

# **Listening To Young Children: Successful Techniques For Interviewing 3-5 Year Olds**

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## **Introduction**

A four-season demographic survey was conducted at the Philadelphia Zoo by Margaret Chambers in 1982. One of her findings indicated that over one quarter of the Zoo's audience was under 6 years old (approximately 325,000 visitors). This pre-literate audience was of particular interest, because the Zoo felt this group was not adequately being served. Previous Philadelphia Zoo evaluations showed that experiences in the Children's Zoo and attendance at shows and programs had improved the content knowledge of adults and older children; however, 3-5 year olds have a developmental need for hands-on learning (Massey & Hartnett, 1991), and except for the Children's Zoo, there were not many "touching" opportunities provided to them.

In September 1993, the Philadelphia Zoo was awarded a 30 month grant from the National Science Foundation to study casual family learning and to develop a series of interactive activity kits, called "Explore-A-Zoo," to encourage families with children aged 3-9 to interact together in front of exhibits while at the same time improve their science process skills.

It was while working on this grant that the Philadelphia Zoo realized the difficulty of collecting accurate data from young visitors who could not yet form complete sentences. This paper discusses the obstacles that confronted the Zoo when they encountered preliterate 3 - 5 year olds, and also highlights two data collection methods that were found to be successful.

## **Obstacles Encountered**

During the time that early formative evaluation on components of the kits was being conducted, it became apparent that interacting with young children would be an arduous task. The Philadelphia Zoo struggled through the first year of evaluation, researching and testing numerous interview and data collection methods, as well as searching for the appropriate data collectors. Successful data collectors were measured more by personality traits and less by educational background. Charismatic extroverts captivated

the 3 - 9 year old visitor and allowed for a more favorable interview process. The more comfortable the children were with the data collector, the easier it became to collect accurate information from the children.

Through observations of how the data collectors were approaching families, it was determined that families form immediate impressions. If the evaluator addressed the whole family but made eye contact first with the adult members of the group, the initial impression was more positive. A major concern of families with young children is the potential for kidnapping in open, crowded environments such as zoos and malls (Zonis, 1995). The Philadelphia Zoo found that by wearing a name tag or staff uniform, it added emphasis to employee credibility.

Having a confident approach ensured that the family would at least listen to the opening line. By smiling and being friendly and upbeat, data collectors experienced a refusal rate of less than 10%. Because the Philadelphia Zoo's summer visitor population includes many tourists, data collectors learned to speak slowly and clearly and to avoid using colloquialisms. What is recognizable in one part of the country as acceptable slang may be totally unrecognizable in another part of the country. The Philadelphia Zoo discovered that when the approach to the family was well rehearsed and clean, a positive interaction occurred between data collector and family.

Data collectors began training by tracking over a two-hour period, families who were not using the "Explore-A-Zoo" kits during their visit to the Zoo. Although data collectors did not use any formal coding procedure, they noted the kinds of activities families engaged in while visiting. We also developed an interview to compare families using kits versus those without kits. A critical discovery in the early research reflected what has previously been studied — that what families say during an interview is oftentimes very different from what those families do throughout their visit (Patterson, 1990; Patterson, Bitgood, & Benefield, 1986). Interviews with families and studies of their behavior in the Philadelphia Zoo also concur with earlier evaluation studies conducted by E.S. Robinson and Marilyn Hood (Robinson, 1928; Hood, 1988), and show that weekend visitors to the Philadelphia Zoo differ from weekday crowds, as well as spring and fall visitors versus summer attendees. Even morning and afternoon crowd vary. To ensure the families sampled were representative of the overall population, the Philadelphia Zoo developed an evaluation schedule. A large dry-erase calendar board was used in which observation and interview days and times were inserted. At a glance, data collectors could review the schedule and add as needed to round out the cells.

It was while doing this early training that the difference was noticed in observed behavior as compared to a family interview. Two methods were then developed to conduct on-site research: a 30 second interval instantaneous sampling method and interactive assessment interviews.

The 30 second interval instantaneous sampling evaluation used a series

of codes to record 10 basic behaviors. Evaluators wore a portable cassette player with head phones. On the tape was a tone which sounded every 30 seconds. At the tone, the evaluator coded subject behavior on a data sheet. Through continuous refinement we expanded to a more specific 12-item code system (Tables 1 and 2).

Face to face interviews were also conducted on sample families. Normally, interviews can provide a wellspring of information for research; however, when confronting 3 - 5 year old children, a whole host of challenges was encountered. Data collectors quickly learned that 3 - 5 year old children can be quite different developmentally. Semistructured interviews were created in which the wording or sentence structure could be altered to suit the child or situation. Standing while conducting an interview tended to intimidate children. Data collectors tried stooping down to the child's level to conduct the interview. By sitting on a bench or on the ground, we made the child feel more comfortable (Sommer & Sommer, 1986).

Another challenge was finding a location in the Zoo to conduct the interview. When interviewing in front of or near an animal exhibit, the children often became distracted and would not focus on the interview. Quiet areas in the Zoo were used to alleviate the problem. Also, after a two hour Zoo visit, children were either quite tired or extremely excited or hungry, so face-to-face interviews were kept short in order to obtain the maximum amount of usable information.

General question interviews did not provide accurate results. Developmentally, the children could not give us the answers we required to collect relevant data. Questions were too abstract. Parents often intervened, or the child conjured up wild tales because they did not know how to answer the questions. The Zoo created a type of interview that used interactive assessments. Children would demonstrate how they used the kits by recreating an activity from the kit. Questions were created which asked the children to distinguish between what is alike and what is different, or which have stripes and which have spots. By engaging children in these "hands-on" interviews, data collectors could effectively ascertain what the children had accomplished and not rely on the adult's interpretation of their child's involvement with the kits.

## Conclusion

Zoo experts warn that animals are unpredictable. Through the "Explore-A-Zoo" project, it has been noted that the young, 2-footed, talking human variety can be just as unpredictable. "Stranger-danger", pushy parents, distractions, and tall tales are just a few of the many obstacles we have encountered. Through determination and many hours of observation, the Philadelphia Zoo has been able to hurdle these and many other obstacles in order to gather accurate data necessary to complete this project. Although

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there is a long way to go, several inroads into the previously unexplored region of interviewing young children have been made.

### References

- Hood, M. (1988). Arboretum visitor profiles as defined by the four seasons. *Visitor Studies - 1988: Theory, research and practice. Proceedings of the First Annual Visitors Studies Conference*. Jacksonville, AL: Center for Social Design.
- Massey, C., Hartnett, p. (1991). *Zoo Visitors' Understanding of the Concept of Adaptation*, Manuscript in Preparation.
- Patterson, D., Bitgood, S., Benefield, A. (1986). *Zoo and museum visitors: What they say and what they do*. Presented at the Annual Meeting of the Southeastern Psychological Association, Orlando, FL.
- Patterson, D. (1990). The generality of visitor studies. *Visitor Studies: Theory, research and practice. Proceedings of the 1990 Visitor Studies Conference*. Jacksonville, AL: Center for Social Design. pp. 40 - 46.
- Robinson, E. S. (1928). The behavior of the museum visitor. *AAM Monograph*, New Series No. 14. Washington, DC: American Association of Museums.
- Sommer, B., Sommer, R. (1986). *Practical Guide to Behavioral Research*. New York, Oxford: Oxford University Press.
- Zonis, N. (1995 July/August). Does your family feel safe? *Sesame Street Parents*, pp. 22 - 27.



**Table 2**  
Coding Categories

<b>code</b>	<b>description</b>	<b>example</b>
Move	Moving from one exhibit to another	Walking along the pathway from one exhibit to another.
Look	Looking at exhibits	Attention is focused at exhibit.
E,R,P	Eat, rest, play	Eating lunch, sitting on a bench, climbing sculpture.
Exhibit	Interacting at exhibits	Pointing, talking, or asking questions in front of an exhibit.
Talk	Talking, not exhibit related	“When do we eat lunch?”
C & S	Concessions & services	Buying a souvenir
S & S	Signs and storybook boxes	Reading a sign or label
Program	Zoo program	Watching a scheduled keeper talk.
Other	Other behaviors noted for the sample family	Taking a photograph.
Intend	Intended use of the kit	An activity in front of an exhibit for which it was intended.
Unintend	Unintended use of the kit	An activity in front of an exhibit for which it was not intended
Non Exh	Non-exhibit use of the kit	Non exhibit use in areas such as lunch.