Another way to analyse their responses was to group them into categories: Correct (or nearly so), Wrong (term of another body part), Obscure (jargon), and Unknown (or no answer). For the entire group of chilaren $(N=144)$, the proportion of correct responses was highest for buttocks ( $82 \%$ ) and lowest for $\operatorname{scr}$ otum ( $14 \%$ ). The highest proportion of wrong (25\%) and of obscure (11\%) responses was for
vagina. Use of obscure responses for all names combined ranged narrowly from 7 to $10 \%$. The fewest responses were offered for scrotum (32\%) and the most for buttocks ( $90 \%$ ). The proportion of Wrong and obscure responses declined sharply after four years of age. $28 \%$ of the labels offered by three and four year olds, $10 \%$ of those offered by five and six year olds, and $8 \%$ of those offered by seven and eigint year olds were incorrect. For the youngest children, the highest proportion of obscure responses were for breast (20\%) and scrotum (18\%). Girls gave a substantially higher proportion of wrong responses for vagina than did boys (33\% as opposed to 18\%) ; for breast, the proportions were 5\% for girls and $8 \%$ for boys. Table 9 presents the tabulation of the data discussed above.

Insert TABLE 9
about here

The parent questionnaire is shown in Appendix D. Inspection of the responses indicate that most if not all of the children have exposure to dolls, stuffed animals or small figures in their homes. Summaries of these data are presented by group in Appendix J. The simil arities among the groups are striking; for this reason, further analyses were not done at this time with this data.

TABLE 9: Percentage of Labels Offered by Girls ( $N=72$ ) and Boys ( $N=72$ )

Girls: 3-4 year olds
Body

| Parts | Correct | Close | Cor/Cl | Wrong | Obscure | No An. | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
| Breast | 27.03 | 26.13 | 53.15 | 7.21 | 27.93 | 11.71 | 111 |
| Navel | 57.26 | 12.82 | 70.09 | 1.71 | 17.09 | 11.11 | 117 |
| Vagina | 18.97 | 1.72 | 20.69 | 36.21 | 13.79 | 29.31 | 58 |
| Penis | 39.29 | 12.50 | 51.79 | 3.57 | 17.86 | 26.79 | 56 |
| Scrotum | 2.17 | 0.00 | 2.17 | 26.09 | 19.57 | 52.17 | 46 |
| Buttocks | 50.85 | 13.56 | 64.41 | 14.41 | 6.78 | 14.41 | 118 |
| Anus | 0.00 | 21.50 | 21.50 | 19.63 | 3.74 | 55.14 | 107 |
| Total | 31.16 | 14.85 | 46.00 | 13.54 | 14.68 | 25.77 | 613 |

Boys: 3-4 year olds

| Breast | 21.01 | 26.89 | 47.90 | 17.65 | 11.76 | 22.69 | 119 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Navel | 23.44 | 15.63 | 39.06 | 17.19 | 28.13 | 15.63 | 64 |
| Vagina | 18.97 | 5.17 | 24.14 | 34.48 | 13.79 | 27.59 | 58 |
| Penis | 56.67 | 11.67 | 68.33 | 11.67 | 10.00 | 10.00 | 60 |
| Scrotum | 0.00 | 4.08 | 4.08 | 20.41 | 16.33 | 59.18 | 49 |
| Buttocks | 56.90 | 12.07 | 68.97 | 5.17 | 6.03 | 19.83 | 116 |
| Anus | 0.00 | 45.28 | 45.28 | 12.26 | 6.60 | 35.85 | 106 |
| Total | 26.40 | 20.28 | 46.68 | 15.38 | 11.89 | 26.05 | 572 |

TABLE 9: Percentage of Labels Offered by Giris ( $N=72$ ) and Boys ( $N=72$ )--conti nued

| Girls: 5-6 year olds |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Body |  |  |  |  |  |  |  |
| Parts | Correct | Cl ose | Cor/Cl | Wrong | Obscure | No An. | Total |
| Breast | 48.25 | 25.44 | 73.68 | 2.63 | 1.75 | 21.93 | 114 |
| Navel | 89.42 | . 96 | 90.38 | . 96 | 3.85 | 4.81 | 104 |
| Vagina | 31.58 | 7.89 | 39.47 | 44.74 | 10.53 | 5.26 | 38 |
| Penis | 39.62 | 13.21 | 52.83 | 7.55 | 3.77 | 35.85 | 53 |
| Scrotum | 0.00 | 0.00 | 0.00 | 2.04 | 2.04 | 95.92 | 49 |
| Buttocks | 69.60 | 12.80 | 82.40 | . 80 | 2.40 | 14.40 | 125 |
| Anus | 0.00 | 14.14 | 14.14 | 2.02 | 8.08 | 75.76 | 99 |
| Total | 46.05 | 12.03 | 58.08 | 4.98 | 4.12 | 32.82 | 582 |
| Boys: 5-6 year olds |  |  |  |  |  |  |  |
| Breast | 23.93 | 38.46 | 62.39 | 4.27 | 3.42 | 29.91 | 117 |
| Navel | 67.80 | 13.56 | 81.36 | 8.47 | 4.24 | 5.93 | 118 |
| Vagina | 26.92 | 1.92 | 28.85 | 17.31 | 0.00 | 53.85 | 52 |
| Penis | 55.93 | 20.34 | 76.27 | 0.00 | 5.08 | 18.64 | 59 |
| Scrotum | 10.00 | 30.00 | 40.00 | 2.00 | 4.00 | 54.00 | 50 |
| Buttocks | 76.60 | 2.13 | 78.72 | 7.45 | 4.26 | 9.57 | 94 |
| Anus | 0.00 | 32.71 | 32.71 | 7.48 | 5.61 | 54.21 | 107 |
| Total | 38.86 | 21.11 | 59.97 | 6.70 | 4.02 | 29.31 | 597 |

TABLE 9: Percentage of Labels Offered by Girls ( $N=72$ ) and Boys ( $N=72$ )--continued

Girls: 7-8 year olds

| Body |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Parts | Correct | Cl ose | Cor/Cl | Wrong | Obscure | No An. | Total |
| Breast | 29.09 | 42.73 | 71.82 | 4.55 | 1.82 | 21.82 | 110 |
| Navel | 96.94 | 0.00 | 96.94 | 0.00 | 0.00 | 3.06 | 98 |
| Vagina | 35.71 | 3.57 | 39.29 | 21.43 | 10.71 | 28.57 | 56 |
| Penis | 55.77 | 3.85 | 59.62 | 9.62 | 5.77 | 25.00 | 52 |
| Scrotum | 0.00 | 4.76 | 4.76 | 2.38 | 0.00 | 92.86 | 42 |
| Buttocks | 82.93 | 7.32 | 90.24 | 1.63 | . 81 | 7.32 | 123 |
| Anus | 0.00 | 24.49 | 24.49 | 1.02 | 2.04 | 72.45 | 98 |
| Total | 48.01 | 14.85 | 62.87 | 4.49 | 2.42 | 30.22 | 579 |
| Boys: 7-8 year olds |  |  |  |  |  |  |  |
| Breast | 26.13 | 32.43 | 58.56 | 1.80 | 8.11 | 31.53 | 111 |
| Navel | 79.31 | 11.21 | 90.52 | 4.31 | 3.45 | 1.72 | 116 |
| Vagina | 38.78 | 2.04 | 40.82 | 0.00 | 12.24 | 46.94 | 49 |
| Penis | 50.85 | 16.95 | 67.80 | 5.08 | 5.08 | 22.03 | 59 |
| Scrotum | 4.00 | 28.00 | 32.00 | 2.00 | 10.00 | 56.00 | 50 |
| Buttocks | 89.68 | 9.03 | 98.71 | . 65 | . 65 | 0.00 | 155 |
| Anus | 0.00 | 11.11 | 11.11 | 7.07 | 18.18 | 63.64 | 99 |
| Total | 48.67 | 15.49 | 64.16 | 2.97 | 7.20 | 25.67 | 639 |

continued next page

TABLE 9: Percentage of Labels Offered by Girls $(N=72)$ and Boys ( $N=72$ )--conti nued

Girls: All Ages

| Body |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Parts | Correct | Close | Cor/Cl | Wrong | Obscure | No An. | Total |
|  |  |  |  |  |  |  |  |
| Breast | 34.93 | 31.34 | 66.27 | 4.78 | 10.45 | 18.51 | 335 |
| Navel | 79.94 | 5.02 | 84.95 | .94 | 7.52 | 6.58 | 319 |
| Vagina | 28.29 | 3.95 | 32.24 | 32.89 | 11.84 | 23.03 | 152 |
| Penis | 44.72 | 9.94 | 54.66 | 6.83 | 9.32 | 29.19 | 161 |
| Scrotum | .73 | 1.46 | 2.19 | 10.22 | 7.30 | 80.29 | 137 |
| Buttocks | 68.03 | 11.20 | 79.23 | 5.46 | 3.28 | 12.01 | 366 |
| Anus | 0.00 | 20.07 | 20.07 | 7.89 | 4.61 | 67.43 | 304 |
| Total | 41.54 | 13.92 | 55.47 | 7.78 | 7.22 | 29.54 | 1774 |

Boys: All Ages

| Breast | 23.63 | 32.56 | 56.20 | 8.07 | 7.78 | 27.95 | 347 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Navel | 62.75 | 13.09 | 75.84 | 8.72 | 9.06 | 6.38 | 298 |
| Vagina | 27.67 | 3.14 | 30.82 | 18.24 | 8.81 | 42.14 | 159 |
| Penis | 54.49 | 16.29 | 70.79 | 5.62 | 6.74 | 16.85 | 178 |
| Scrotum | 4.70 | 20.81 | 25.50 | 8.05 | 10.07 | 56.38 | 149 |
| Buttocks | 75.89 | 8.22 | 84.11 | 3.84 | 3.29 | 8.77 | 365 |
| Anus | 0.00 | 30.13 | 30.13 | 8.97 | 9.94 | 50.96 | 312 |
| Total | 38.38 | 18.86 | 57.25 | 8.13 | 7.63 | 26.99 | 1808 |

Cor $/ \mathrm{Cl}=$ Correct $/ \mathrm{Cl}$ ose $\quad$ No $\mathrm{An}=$ No Answer Total=Total Number of Responses

## DISCUSSION

The data presented above have many interesting implications. Anatomically-correct dolls are not particularly interesting toys. In fact, given the choice between what appeared to be many uninteresting toys, these novel dolls were found to have marginal attractiveness. Moreover, al though the sexual body parts of these dolls were inspected by many children, role playing displaying explicit incidents of sexual behavior were not observed. Contrary to the assertion of some perpetrators, these dolls do not appear to stimulate discussions or activities of a sexual nature.

Aggression in general, and toward the dolls in particular, was a rare event. Less than $1 \%$ of the observed interactions were aggressive. Of interest, in particular, was the observation that when the dolls were left undressed, no incidents of aggression toward the dolls was observed.

As might be expected, girls found the dolls more attractive and played with them more than did boys. However, the finding that the presence of a female interviewer stimulated children's play with the dolls was unexpected. It is interesting to speculate whether children see females as more nurturant and therefore, identify with that role or whether in some way the female interviewers subtly suggest doll play more than the male
interviewers. Certainly, if this finding is replicated, then investigating agencies might want to consider using only females in those investigations in which doll interviews or doll play is expected to be a part.

The youngest children (three to four year olds) were observed to play less with the dolls when an adult was present in the room than when the adult was absent. During the study, these young children of ten sought to communicate with the adult when he/she was in the room with the child. Once the adult left the room, these chil aren behaved in a manner consistent with the behavior of the older children. The youngest children al so had a tendency to leave the room or refuse to stay alone after the doll interview; in general, they appeared to be less comfortable and more unsure of the expectations for their behavior in the different conditions under which observations were made.

It was hoped that a sequential analysis of the data would provide some insight into the antecedents of doll interactions or particular behaviors such as aggression, wandering or leaving the room. Instead, these analyses provided validity information on the observation system itself. The only significant and meaningful findings were that high frequency behaviors were preceded by themselves. This suggested that the observations of
the behavior of the children were not random; the observed events tended to repeat themselves many times during a given condition.

The analysis of the names given by the children for sexually-rel ated body parts suggested that younger children gave more labels than do older children. These labels were at times far from correct and suggest that these young children may be willing to provide answers to questions asked of them, even when they have no real response. Interviewers working with young chilaren may find that pressing these children for more details when the responses are not forthcoming will not prove helpful to their inquiry.

Girls appeared less willing than boys to speak about body parts; girls also used fewer correct names for body parts than did boys. During the study, interviewers and observers were impressed by the behavior of older girls who were very uncomfortable in the interview. It was felt that this inhibition might be a reflection of the effectiveness of sexual abuse prevention programs and the awareness of these children that such questioning is unusual and, in most settings, inappropriate.

The cnildren offered many names for different body parts, names which were different from those offered by their parents. Same persons suggest that children using a different label from
those used by his/her parent is evidence, in and of itself, of abuse. In this sample, such a suggestion is contradicted.

Of note were body parts for which the majority of children had no names. In particular, scrotum and breast presented difficulties for many children. Again, persons evaluating interview data should be cautioned against overinterpretation of the exactness of verbal descriptions and labels given by many chil aren. It appears likely that most children will not have all the terminology needed to describe a particular incident in the detail which may be required for legal proceedings.

Parents reported that most children had ready access to dolls, stuffed animals or action figures and used them in regular play activities. Therefore, differences in observed doll play could not be attributed to differential previous exposure to dolls.

The reader is asked to remember that this particular pil ot study involved 144 middle class subjects and that generalizations to other groups should be guarded. Replication of the study is suggested for other groups of subjects and should be done with the changes in methodology suggested earlier in this report. In addition, it is alear that a more el aborate and extensive study must follow to explore the differences between the interactions of
non-abused and abused children. Such a study should address a number of questions, including:

1. How do the interactions exhibited by sexually-abused children differ from those exhibited by non-abused chil dren?
2. For sexually-abused children, are these differences related to circumstances of the abuse, characteristics of the perpetrator, duration of abuse, and time since discovery and disclosure? Do these factors exert an effect on doll play independent of the children's age, gender, or social class?
3. Does the lexicon differ for sexually-abused children?
4. Does separation from the perpetrator change the type and intensity of doll play?

Data from the larger study could provide information which would be invaluable in the training of protective service workers, law enfor cement officials and mental heal th workers involved in the investigation of abuse incidents. Most intriguing, however, is the possibility of developing a projective, evaluative technique based on free play/observation of interactions of children with the dolls. The non-invasive mature of such a technique would provide many advantages over the of ten criticized interview methodologies.

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Appendix A:
New spaper Articles

The article which follows was released by the Inf ormation Service.

Release: Immediate Health News Contact: Mary Abboud-Kamps 283 Medical Laboratories 319/353-7302
(UI study: normal chilaren's interactions with anatomically-correct dolls)

IOWA CITY, Iowa -- Children between the ages of three and eight years, and their parents, are being asked to participate in a new University of Iowa College of Medicine study about the use of anatomically-correct rag dolls.

The UI researchers are studying children's interactions with these life-like dolls that include male and female genitals.

The child participants will be observed as they interact in a UI playroom with the rag dolls and a variety of child-safe toys, says Dr . Abigail Sivan, a UI pediatric psychologist. The children will receive $\$ 10$ for their participation in the UI study, Sivan adds. Sivan, a member of the Child Development Clinic staff of the UI pediatric Division of Developmental Disabilities, is conducting the study.

The dolls are increasingly being used by irvestigators of child sexual abuse during interviews of children who are suspected to have been sexually abused, she says.

There is no scientific data which provides information about the interaction of normal children with these dolls. An understanding of how normal children react with the dolls can be important to an understanding of a sexually abused child's interactions with these dolls, Sivan explains.
"Without comparison data of the interactions of normal children and children who apparently have been sexually abused, it's difficult to use observations of the doll play of abused children as significant evidence," she notes. Such information could help to validate a child victim's court
testimony, as well as help the child protection system avoid proceeding unfairly against persons who have not committed sexual abuse.

The interviews of children who are suspected to have been sexually abused, in many cases serves as the child's testimony that sexual abuse has occurred, and the testimony of ten is accepted in a court hearing.

Persons interested in receiving more information about this UI study may tel ephone Sivan at (319) 353-4825.

Also participating in the UI study with Sivan are Drs. David Schor, Gina Krehbiel, Dennis Harper, and Linn Noble.
"Aratomically correct dolls studied in UI research." The Daily Iowan, July $26,1985$.
"Anatomically correct dolls used in UI study." Courier, August 23, 1985.
"Chil dren Needed For UI Study of Sexual Abuse." Republican-Standard, August 6, 1985.
"Children sought for $U$ of I study on court use of dolls." Daily Times, August 13, 1985.
"Children's Interaction With 'Dolls'." Toledo Chronicle, August 3, 1985.
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"Kias sought for study of anatomically correct dolls." Citizen, August 8, 1985.
"Life-like doll is used in Iowa study." Daily News, August 13, 1985.
"Study being conducted on use of anatomically-correct dolls." Red Oak Express, August 2, 1985.
"Study Needs Volunteers." Maquoketa Sentinel-Press, August 14, 1985.
"SUI performing research on 'anatomically correct' dolls." Gazette, July 30, 1985.
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"U of I seeks children for study." DeWitt Observer, July 31, 1985.
"U of I to conduct study of kids with anatomically correct dolls." Daily Herald, July 26, 1985.
"U of I will use life-like dolls in study to help validate child abuse stories." LeMars Daily Sentinel, August 1, 1986.
"UI child study." Evening Journal, July 26, 1985.
"UI studies children's interactions with anatomically-correct dolls." Hawk Eye, Juily 28, 1985.
"UI studies children's interaction with anatomically correct dolls." Messenger, July 30, 1985.
"UI Studies Normal Children's Interaction With Dolls." Economist, August 13, 1985.
"We CAN protect kids from abuse." Iowa City Press-Citizen, August 2, 1985.

Appendix B:
Consent Forms

# The University of lowa 

Iowa City, Iowa 52242

Child Development Clinic Division of Developmental Disabilities University Hospital School

1847

Project Title: Interactions of Normal Children with Anatomically-Correct Dolls

Investigators: Abigail Sivan, David Schor, Gina Krehbiel, Dennis Harper

The purpose of this research is to collect information about the interactions of children ages 3-8 years with anatomically-correct dolls. These dolls have been widely used in educational, therapeutic, and social service settings, but to date, no data on the interactions of normal (nonreferred) children are available.

The dolls are attractive rag dolls with proportional and explicit male and female body parts. They will be presented to the children fully clothed. The research is conducted in several phases and involves about 45 minutes of your child's time. In the first phase, a brief and commonly used measure of general vocabulary will be administered to your child. During this time, you will be introduced to the dolls and also asked to complete a brief questionnaire about your child's play and your family's words for body parts and functions. In the second phase, your child will be invited into a playroom with the dolls and other child-safe toys in the presence of the staff member. The staff member will then leave the room and later return to interview your child, asking about differences between these dolls and other dolls your child has seen and asking your child to name body parts. Then the interviewer will leave, and your child will play freely with the dolls for an additional five minutes.

The entire interaction between your child and the dolls will be recorded on audiotape. A trained observer will be in an observation room recording comments as well. You are encouraged to observe your child's interaction in the playroom. All observations will remain strictly confidential. The research data will be stored by code number and no names will be used. If you or your child wish to withdraw from participation in the study, you may do so at any time. Upon completion of the observation, your child will be paid $\$ 10$ for his/her time and cooperation.

# The University of lowa 

WRITTEN SUMMARY OF INFORMATION DISCUSSED WITH SUBJECT

Today we would like to introduce you to our playroom. We have some new dolls there. After you play for awhile, I will ask you some questions about the dolls. If you do not enjoy what you are doing, you may stop at any time. Your parent(s) and I will watch you play from another room. When you are finished, you and your parent(s) may leave. In a few weeks, we will send you a check for ten dollars.

I HAVE DISCUSSED THE ABOVE POINTS WITH THE SUBJECT. IT IS MY OPINION THAT THE SUBJECT UNDERSTANDS THE BENEFITS AND OBLIGATIONS INVOLVED IN PARTICIPATION IN THIS PROJECT.

Investigator

Auditor-Witness

Date

Date

# WRITTEN STATEMENT OF INFORMATION DISCUSSED WITH PARENT OR GUARDIAN 

Project Title: Interactions of Normal Children with Anatomically-Correct Dolls

Investigators: Abigail Sivan, David Schor, Gina Krehbiel, Dennis Harper

The purpose of this research is to collect information about the interactions of children ages $3-8$ years with anatomically-correct dolls. These dolls have been widely used in educational, therapeutic, and social service settings, but to date, no data on the interactions of normal (nonreferred) children are available.

The dolls are attractive rag dolls with proportional and explicit male and female body parts. They will be presented to the children fully clothed. The research is conducted in several phases and involves about 45 minutes of your child's time. In the first phase, a brief and commonly used measure of general vocabulary will be administered to your child. During this time, you will be introduced to the dolls and also asked to complete a brief questionnaire about your chiid's play and your family's words for body parts and functions. In the second phase, your child will be invited into a playroom with the dolls and other child-safe toys in the presence of the staff member. The staff member will then leave the room and later return to interview your child, asking about differences between these dolls and other dolls your child has seen and asking your child to name body parts. Then the interviewer will leave, and your child will play freely with the dolls for an additional five minutes.

The entire interaction between your child and the dolls will be recorded on audiotape. A trained observer will be in an observation room recording comments as well. You are encouraged to observe your child's interaction in the playroom. All observations will remain strictly confidential. The research data will be stored by code number and no names will be used. If you or your child wish to withdraw from participation in the study, you may do so at any time. Upon completion of the observation, your child will be paid $\$ 10$ for his/her time and cooperation.

I HAVE DISCUSSED THE ABOVE POINTS WITH THE LEGALLY AUTHORIZED REPRESENTATIVE OF THE SUBJECT. IT IS MY OPINION THAT THE PARENT OR GUARDIAN UNDERSTANDS THE BENEFITS AND OBLIGATIONS INVOLVED IN PARTICIPATION IN THIS PROJECT.

Investigator
Date

## BASIC CONSENT FORM

## CERTIFICATION OF SUBJECT CONSENT <br> BY LEGALLY AUTHORIZED REPRESENTATIVE

Project Title: Interactions of Normal Children with Anatomically-Correct Dolls
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$$
\text { I, } \frac{\text { parent or guardian's name }}{(\text { relationship or legal status) }}
$$

of $\qquad$ , hereby certify that $I$ have been told by

```
anme of person conducting research of Pediatrics Department
    (investigator's name)
                    (department)
```

about the research on Observations of Children's Interaction with Anatomically -

Correct Dolls
and its purposes, in which my $\qquad$ has been asked to take (child)
part. I have been told about the procedures to be followed, which of them are experimental, and how much time is involved. I understand the possible risks and discomforts the subject may experience, and the possible benefits to the subject and to others from the research. I have also been told the extent to which any records which may identify the subject will be kept confidential.

A written summary of what $I$ have been told is attached. I have been given an adequate opportunity to read it.

I understand that $I$ have the right to ask questions at any time and that I should contact $\qquad$ for answers about the research and our rights.

I understand that $I$ have the right to withdraw this consent to take part in the project at any time and withdraw him/her from the project without penalty or loss of benefits to which he/she may be entitled.

I hereby freely consent to $\qquad$ taking part in this research project.

Signature of Legally Authorized Representative

I, the undersigned, certify that $I$ was present during the oral presentation of the written summary attached, when it was given to the above legally authorized representative of the subject.

Appendix C:
New spaper Ads




Appendix D:
Parent Questionnaire

## PARENT QUESTIONNAIRE

Child's Birthday__-_/_-_/ month/day/year

Mother's Occupation Mother's Education

Please list all siblings and their ages:

$\qquad$

Father's Occupation
Father's Education

Children differ in the toys to which they are attached. Which of the following toys are in your home? With which of the following does your child play most of the time? Check the appropriate blanks.

We have these my Child uses these toys
TOYS: ALOT SOME NOT AT ALL
Blocks/lego
Board games/cards
Books/taped stories
Cars/trucks/tracks
Craft/art activities
Dolls/dolls clothes, etc. Musical activities/records
Small models/figures
Sports equipment
Stuffed animals
Television/video games

| --- | ---- |
| :---: | :---: |
| --- | --- |
| ---- | ---- |
| - | ---- |
| --- | --- |
| --- | --- |
| --- | --- |
| --- | --- |
| ---- | ---- |

Families have different names for body parts and functions. What terms do you use with your children when referring to the following:

YOUR WORD(S)
Abdomen
Anus $\qquad$
Belly button/navel $\qquad$
Bowel movement

Breast $\qquad$
Buttocks


Penis

Parent Questionnaire - Page 2 - Continued

Thigh
Urination
Vagina/labia

$\qquad$
$\qquad$

Have you discussed any sexual-reproductive information with your child? Explain:

Does your child have knowledge of sexual-reproductive function? $\qquad$ How much curiosity has your child exhibited regarding sexual-reproductive
functions? None

Explain: $\qquad$

Appendix E:
Interview
$\qquad$

Date $\qquad$
"Did you see the new dolls?"
"How are these dolls different from the ones you have at home?" $\qquad$
"These dolls have all their body parts... let's see if you can tell me some names for these, okay? I am going to write down what you say so I can remember, okay?"

Comments re child's behavior/affect:
$\qquad$
I. Take the child doll which is the same gender as the

## subject first.

Undress the doll; ask "Would you help me undress the doll?" Ask about one body part on the head <e.g., hair, eyes, mouth, chin, cheek, ear or nose) before going to the torso. "What do you call this?"

Ask about one body part on the upper torso <e.g., shoulder, arm, elbow, hand or thumb) before going to the sexually related parts. "What do you call this?"

Going on to the sexual parts. Ask for each part: "What do you call this?" "Do you know ariy ether names for ?"____ breasts $\qquad$ navel $\qquad$
vagina $\qquad$
penis $\qquad$ scrotum: $\qquad$
buttocks $\qquad$
anus $\qquad$
Ask about one body part on the lower body (e.g. leg, knee, foot or abdomen). "What do you call this?"
$\qquad$
II. Pick up the second child doll and ask "Is this doll the same as the one you just looked at? If not, ask "how is it different from the other doll?" $\qquad$

Repeat questioning as above:
Undress the doll; ask "Would you help me undress the doll?" Ask about one body part on the head (e.g., hair, eyes, mouth, chin, cheek, ear or nose) before going to the torso. "What do you call this?"

Ask about one body part on the upper tarso (e.g., shoulder, arm, elbow, hand or thumb) before going to the sexually related parts. "What do you call this?"

Going on to the sexual parts. Ask for each part: "What do you call this?" "Do you know any other riames for ? breasts $\qquad$
navel $\qquad$
vagina $\qquad$
penis $\qquad$
but tocks $\qquad$
anus $\qquad$
Ask about one body part on the lower body se.g. leg, knee, foot or abdomen). "What do you call this?"
$\qquad$
III. Pick up mother doll and repeat process. Ask "Is this a boy doll or girl doll? "How do you
know?" $\qquad$

Repeat questioning as above:
Undress the doll; ask "Would you help me undress the doll?" Ask about one body part on the head (e.g., hair, eyes, mouth, chin, cheek, ear or nose) before going to the torso.
"What do you call this?"
Ask about one body part on the upper torso (e.g., shoulder, arm, elbow, hand or thumb) before going to the sexually related parts. "What do you call this?"

Going on to the sexual parts. Ask for each part: "What do you call this?" "Do you know any other names for ? breasts $\qquad$
navel $\qquad$
vagina $\qquad$
penis $\qquad$ scrotum: $\qquad$
buttocks $\qquad$
anus $\qquad$
Ask about one body part on the lower body (e.g. leg, knee, foot or abdomen). "What da you call this?"
$\qquad$
IV. Pick up the father doll and repeat the questions. "Is this a boy doll or girl dall?" "How da you know?" $\qquad$

Repeat questioning as aboue:
Undress the doll; ask "Would you help me undress the doll?" Ask about one body fart on the head <e.g., hair, eyes, mouth, chin, cheek, ear or nose) before going to the torso. "What do you call this?"

Ask about one body part on the upper torso (e.g., shoulder, arm, elbow, hand or thumb) before going to the sexually related parts. "What do you call this?"

Going on to the sexual parts. Ask for each part: "What do you call this?" "Do you know any other names for ? breasts $\qquad$
navel $\qquad$
vagina $\qquad$
penis $\qquad$
$\qquad$
buttocks $\qquad$
anus $\qquad$
Ask about one body part on the lower body (e.g. leg, knee, foot or abdomen). "What do you call this?"

DO NOT RE-DRESS DOLLS; LEAVE THEM UNDRESSED

## Appenaix F: <br> Diagram and List of Equipment



5--Audio Cassette Playback 6--Microphone
7--Audio Amplifier
8--Ceiling Microphone
9--Speaker

## List of Equipment

1, 2: Wireless FM Microphone and FM Receiver TOA Model: WT-6
3: Stereo Cassette Recorder
Panasonic Model RX-C45F
4: Audio Mixer
Realistic Model 32-110A
5: Monaural Cassette Playback Wollensak Mode 2550
6: Microphone Realistic 33-992B
7, 8, 9: Audio Amplifier, Ceiling Microphone and Speaker Intercom System of room installed 20 years ago

Appendix G:

## Observer Descriptors

## DESCRIPTORS FOR OBSERVERS

```
Structure: Actor-verb-object-(for dolls) body part
Doll actions are coded as a priority over other actions
ACTOR
child - subject
male - older male doll
female - older female doll
boy - younger male doll
girl - younger female doll
adult - interviewer
CHIID ACTS ON OBJECT VERBS
Child moves object verbs
tarow - object is not in contact with any other person or object kick - child uses foot to move object at least one-half square on floor pick-up - child lifts object from surface places - child puts object on object for one second or more
```


## Child touching object verbs

(code any other verb as a priority)
hold - child touches with one or two hands for one second or more
touch - child manipulates for one second or less (may be repeated)
Child acting on doil verbs
cradle-doll in both arms, arms interlocked, doll parallel to floor hug - doll in one or two arms, body vertical to floor, dolls body against child's.
hands
rub - child rubs with back to back motion with one or two hands
punch - child hits with front of knuckled fist
pound - child hits with heel of fist
slap - child hits with open hand
squeeze/pinch - child uses thumb and forefinger to squeeze (hold, places, pick-up, are priority codes)
poke - child hits with one or two fingers
jerk - child puils part away from object midline
fold - child bends object more than 90 degrees
others - pull
head
bite - child places in mouth
kiss - child places mouth on object
hit - child hits own head against object or object against head

## feet

step-on - child places on foot on object
stomp - child places one or two feet $x 2$ on object no intervening code
kick-at - child uses foot to kick object without moving object (i.e., holds object or places object against wall)
other

```
sit - child's bottom contacts object for one second or more
bounce - child's bottom contacts object for one second or less
talk - child talks to object (code any but look as a priority)
look - child's head points to object (code any other code as a priority)
```

Child manipulating clothing
remove - child removes item from doll
closures/unclosures - child places clothing on doll and does appropriate
fastening
undressing - child attempting to remove clothing items
dressing - child attempting to put on items

PRIORITY OF CHILD ACTING ON OBJECT VERBS IN DESCENDING ORDER
rub, punch, pound, slap, poke, jerk, fold, bite, kiss, hit,
st omp, step-on, kick-at,
sit, bounce,
undressing, dressing, remove, put on,
cradle, hug,
throw, kick,
pick-up, places,
hold, touch, pinch,
talk,
look
CHILD ACTS ALONE VERBS
stands - child has only feet touching any object or child moves from sitting to standing position
kneels - child has one or two knees touching ground
sits
wanders in room
DOLL ACTS ON OBJECT VERBS
same as child acts on other verbs - some categories less likely than others

ROOM OBJECTS
Play Objects
bed - bed, sheets, mattress
chalk - chalk
car - car
sink - sink
chairs - chairs
curtain - curtain and all toys behind curtain
door - doors
rear table - table next to interviewer's chair
typing table - table under observer's mirror
picnic basket - picnic basket and all items in it
teapot - silver tea pot
book - book
puzzle - interlocking cards and box - matchmates

```
Play Objects (continued)
own clothing - child's clothing, describe item(s)
own body part - child plays with own body part, describe part(s)
mirror - observation window
mike - transmitter and strap
dominoes
wagon
DOLL OBJECTS
Body Parts
hair
eye
nose
ear
head
mouth
body
breast
arm
hand
penis
scrotum
bottom
leg
foot
crotch - between legs
Doll Orientation
front
back
Clothing
shirt
pants
dress
undermen - male and boy's underpants
underwomen - female and girl's pants
```


## Appenaix H :

Table Showing Percentages of Events in Each Category for 12 Groups

APPENDIX H
Table Showing Percentages of Events in Each Category for 12 groups


## Appenaix I:

Parents' and Children's Labels of Sexuality-Related Body Parts

SCROTUM [2 dolls]


ANUS [4 dolls]

|  | BOYS | G IRLS | PARENTS |
| :---: | :---: | :---: | :---: |
| Age Group: 3-4 years | DK (38) | DK (59) | no answer (7) |
|  | butt/s/ (11) | bottan (11) | bottam (20) |
|  | poop (9) | crotch (6) | butt (11) |
|  | bottam (8) | hole (5) | anus (5) |
|  | bones (4) | peanut (4) | butt-hole (3) |
|  | butt-hole (4) | penis (4) | poopy-hol e/poop-hole (2) |
|  | poop-hole (4) | where you make | rect um (2) |
|  | penis (3) | byce (4) |  |
|  | buga (2) | butt (3) |  |
|  | hole (2) | crotcho (3) |  |
|  | poop come out/ can poop out (2) |  |  |
|  | skin (2) |  |  |
|  | stuff dolls (2) |  |  |
| Other Words: | butt-hole | back | bum |
|  | butt-hole butt | backo | opening for BMs/where |
|  | buttee-hole | lipstick | your BM comes out |
|  | button | pink | po-po |
|  | choo | tig | rearend |
|  | doo-doo | three little pigs | where the poop/y/ |
|  | go to bathroom | twig | comes out |
|  | goes for poo | where you go pee |  |
|  | gutter butt-hole |  |  |
|  | hole to go bath room |  |  |
|  | lina |  |  |
|  | little hole they poop out of |  |  |
|  | pewy |  |  |
|  | vagina |  |  |
|  | when BM comes out |  |  |
| Age Group: <br> 5-6 years | DK (58) | DK (75) | no answer (12) |
|  | hole (12) | butt (7) | bottan (21) |
|  | poop (8) | hole (4) | butt (12) |
|  | bottam (4) | bottam (3) | rectum (5) |
|  | butt-hole (4) | butt-hole (2) | behind (2) |
|  | in between (4) | china (2) |  |
|  | tinkle spot (3) | poop-hole (2) |  |
|  | bottam-hole (2) |  |  |
|  | pee (2) |  |  |
|  | tinkl eee (2) |  |  |
| Other Words: | buns hole | bladder | anal sphincter |
|  | butt | crack | butt hole |
|  | buttie | fargutt | fanny |


|  | ```BOYS buttocks chubby cheek crotch d'henzos where poop romes out``` | G IRL S <br> line <br> where your pee comes out | PARENTS <br> hole <br> where bowel move- <br> ment comes out <br> where the poop/y/ comes out <br> where you go potty |
| :---: | :---: | :---: | :---: |
| Age Group: <br> $7-8$ years | ```DK (63) hole-the hole or a hole-(9) butt-hole (8) crack (8) bone/s/ (5) skin (3)``` | ```DK (71) butt-hole (11) bottam (5) where he/she goes #2 (4) butt (2) crack (2) hole (2)``` | ```no answer (12) bottam (18) butt (8) butt-hole (5) anus (3) rectum (2)``` |
| Other Words: | inside of rump pun rump | bones | bum <br> heiney <br> hole <br> opening for BMs/where <br> your BM comes out poop/y/ hole <br> rearend |

BUTTO CKS [4 dolls]


|  | $\begin{aligned} & \text { BOYS } \\ & \text { rear } \end{aligned}$ | G IRL S <br> seat <br> tona | PAREN TS <br> fanny peter cottontail |
| :---: | :---: | :---: | :---: |
| Age Group: | DK (0) | DK (9) | no answer (2) |
| 7-8 years | bottam (67) | bottam (49) | butt (27) |
|  | butt (59) | butt (43) | bottam (24) |
|  | rearend (13) | buns (10) | buns (6) |
|  | behind (4) | behind (4) |  |
|  | buns (4) | rump (4) |  |
|  | rump (4) | rear (3) |  |
|  | ass (2) | rearend (3) |  |
| Other Words: | biscuit | back | ass |
|  | button | behive | bum |
|  |  | bottam side | buttocks |
|  |  | uterus | fanny |
|  |  |  | rear |
|  |  |  | rump |
|  |  |  | tusch |

BOYS
GIRLS

DK (13)
breasts (21)
boobies (17)
boobs (10)
ni pples (9)
dots (6)
tummy (5)
belly button (4)
neenee (4)
rest (4)
teetees (4)
circles (3)
polkadots (2)

PARENTS
no answer (4) breasts (33) boob/s/ (12) booby (3) ni pple/s/ (3) chest (2)

Other Words: B
belly button balls
bewey
boobie-nipple boobo
bucks
bun
gutts
like belly button like egg
milk
naked
nannys
penis
pewey
strap them
toobis
tummy
belly
bras
bust
chum
drink milk from it
heart
leeta
pink
puffies
sandy
suckers
twig
wide

Age Group:
5-6 years

DK (35)
boobs (30) breasts (18)
boobies (10)
nipples (10)

DK (25)
breasts (28)
nipples (27)
boobs (19)
boobies (10)
no answer (1)
breast (40)
boobs (12)
booby (5)
ni pple/s/ (5)

|  | BOYS | GIRLS | PARENTS |
| :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { chest (3) } \\ & \text { nippl eeee (3) } \\ & \text { bras (2) } \\ & \text { pimples (2) } \\ & \text { titties (2) } \end{aligned}$ | buttons (3) $\qquad$ (2) | tit/s/ (4) |
| Other Words: | belly button dipples |  | book <br> chest <br> nanny <br> titty |
| Age Group: <br> $7-8$ years | DK (35) | DK (24) | no answer (3) |
|  | breasts (27) | boobs (35) | breast (36) |
|  |  |  |  |
|  | boobies (10) | boobies (5) | chest (2) |
|  | tits (5) | titties (4) |  |
|  | ninni-dots (4) | chest (3) |  |
|  | nipples (2) | tits (3) |  |
|  | teeties (2) | packs (2) |  |
|  | titties (2) | ribs (2) |  |
| Other Words: | beanies |  | nipple/s/ |
|  | bikini |  | tit/s/ |
|  | chest |  | titty |
|  | pupils |  |  |

PENIS [2 dolls]

|  | BOYS | GIRLS | PAREN TS |
| :---: | :---: | :---: | :---: |
| Age Group: <br> 3-4 years | ```DK (6) penis (32) bun (2) pee-pee (2) tidera/tidra (2) wei ner (2)``` | DK (15) <br> penis (20) <br> bottam (2) <br> denis (2) <br> peanut (2) <br> peter (2) <br> wei ner (2) <br> wee-wee (2) | $\begin{aligned} & \text { no answer (1) } \\ & \text { penis (41) } \\ & \text { pee-pee (2) } \end{aligned}$ |
| Other Words: | bagina benis body bottom breast buga genis hot dog peins pewy poop potty toushee weenie | flagger <br> ollie <br> peanut-pees <br> renna <br> thrink <br> to go potty <br> tussie <br> wally <br> wide | gilkie <br> pee-er <br> pee-wee <br> tiddler <br> weenie <br> wee-wee <br> what is that hanging out |
| Age Group: <br> 5-6 years | DK (11) <br> penis (33) <br> tote/t oote/ <br> tutee (3) <br> weiner (3) <br> pee-pee (2) <br> peter (2) <br> tinkle spot (2) | ```DK (19) penis (21) weiner (6) bottam (2) part of bottam (2)``` | ```no answer (3) penis (42) dick (2)``` |
| Other Words: | dick <br> tinkle <br> tinkl ee | carness <br> hot dog <br> p $\qquad$ | ```gilkie pee-er pee-pee peter potty privates/personal part/private part tinkle spot tutty wei ner``` |


|  | BOYS | G IRL S | PAREN TS |
| :---: | :---: | :---: | :---: |
| Age Group: | DK (13) | DK (13) | no answer (4) |
| $7-8$ years | penis (30) | penis (28) | penis (41) |
|  | dick (7) | vagina (3) | privates/personal |
|  | weiner (3) <br> croton (2) | weiner (2) | part/private part (3) |
| Other Words: | balls | crotch | bo-bo |
|  | bad spot | hot dog | hooty |
|  | bo-bo | peenie | pee-pee |
|  | boo-boo | period | peter |
|  |  | private part | weiner |
|  |  | where he goes \#1 |  |


|  | BOYS | G IRL S | PAREN TS |
| :---: | :---: | :---: | :---: |
| Age Group: <br> 3-4 years | ```DK (10) belly button (50) penis (8) belly (6) button (6) tummy (4) pewy (4) breasts (3) buga (2) peeny button (2) red (2) socum (2)``` | ```DK (13) belly button (64) peek-a-hole (4) pickle (4) tummy (4) tummy button (4) button (3) telly button (3) belly (2) round (2)``` | no answer (0) <br> be?ly button (46) navel (4) <br> pupek/pooh-pe ck--czech--(2) |
| Other Words: | belly dutton benis <br> chew <br> dot <br> gelly gutton <br> one tickle <br> telly delly button thickle <br> vas | al ateet <br> belly delton <br> belly dutton <br> bunny <br> cinda <br> circle <br> cl ock <br> jenny <br> like penis <br> sandy <br> telly bunny <br> tig <br> vagi na <br> wide | peek hole <br> tummy button <br> where your belly button is |
| Age Group: <br> 5-6 years | ```DK (7) belly button (78) belly (12) heart (4) pooh-back-- czech--(4) tummy (4) inee-outee (3) button (2) scrotum (2)``` | ```DK (5) belly button (89) button (4) carnist/carnal/ carness (4)``` | ```no answer (1) belly button (44) navel (2)``` |
| Other Words: | belly-ache really button | belly where babies were born | ```belly button pupek/pooh-peck-- czech-- tummy tummy button umbilicus``` |


|  | BOYS | G IRLS | PAREN TS |
| :---: | :---: | :---: | :---: |
| Age Group: | DK (2) | DK (3) | no answer (1) |
| 7-8 years | belly button (82) | belly button (91) | belly button (41) |
|  | tummy button (8) | navel (4) | tummy button (6) |
|  | button (7) |  | navel (2) |
|  | belly (5) |  |  |
|  | stamach (5) |  |  |
|  | scar (4) |  |  |
|  | nabel (3) |  |  |
| Other Words: |  | belly |  |
|  |  | button |  |
|  |  | hole |  |

VAGINA [2 dolls]

|  | BOYS | G IRL S | PARENTS |
| :---: | :---: | :---: | :---: |
| Age Group: | DK (16) | DK (17) | no answer (10) |
| 3-4 years | penis (7) | bottam (14) | vagi na (28) |
|  | vagina (7) | vagi na (8) | bottam (7) |
|  | butt (4) | butt (3) | vulva (3) |
|  | poop (3) | crotch (2) | labia (2) |
|  | bagina (2) | bottams (2) |  |
|  | leg (2) | pink (2) |  |
|  | pee-pee (2) | weiner (2) |  |
| Other Words: | bones | chakie | butt |
|  | bottam | cinda | cracker |
|  | breasts | hair | crotch |
|  | buga | hole | perineal area |
|  | crotch | pernium | perineum |
|  | dot | twig | that |
|  | fira | where you go potty | where babies come |
|  | fur | wide-in | out |
|  | hair |  |  |
|  | little butt where |  |  |
|  | poop comes out |  |  |
|  | pina |  |  |
|  | poop come out |  |  |
|  | to go tinkle |  |  |
|  | vagi ne |  |  |
| Age Group: <br> 5-6 years | DK (28) | DK (20) | no answer (14) |
|  | vagina (8) | bott am (9) | vagina (24) |
|  | crotch (6) | vagina (7) | bottam (6) |
|  | buttocks (2) | butt (4) | crotch (3) |
|  | foot/footee (2) | crotch (3) | personal part/private |
|  | penis (2) | bl adder (2) | parts/privates/ |
|  |  | hair (2) | private stuff (3) |
|  |  | pee-pee (2) | labia (2) |
|  |  | private spot (2) |  |
|  |  | vulva (2) |  |
| Other Words: | belly button buttee hair pee-pee tit | like a penis penis <br> where your poop \& pee comes out | pee-pee |
|  |  |  | pussy |
|  |  |  | tinkle spot |
|  |  |  | tussy |
|  |  |  | urethra |
|  |  |  | vulva |
|  |  |  | where babies come |
|  |  |  | out |

BOYS
Age Group:
7-8 years

Other Words:

DK (23)
vagina (17)
crotch (2)
starts with V (2)

GIRLS
DK (16)
vagina (9)
crotch (8)
bottan (6)
genitals (2)
period (2)
urethra (2)
butt
cracker
'gina
patch
penis
private part
uterus
weiner
uterus
weiner
where she goes \#1

PAREN TS
no answer (11)
vagina (27)
personal part/private parts/privates/ private stuff (5)
bottam (2)
crotch (2)
labia (2)
bo-bo
bottam-front end cracker
genitals
groin
pelvic area

Appendix J:
Summary of Responses to Parent Questionnaires

Group: $\qquad$

|  |  |  | NOT |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| HAVE | USES | USES | AT | DON'T | MANY | NO |
| TOYS | ALOT | SOME | ALL | HAVE | ANS. | RESP. |

Blocks / legos
Board games/cards
Books/taped stories
Cars/trucks/tracks
Craft/art activities Dolls/dolls clothes, etc. Musical activities/records Small models/figures Sports equipment Stuffed animals Television/video games
$\begin{array}{r}5 \\ \hline \frac{2}{9} \\ \hline 10 \\ \hline 6 \\ \hline 2 \\ \hline 4 \\ \hline 7 \\ \hline 2 \\ \hline 6 \\ \hline 4\end{array}$

| 7 |
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$\qquad$

Blocks/legos Board games/cards Books/taped stories Cars/trucks/tracks Craft/art activities Dolls/dolls clothes, etc. Musical activities/records Small models/figures Sports equipment Stuffed animals Television/video games


ANS=Answers
RESP=Responses

Group: III

|  |  |  |  | NOT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HAVE | USES | USES | AT | DON'T | MAN Y | NO |
|  | TOYS | AL OT | SOME | ALL | HAVE | ANS. | RES P. |
| Blocks/legos | 12 | 4 | 7 | 1 | 0 | 0 | 0 |
| Board games/cards | 12 | 3 | 9 | 0 | 0 | 0 | 0 |
| Books/taped stories | 12 | 12 | 0 | 0 | 0 | 0 | 0 |
| Cars/trucks/tracks | 12 | 2 | 8 | 1 | 0 | 0 | 1 |
| Craft/art activities | 12 | 9 | 3 | 0 | 0 | 0 | 0 |
| Dolls/dolls clothes, etc. | 12 | 8 | 4 | 0 | 0 | 0 | 0 |
| Musical activities/records | 12 | 7 | 4 | , | 0 | 0 | 0 |
| Small models/figures | 11 | 4 | 7 | 0 | 1 | 0 | 0 |
| Sports equi pnent | 12 | 1 | 9 | 1 | 0 | 0 | I |
| Stuffed animals | 12 | 8 | 3 | 0 | 0 | 0 | 1 |
| Television/video games | 11 | 4 | 6 | 1 | 1 | 0 | 0 |

Group : $\qquad$ IV

Blocks/legos
Board games/cards Books/taped stories Cars/trucks/tracks Craft/art activities Dolls/dolls clothes, etc. Musical activities/records Small models/figures Sports equipment Stuffed animals
Television/video games

|  |  |  | NOT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HAVE | USES | USES | AT | DON ' T | MAN Y | NO |
| TOYS | AL OT | S OME | ALL | HAVE | ANS. | RES P |
| 12 | 5 | 5 | 2 | 0 | 0 | 0 |
| 12 | 5 | 6 | 1 | 0 | 0 | 0 |
| 12 | 10 | 2 | 0 | 0 | 0 | 0 |
| 12 | 2 | 9 | 1 | 0 | 0 | 0 |
| 11 | 8 | 3 | 0 | 1 | 0 | 0 |
| 12 | 8 | 4 | 0 | 0 | 0 | 0 |
| $1 /$ | 8 | 3 | 0 | 1 | 0 | 0 |
| $1 /$ | 1 | 9 | 0 | 1 | 0 | 1 |
| 10 | 2 | 8 | 0 | 2 | 0 | 0 |
| 13 | 6 | 5 | 0 | 0 | 1 | 0 |
| 9 | -2 | 6 | 1 | 3 | 0 | 0 |

ANS=Answers
RESP=Responses

Blocks / legos
Board games/cards Books/taped stories Cars/trucks/tracks Craft/art activities Dolls/dolls clothes, etc. Musical activities/records Small models/figures Sports equipment Stuffed animals Television/video games

|  |  |  | NOT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H AVE | USES | USES | AT | DON ' T | MAN Y | NO |
| TOYS | AL OT | SOME | ALL | HAVE | ANS. | RES P. |
| 12 | // | 0 | 1 | 0 | 0 | 0 |
| 12 | 6 | 6 | 0 | 0 | 0 | 0 |
| 12 | 8 | 4 | 0 | 0 | 0 | 0 |
| 12 | 7 | 5 | 0 | 0 | 0 | 0 |
| 12 | 8 | 4 | 0 | 0 | 0 | 0 |
| 9 | 2 | 6 | 1 | 3 | 0 | 0 |
| $\angle 2$ | 5 | 7 | 0 | 0 | 0 | 0 |
| 11 | 7 | 4 | 0 | 1 | 0 | 0 |
| 12 | 5 | 7 | 0 | 0 | 0 | 0 |
| 12 | 4 | 8 | 0 | 0 | 0 | 0 |
| $1 /$ | 5 | 6 | 0 | 1 | 0 | 0 |

ANS=Answers
RESP=Responses

Group: VI

Blocks/legos Board games/cards Books/taped stories Cars/trucks/tracks Craft/art activities Dolls/dolls clothes, etc. Musical activities/records Small models/figures Sports equi pment Stuffed animals
Television/video games

|  |  |  | NOT |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| HAVE | USES | USES | AT | DON'T | MANY | NO |
| TOYS | ALOT | SOME | ALL | HAVE | ANS. | RESP. |




ANS=Answers RESP=Responses
$\qquad$

|  | $\begin{aligned} & \text { HAVE } \\ & \text { TOYS } \end{aligned}$ | $\begin{aligned} & \text { USES } \\ & \text { AL OT } \end{aligned}$ | $\begin{aligned} & \text { USES } \\ & \text { SOME } \end{aligned}$ | $\begin{aligned} & \text { NOT } \\ & \text { AT } \\ & \text { ALL } \end{aligned}$ | $\begin{aligned} & \text { DON ' }{ }^{\prime} \text { ' } \\ & \text { HAVE } \end{aligned}$ | MAN Y ANS. | $\begin{aligned} & \text { NO } \\ & \text { RES P. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Blocks/legos | 12 | 2 | 10 | 0 | 0 | 0 | 0 |
| Board games/cards | 12 | 4 | 8 | 0 | 0 | 0 | 0 |
| Books/taped stories | 12 | 10 | 2 | 0 | 0 | 0 | 0 |
| Cars/trucks/tracks | 11 | 1 | 7 | 2 | 1 | 0 | 1 |
| Craft/art activities | 11 | 8 | 3 | 0 | 1 | 0 | 0 |
| Dolls/dolls clothes, etc. | 12 | 11 | 1 | 0 | 0 | 0 | 0 |
| Musical activities/records | 11 | 7 | 4 | 0 | 1 | 0 | 0 |
| Small models/figures | 12 | 4 | 7 | 1 | 0 | 0 | 0 |
| Sports equipment | 12 | 0 | 11 | 1 | 0 | 0 | 0 |
| Stuffed animals | 12 | 6 | 5 | 1 | 0 | 0 | 0 |
| Tel evision/video games | 12 | 2 | 9 | 1 | 0 | 0 | 0 |

Blocks / legos
Board games/cards
Books/taped stories Cars/trucks/tracks Craft/art activities Dolls/dolls clothes, etc. Musical activities/records Small models/figures Sports equipment Stuffed animals Television/video games

|  |  |  | NOT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H AVE | USES | USES | AT | DON'T | MAN Y | NO |
| TOYS | AL OT | SOME | ALL | HAVE | ANS. | RES P. |
| 11 | 1 | 7 | 3 | 1 | 0 | 0 |
| 12 | 2 | 10 | 0 | 0 | 0 | 0 |
| 12 | 10 | 2 | 0 | 0 | 0 | 0 |
| 10 | 1 | 8 | 1 | 2 | 0 | 0 |
| 12 | 10 | 2 | 0 | 0 | 0 | 0 |
| 12 | 8 | 3 | 0 | 0 | 0 | 1 |
| 9 | 3 | 6 | 0 | 3 | 0 | 0 |
| 9 | 2 | 7 | 0 | 3 | 0 | 0 |
| 11 | 3 | 7 | 1 | 1 | 0 | 0 |
| 12 | 5 | 7 | 0 | 0 | 0 | 0 |
| 10 | 2 | 8 | 0 | 2 | 0 | 0 |

Group : IX

Blocks/legos
Board games/cards Books/taped stories Cars/trucks/tracks Craft/art activities Dolls/dolls clothes, etc. Musical activities/records Small models/figures Sports equipment Stuffed animals Television/video games

| HAVE | USES | USES | NOT | AT | DON'T | MANY |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| TOYS | ALOT | SOME | ALL | HAVE | ANS. | RESP. |
| $\frac{12}{12}$ | $\frac{5}{3}$ | $\frac{6}{12}$ | $\frac{6}{12}$ | $\frac{8}{12}$ | $\frac{1}{4}$ | $\frac{0}{3}$ |
| $\frac{1}{11}$ | $\frac{2}{12}$ | $\frac{0}{10}$ | $\frac{0}{2}$ | $\frac{0}{0}$ | $\frac{0}{0}$ | $\frac{0}{0}$ |
| $\frac{12}{12}$ | $\frac{2}{10}$ | $\frac{0}{10}$ | $\frac{0}{2}$ | $\frac{0}{0}$ | $\frac{0}{0}$ | $\frac{0}{0}$ |
| $\frac{12}{12}$ | $\frac{1}{6}$ | $\frac{0}{7}$ | $\frac{0}{6}$ | $\frac{0}{0}$ | $\frac{0}{0}$ | $\frac{0}{0}$ |

Group: $\qquad$

Blocks/legos
Board games/cards
Books/taped stories Cars/trucks/tracks Craft/art activities Dolls/dolls clothes, etc. Musical activities/records Small models/figures Sports equipment Stuffed animals Television/video games

|  |  |  | NOT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HAVE | USES | USES | AT | DON ' T | MAN Y | NO |
| TOYS | AL OT | S OME | ALL | HAVE | ANS. | RES P. |
| 11 | 6 | 5 | 0 | 1 | 0 | 0 |
| 12 | 7 | 5 | 0 | 0 | 0 | 0 |
| 12 | 10 | 2 | 0 | 0 | 0 | 0 |
| 12 | 6 | 6 | 0 | 0 | 0 | 0 |
| 11 | 5 | 6 | 1 | 1 | 0 | 0 |
| 11 | 1 | 6 | 4 | 1 | 0 | 0 |
| 10 | 6 | 4 | 0 | 2 | 0 | 0 |
| 11 | 5 | 4 | 2 | 1 | 0 | 0 |
| 12 | 5 | 7 | 0 | 0 | 0 | 0 |
| 11 | 2 | 6 | 3 | 1 | 0 | 0 |
| 9 | 4 | 5 | 0 | 3 | 0 | 0 |

Group : $\qquad$

Blocks / legos
Board games/cards Books/taped stories Cars/trucks/tracks Craft/art activities Dolls/dolls clothes, etc. Musical activities/records Small models/figures Sports equipment Stuffed animals Television/video games

|  |  |  | NOT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H AVE | USES | USES | AT | DON ' T | MAN Y | NO |
| TOYS | AL OT | S OME | ALL | HAVE | ANS. | RES P. |
| 11 | 1 | 9 | 1 | 1 | 0 | 0 |
| 12 | 2 | 10 | 0 | 0 | 0 | 0 |
| 12 | 8 | 4 | 0 | 0 | 0 | 0 |
| 11 | 2 | 6 | 3 | 1 | 0 | 0 |
| 10 | 6 | 4 | 0 | 2 | 0 | 0 |
| 12 | 9 | 3 | 0 | 0 | 0 | 0 |
| 11 | 3 | 7 | 1 | 1 | 0 | 0 |
| 9 | 1 | 7 | 1 | 3 | 0 | 0 |
| 10 | 2 | 8 | 2 | 2 | 0 | 0 |
| 12 | 5 | 7 | 0 | 0 | 0 | 0 |
| 10 | $\frac{5}{6}$ | 4 | 0 | 2 | 0 | 0 |

ANS=Answers RESP=Responses


Group: Boys

|  | $\begin{aligned} & \text { HAVE } \\ & \text { TOYS } \end{aligned}$ | $\begin{aligned} & \text { USES } \\ & \text { AL OT } \end{aligned}$ | $\begin{aligned} & \text { USES } \\ & \text { SOME } \end{aligned}$ | NOT <br> AT <br> ALL | $\begin{aligned} & \text { DON ' } T \\ & \text { HAVE } \end{aligned}$ | $\begin{aligned} & \text { MAN Y } \\ & \text { ANS. } \end{aligned}$ | $\begin{aligned} & \text { NO } \\ & \text { RES P. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Blocks/legos | 71 | 46 | 23 | 2 | 1 | 0 | 0 |
| Board games/cards | 20 | 29 | 40 | 1 | 2 | 0 | 0 |
| Books/taped stories | 72 | 51 | 21 | 0 | 0 | 0 | 0 |
| Cars/trucks/tracks | 72 | 46 | 24 | 2 | 0 | 0 | 0 |
| Craft/art activities | 62 | 32 | 35 | 0 | 5 | 0 | 0 |
| Dolls/dolls clothes, etc. | 60 | 7 | 37 | 14 | 12 | 2 | 0 |
| Musical activities/records | 65 | 23 | 35 | 2 | 7 | 1 | 0 |
| Small models/figures | 66 | 44 | 20 | 2 | 6 | 0 | 0 |
| Sports equipment | 70 | 25 | 45 | 0 | 2 | 0 | 0 |
| Stuffed animals | 70 | 23 | 37 | 10 | 2 | 0 | 0 |
| Television/video games | 57 | 26 | 30 | 1 | 15 | 0 | 0 |

ANS=Answers
RESP=Responses

Group: $\qquad$

Blocks/legos
Board games/cards Books/taped stories Cars/trucks/tracks Craft/art activities Dolls/dolls clothes, etc. Musical activities/records Small models/figures Sports equipment Stuffed animals Television/video games


|  | NOT |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HAVE | USES | USES | AT | DON'T | MAN Y | NO |
|  | TOYS | AL OT | SOME | ALL | HAVE | ANS. | RES P. |
| Blocks/legos | 141 | 59 | 67 | 14 | 3 | 0 | 1 |
| Board games/cards | 142 | 51 | 89 | 2 | 2 | 0 | 0 |
| Books/taped stories | 144 | 111 | 32 | 0 | 0 | 1 | 0 |
| Cars/trucks/tracks | 139 | 54 | 67 | 16 | 5 | 0 | 2 |
| Craft/art activities | 134 | 82 | 52 | 0 | 10 | 0 | 0 |
| Dolls/dolls clothes, etc. | 132 | 62 | 53 | 14 | 12 | -2 | 1 |
| Musical activities/records | 130 | 58 | 67 | 4 | 14 | 1 | 0 |
| Small models/figures | 129 | 56 | 66 | 6 | 15 | 0 | 1 |
| Sports equipment | 136 | 33 | 99 | 3 | 8 | 0 | 1 |
| Stuffed animals | 142 | 55 | 73 | 12 | 2 | 1 | 1 |
| Television/video games | 120 | 47 | 69 | 4 | 24 | 0 | 0 |

ANS=Answers
RESP=Responses

## Appendix K:

## SUBJECT

A: How about if I put this over your arm and then over your head?
How would that be?
C: Okay.
A: Is that comfortable?
C: Ya.
A: Okay, great. I'm going to sit here and do some work for a little while and you can play with whatever you'd like to. Okay?
C: Okay.
C: This got to have something in it for sure cause its heavy. I was 97 right. A tea party.

C: I'm gain to cook outside.
97

C: This is a pitcher. Do we have any food for here?
A: I don't think so.
C: We should have brought some food from out there.

C: Okay. Only need one cup. Cause I'm the only one eating. 97

C: Only one plate. Hey, I don't want that. I like the pouch. I have one of these at my school. So I have all of this kit except one 97 thing. Okay.

C: There, it's right on top. 97
C: Okay. Put that
----------------- my self.

## OBSERVER

Child and adult enter room. Adult hel ps child put on microphone.
**Adult talks to child. Child looks at mirror. Child goes to mirror table. Picks up basket. Kneels on floor. Puts picnic basket on floor. Child places lid on floor. $1 /-22$ Places grill on floor. Child stands. Picks up cloth. Unfolds cloth. Places cloth on floor. Child talks. Picks up grill. Looks at grill. Places grill in basket lid. Picks up grill. Picks up pitcher. Places pitcher on floor. Places grill in lid. Child picks up tongs. Stands. Holds tongs. Walks. Looks around.
**Child kneels on floor. Places tongs on floor. Picks up cup. Places cup on cloth. Picks up plate. Again. Places plate on $12-22$ cloth. Picks up pitcher. Holds pitcher. $12-22$ Holds pitcher above cup. Touches pitcher spout. Places pitcher on floor. Places lid on basket. Removes lid. Places grill on basket. Places grill on floor. Places pitcher on basket. Touches cup and plate to
own mouth. Places cup and plate in basket. *Places tongs in basket. Places grill on basket. Places lid on basket. Pushes basket lid down. Stands. Picks up basket by $1 /-22$ handle. Places on mirror table. Looks at $\|-22$ dolls. Walks to doll table. Picks up
female. Lets go of female. Walks away from $/ /-2 i$
doll table. Looks at dolls. Walks to other
side of doll table. Looks at dolls. Touches
boy. Picks up girl. Holds girl. Child
walks. Carries girl. Walks to adult. Shows girl to adult. Child walks to car. Sits girl on car.
**Child stands. Holds girl. Puts girl on $11-22$
floor. Picks up cloth. Holds cloth.

Carries cloth to basket on mirror table.
Picks up basket lid. Picks up grill. Places $11-22$ cloth in basket. Places grill on basket. Places lid on basket. Picks up girl from $1 /-26$ floor. Sits girl on table. Looks at mike. Touches mike to own ear. Touches mike to own mouth. Looks around. Child looks at dolls. Talks to dolls. Child sits on chair at doll table. Looks around.
**Child talks. Looks around. Child looks at adult. Again. Child looks around. Child 98 looks at mike. Touches mike to own ear. 98 Child looks at mike. Child talks to adult.
books in my other study, one which is now over. And, except they have smaller ---------, kind of.
C: (whispers) 97
C: What's this thing? 0kay. 97

A: I left something I need in the other room and I'm going to go get it okay?
C: Okay.
A: And I'm going to be gone for a couple minutes. Is it okay if you stay here and play?
C: Uh-huh.
A: Okay. You can play with whatever you'a like.
C: I'll o---that mop I can't play with.
A: Okay. You can play with whatever you'd like. I'll be back in a little while.

Holds mike. Again.
98
**Child looks around. Child looks at adult. Child looks at mirror. Child looks around. Child looks around. Child looks at mike.

Child looks around. Child stands. Walks to 98 mirror table. Looks at basket lid. Walks to 98 doll table. Touches
**the dolls. Looks at dolls. Picks up
female. Holds female sitting up. Touches
female hair. Holds female folded. Sits $||-z|$
female down. Touches male. Puts female next $||-Z|$ to male. Walks around doll table. Looks at $||-2|$ dolls. Picks up girl. Hugs girl. Puts down girl. Adult talks to child.
**Child talks to adult. Adult leaves. Child walks to mirror table. Picks up matchmates. Places matchmates on mirror table. Picks up $11-22$ dominoes. Carries dominoes. Child kneels on floor. Places dominoes on floor. Child $11-22$ picks up, holds dominoes. Places dominoes on floor. Again. Child holds and looks at $11-22$ dominoes. Places on floor. Child picks up domino. Places on floor.
**Child places domino next to domino on floor. Again. Again. Again. Again. $11-22$ Again. Again. Again.
**Again. Again. Child turns dominoes over.
$11-22$

Again. Again. Again. Child places domino $1 /-22$ in box. Again.
*Again. Again. Again. Again. Again.

$$
11-22
$$

Again. Again. Child looks at dominoes. $11-22$ $11-22$ Child looks around. Child looks at dolls. Child stands. Child
**Walks to doll table. Looks at dolls. Child looks around. Child walks. Child 98 holds mike. Looks at mike. Touches mike to 98 own mouth. Talks. Looks at mirror. Child walks to doll table. Looks at mirror. Child looks at dolls. Child looks at girl.

Touches girl. Looks at mirror. Child looks around. Child touches
**girl's foot to own mouth. Child looks around. Child looks at dolls. Child looks around. Child looks at dolls. Child looks around. Child looks
**at mike. Holds mike. Touches mike to own mouth. Talks. Child looks at mirror. Child looks around. Child stands. Walks to mirror $11-26$ table. Child picks up matchmates. Carries $11-22$ matchmates to doll table. Walks. Picks up dominoes. Places dominoes on mirror table. ||-22 Child touches dominoes. Kneels on floor. Picks up matchmates from box. Places on floor. Again.
**Again. Adult enters room. Adult talks to

A: Hi. I'm back again. Well you figured out those things.
A: Have a seat here and let's talk about these dolls for a little bit.

A: I'll be back in a couple minutes. Okay.
C: Okay.
A: Okay. You can play with whatever you want.
C: -----------
C: Okay. Eight, eight, two! Three.

C: Okay. There's one.
97

C: Two. One, two, three, four, five, six, seven, eight.
child. Interview.

Interview ended. Adult leaves room. Child kneels on floor with matchmates.

* Child moves matchmates. Child places matchmate next to matchmate. Child turns over matchmate. Child places matchmate next $\begin{array}{r}11-22 \\ 11-22\end{array}$ to matchmate. Again. Again. Child picks up $11-22$ matchmate box. Looks at box. Places box on floor. Child picks up matchmates. Places **next to matchmate. Child looks at matchmates. Child touches mike. Child picks up matchmates. Picks up box. Cl oses end of $11-22$ box. Places matchmates in box. Again.
$11-22$ $11-22$ Again.
**Again. Again. Again. Child stands.
Places matchmates on mirror table. Child looks around. Walks. Child looks at mirror. Child walks around. Talks. Child walks to $11-24$ curtain. Opens curtain. Looks at curtain. Child walks. Looks around.
**Child holds mike wire. Child looks at
mirror. Holds mike to own mouth. Talks. 98
Child looks at mirror. Child looks at dolls.
Child walks. Looks at mike. Child walks. 98
Opens curtain. Looks behind curtain. Closes
$11-24$ curtain. Child walks. Looks around. Again.
*Again. Looks at doll table. Looks at
mirror. Looks around. Adult enters room. Observation ended.

A: We're all done. Yea. Here let me have the microphone from you. C: But it isn't

Child and adult enter room. Adult helps child put on microphone.

## **

Adult talks to child. Child walks to mirror table. Picks up matchmates. Child talks to adult. Looks ---------. Holds matchmate $11-22$ box. Holds matchmate. Child places matchmate box on mirror table. Picks up $11-22$ matchmates. Child looks at mirror. Child holds mike. Looks at mike. Child looks at mirror.

## Picks up matchmates.

**Child carries matchmates. Kneels on floor. Looks at dolls. Places matchmates on floor. $1 \mid-22$ Child holds matchmates. Places on floor. 1/-2 Child touches matchmates. Child holds $11-22$ matchmates. Child turns matchmates. Again. **Again. Again. Child looks around. Child turns matchmates. Again.

Child talks to adult. Child looks at adult. $\mid 1-22$ Child looks around. Child looks at $11-22$
(Child talks to self)

A: I left some things in my office. I'll be back in a few minutes. I have to go get them, okay?
C: Okay.
A: You just keep on playing.
C:
the grill.
C: Oops. Missed.
C: I'm going my --------- to the floor.
matchmates. Child holds matchmates.
*Whild looks at matchmates. Child touches $11-22$ $11-22$ matchmates. Again. Again. Again. $11-22$ *Again. Again. Again. Again. $11-22,11-22,11-22$ *Again. Child stands. Walks to mirror table. Picks up matchmate box. Looks at box. Looks at mirror table. Picks up basket lid. Places lid on basket. Holds matchmate $11-22$ box. Looks at mirror. Child carries $\|-22$ matchmate box. Kneels on floor. Picks up matchmates. Places in box.
**Places matchmates in box. Again. Again. Child looks at adult. Looks at dolls. Looks around. Child places matchmates in box. $11-22$ Again. Child stands. Carries matchmates. $11-22$ 11-22 Places on mirror table. Child holds basket handle. Carries basket. Places basket on doll table. Child looks at dolls.
**Child sits up male. Child sits down in $ル-2 \mid$ chair at doll table. Opens basket lid. $11-22$ Adult talks to child.

Adult leaves room. Child places basket lid on doll table. Places grill in lid. Child $1 /-22$ talks. Child picks up cloth. Unfolds cloth. $1 /-22$ Places cloth on floor.

Child kneels on floor. Pl aces basket and lid
on floor. Places lid on cloth. Places lid
on floor. Picks up pitcher. Holds pitcher. Opens pitcher spout.
*Opens pitcher lid. Holds lid. Holds the spout. Places lid on pitcher. Child places $|\mid-22$ pitcher in basket. Places pitcher on floor. $11-22$ Picks up plates. Holds plates. Again. Child drops plates. Child places plates on floor. Child places plates on cloth. Again. Child holds cups.
*. Child places cups on cloth. Again. Again. Child picks up plates. Places plates on $\begin{aligned} & 11-22 \\ & 11-22 \\ & 11-22\end{aligned}$ cloth.
child drops plates. Child places plates on

* Child places plates on cloth. Child picks $11-22$
up cups. Holds cups. Child picks up $11-22$
silverware. Places spatula on plate. Places $11-22$ forks on plate. Places cups on cloth. Picks
up tongs. Holds tongs. Child picks up pitcher.
**Places tongs and pitcher in basket. Child picks up silverware. Places in basket. $11-22$ Child places cups in basket. Child places $11-22$ plates in basket. Again. Child picks up cloth.
*Folds cloth. Places cloth in basket.
Places grill and lid on basket. Holds basket ||-22 handle. Picks up basket. Carries basket to $11-22$ mirror table. Places on mirror table.

A: Okay, I'm back.

A: Oh, you see our dolls, huh?
C: Uh-hmmmm.
A: You going to get them ready for bed?

Touches dominoes. Walks. Looks around.
Walks to curtain. Opens curtain. Looks $/ 1 /-24$ behind curtain. Again.

Looks at dolls. Looks at girl. Unclosures $|4-2|$ girl's dress. Closures girl's dress. Pokes $|\mid-2!$ finger in girl's mouth. Picks up nightgown. 14-2 Unfolds nightgown. Picks up pajamas.

Unfolds pajamas. Looks at pajamas. Picks up girl. Turns over. Unclosures dress. Undresses dress from girl. Closures male shirt. Undresses dress from girl. *Places girl's dress on table. Picks up pajamas. Sits up girl. Touches female, boy, $14-2 /$ and male. Holds pajamas.

Dresses girl in pajama top. Adult enters room.
[Interview Section]

Interview ended. Adult leaves room. Child
picks up girl. Picks up clothes. Picks up $|4-2|$
the rest.

C: On the 97

C: Hello. 97
C: Hello-o! Hello. Hello. 97
C: That was me. 97
pajamas. Places clothes on table. Picks up clothes. Child turns girls underwear. 14-21 Dresses girl in underwear.
*Again. Child dresses girl in underwear. $14-2 \mid$ Child looks at mike. Holds mike. Talk into $14-2$ $11-21$ mike. Again.

Child turns mike on and off. Back on.
**Child dresses girl in bra. Child closures
bra. Child unclosures bra. Undresses bra $|4-2|$

from girl. Picks up pajama top. Child
dresses girl in pajama top. Child looks at
mirror. Child removes microphone. Places
mike on table.
**Child walks to door. Opens door. Looks
into hallway. Child leaves room.
Observation ended.
*Child walks. Child holds doll table. Child looks dolls. Child walks. Child touches doll table. Child picks up male doll. Looks behind chalkboard. Chila looks mirror. Child looks mirror. Child walks mirror table. Child picks up domino. Child looks domino. Child picks up domino. Child picks up domino. Child picks up domino. Child picks up domino.
**Child picks up domino. Child picks up domino. Child picks up domino. Child picks $\|-22$ up domino. Child picks up domino. Child $\mid=22$ looks mirror. Child picks up domino.
**Child picks up domino. Again. Child places dominoes on mirror table. Again. $11-22$ Again. Child places dominoes in domino box. $11-22$ Again.
**Again. Again. Again. Again. Again. Again. Child holds mike. Child looks $\quad \mid 1-22$
mirror. Child holds teapot. Child removes $|\mid-22$ lid teapot. Child places lid teapot on $\quad|\mid-22$
teapot. Child picks up puzzle piece. Child picks up puzzle piece.
**Child looks puzzle pieces. Child places

mike. Child looks mirror. Child holds mike. Child holds mike. Child talks mike. Child 98 looks. Child looks floor. Child looks mirror.
**Child holds mike. Child talks. Child
looks clock. Child looks clock. Child looks 98
clock. Child looks clock. Child looks clock.
**Child looks clock. Child looks mirror. Child rubs own head with own hand. Child

Child picks up book. Child opens book. Child turns pages of book. Child closes book. Child places book on mirror table. Child walks.
**Child sits doll table chair. Child looks dolls. Child looks clock. Child holds mike. Child holds boy doll. Child picks up boy $||-2|$ doll. Child turns boy doll. Child turns boy doll. Child folds boy doll. Child folds boy $|5-2|$ doll. Boy doll kicks boy doll in the head. Child turns boy doll. Child pokes own thumb into boy doll's mouth.
**Child holds boy doll. Child places boy doll on doll table. Child touches boy doll $||-2|$
leg. Child pulls male doll. Child picks up
(Child whispers to self.)

Child whispers-can't understand words.
(Child whispers to self.)

C: Mom. Mom.

A: Hi. How you doing?
male doll. Child turns male doll. Male doll walks. Child holds male doll. Child places $|2-2|$ male doll on doll table. Child holds female legs. Child holds male doll legs. Child touches girl legs. Child touches male doll $||-2|$ leg. Child turns male doll leg. Child touches boy doll leg. Child touches female doll legs.

* Child holds female doll legs. Child pulls down female doll dress. Child holds girl $14-2 \mid$ doll legs. Child picks up boy doll. Child picks up female doll. Places against $12-21$ blackboard. Boy doll walks. Boy doll turns. Child places boy doll against blackboard. Child holds female doll leg. Child holds male doll. Child picks up male doll. Child turns male doll. Child places male doll on doll table. Child looks door. Child looks mirror. Child gets up. Child walks to adult chair. Child holds mike.
**Child looks mirror. Child looks mirror.
Child holds mike. Child looks mirror. Child looks mirror. Child holds mike. Child holds 98 mike. Child looks mirror. Child sits doll 98 table chair.
**Child sits doll table chair. Child rubs own nose with own finger. Child places own 98 finger in own mouth. Adult enters room.


## (Interview.)

(Child whispers.)
(Child makes sounds into mike.)
(Child sings to self.)
(Child whispers to self.)

Adult leaves room. Child sits doll table chair. Child looks mirror. Child holds mike. Child talks into mike. Child looks dolls. Child looks. Child holds mike. Child looks mirror. Child talks. Child holds mike.
**Child holds mike. Child holds mike. Child holds mike. Child sings. Child holds mike. 98 Child looks. Child rubs own face with own 98 hand. Child stands. Child looks mirror. Child looks mirror.
**Child looks dolls. Child touches dolls. Cant see. Child touches foot doll. Child $||-z|$ looks dolls. Child walks. Child sits doll table chair. Child picks up bra. Places bra 98 on doll table. Child looks dolls. Child looks dolls. Child looks floor. Child looks mirror. Child hits own legs with own hands. **Child holds mike. Child holds mike. Child looks dolls. Child looks mike. Child holds mike. Child holds mike. Child holds mike. Child looks mirror. Child looks clock. Child looks clock. Child looks clock. **Child looks clock. Child looks clock. Child looks dolls. Child looks dolls. Child $\begin{array}{r}98 \\ 98\end{array}$

A: Hi.
C: Hi.
A: We're all done.
looks mirror table. Child looks dolls. 98
**Child looks mirror. Child looks mirror. Child looks. Child rubs own face with own 98 hand. Child looks mirror. Child rubs own 98 face with own hand. Child looks mike. Child 98 holds mike. Child looks mirror. Adult enters room.

End session.

