

Child-Assisted Data Collection and Analyses in Children's Spirituality Research

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During the past decade a number of new books have emphasized the distinctive characteristics of research conducted with children (Goodwin & Goodwin, 1996; Pellegrini, 1996; Cohen & Stern, 1997; Graue & Walsh, 1998; Grieg & Taylor, 1998; Holmes, 1998; Christenson & James, 2000). In general, these books concentrate upon the limitations and challenges of researching children, and sometimes emphasize the adult bias of researchers that can interfere with accurate understandings of children's behavior and thought. The most recent of these works includes a valuable chapter (Alderson, 2000) suggesting that children can have a significant role in the conducting of research. Alderson emphasizes children's contributions to research in school projects, by participating in the planning of research by adults, and initiating and directing research on their own. She also mentions children's potential contributions to research by assisting in the analysis of data.

In children's spirituality research the quantitative analysis of data may involve statistical manipulations beyond the capabilities of most children. Qualitative methods applied in the research of children may also require sophisticated analysis beyond the abilities of most children. Yet there has been somewhat of a tendency to forego formal analysis methods, such as analytic induction, taxonomic analysis, and constant comparison, and instead to concentrate upon aspects of data analysis that are less imposing, such as coding, summarizing, making generalizations, and highlighting the statements of children with minimal elaboration by the researcher. For example, I sense this tendency in some of the chapters of *The Education of the Whole Child* (Erricker, et. al., 1997), a book that I appreciate a great deal. Of course using these methods still involves interpretation—not all comments and actions of children receive equal emphasis, but rather they are selected to emphasize what the researcher considers important—and thus constitute a latent form of data analysis, even if less complex than more formal methods of analysis. Perhaps formal data analysis is minimized out of fear that children's perspectives will be truncated by the researcher's adult conceptualizations. Formal analysis may produce abstractions that are far removed from children's conceptualizations; the emic (insider) perspectives reflected by children's voices can easily be eclipsed by the etic (outsider) adult perspective of the researcher-analyst. Thus the literature on children's spirituality tends to either reflect adult perspectives of children's actions and statements, such as classic research studies that emphasize stages of children's religious thinking, or conversely have minimal formal analysis which is increasingly the case in recent years.

In contrast with both of these tendencies, the more traditional stance among ethnographers and other early qualitative researchers was to emphasize both emic (participants') and etic (researcher's) views during data collection: what is ignored by one may be highlighted by the other, and convergence between these perspectives can constitute one form of triangulation and thus reflect a degree of validity. While traditionally the researcher does the interpretation of both sources of data, producing hypotheses, conclusions, and even theory, it is possible to extend the etic/emic interface into at least some aspects of the data analysis process.

For the purposes of this report I will sometimes use the term "data analysis" loosely to include some aspects of analysis that technically precede actual data analysis. This is in keeping with my predominate frame of reference, qualitative research, which understands data analysis to be an ongoing aspect of research that is closely related, and feeds into, data collection. However, my suggestions are not exclusively oriented towards qualitative research; I will also include some examples of preadolescents assisting in preliminary data analysis in more quantitative aspects of research.

My Study of Children's Ceremonies and Rituals in School Hallways

In my own research I included children in several varieties of data analysis. I began my ethnographic research in February, 1994 and collected data for approximately four months in an elementary school hallway in the Southeastern United States. My own rudimentary data analysis began on the first day of data collection, but I soon realized that I was missing a great deal of what was taking place as I observed and wrote field notes. I made the decision to begin videotaping the hallways on the third day of the study, much earlier in the process than what I had originally planned. Segments of these videotapes were later used during interviews with the children, as well in my own formal data analysis over the summer.

Children's Analysis of Videotape Data

I interviewed 52 children in twelve groups, with each group meeting four times during the final month of data collection. During three of the four sessions children observed a brief segment of videotape taken in the hallway, an excerpt chosen from the corpus of video data because it portrayed one of the three ritualistic ceremonies I had observed

earlier in the study—the school line (which resembles a queue in some respects), the phalanx (walking side by side in the hallway), or the cluster (a somewhat circular stationary group of children). A second criterion for selection was that the segment included many of the children in the interview groups. No video was used during the initial interview as I wanted to hear children’s perspectives of hallway events apart from my own conceptual focus on the three varieties of ceremonies.

During each subsequent session I played a one to two minute segment of videotape portraying one of the three ceremonies, and asked the children to comment on what was happening during the tape and to discuss aspects of the ceremonies afterward. [Note: I described the ceremonies as “groups,” as my understanding of these groupings to be ritualistic “ceremonies” evolved several years after the data collection and interviews.]

Children’s initial comments focused on identifying themselves and known peers in the videotape segments. After the completion of the video, the youngsters engaged in a discussion related to the meanings of events and their feelings about what was portrayed, as well as their own experiences in the school hallway. In the initial interview, which included no videos, children floundered at my request for descriptions of feelings and meanings of events, but during the second and subsequent sessions for each group, children readily reflected on their perceptions of the ceremonies portrayed. While this may reflect their becoming comfortable with me as a researcher and with the informal format of the interviews, the inclusion of the video as a stimulus for reactions may have also encouraged their participation. I noticed that during the subsequent session the children again named each person on the video screen, but also began to make brief descriptions of events *as* they observed the video. This suggests that they were learning to analyze the video data as it was occurring, as well as reflecting on their own experiences apart from the video.

Several questions I asked during these sessions involved their analyzing the video data. For example, during the session when lining ceremonies were observed, I asked the youngsters if the lines were typical or unusual, and what made the lines typical or unusual. Other questions related to purposes of lines, feelings and preferences about positions in lines, and meanings of the line ceremonies. I discovered that children’s analysis of video data *as they watched the video* was not as sophisticated as their reflections on the video and personal experiences of lining ceremonies *after* they watched the video. While these comments constitute analyses of their own and others’ activities, the analyses themselves were also data that required analysis.

Interestingly, the children freely corrected my misconceptions of their activities—an important indication of validity. For example, I emphasized in my comments to the children the external appearance of their hallway ceremonies; the side-by-side arrangement of the phalanx ceremony in contrast with the circular or semicircular arrangement of the cluster ceremony. They easily dismissed the difference in appearance, and even the *movement* of the phalanx in contrast with the generally *stationary* cluster, and instead focused on the relational commonalities of the ceremonies; both ceremonies reflected expressions of friendship, they told me, a powerful spiritual value for the youngsters.

Children's Analysis of Other Children's Comments

There were also a few occasions when I mentioned comments made by children in other interview groups. Youngsters readily agreed or disagreed with the comments and on occasion fruitful discussions resulted. This constitutes a second level of analysis by children: analysis of children's analysis of videotapes of children's ceremonies.

For example, I was particularly impressed with the interest the children showed in metaphorical analysis. I had discovered several comments in my own field notes and in children’s analyses of videotapes that suggested similarities between the school hallway and traffic on a highway. When I suggested this metaphor during later interviews, children immediately filled out the metaphor by noting that people tended to walk on the side of the hallway that corresponded to the appropriate lane for automobiles, that teachers were like police cars, and children running to the restroom with a nosebleed were analogous to ambulances. Similarly several youngsters compared the hallway to a prison, and others saw it as a family. When I introduced these metaphors to other groups of children, they readily filled in the details: teachers were guards, children were inmates with countless rules to follow, and the hallway was noisy like a prison. Conversely a group of boys filled out the family metaphor by describing the other boys at school as “like brothers” and the girls, surprisingly, were “like wives.” One group of nine-year-olds introduced additional hallway metaphors: older children in the hallway were described as “herds of buffalo,” “a cattle stampede,” “bullets,” “a football team,” “an exploding grenade,” and even a “high tech bulldozer.” Other groups added details to these and other metaphors suggested by students. I was impressed with the creative metaphorical analyses of children—every bit as sophisticated as my own analyses, often filling out metaphors convincingly, and offering many additional metaphors I had not considered. I wish I had explored metaphors related to ritualistic behavior, but that construct was still at the margins of my study at the time.

Children's Analysis of My Hypotheses and Tentative Constructions

While I contributed ongoing analysis of hallway events throughout the study, I also gave particularly careful attention to the possible meanings and trends found in interviews. These analyses eventually took the form of hypotheses about hallway events, many of them related to the three ritualistic ceremonies observed, but others concerned unrelated hallway events, such as individualized rituals. As I attempted to piece together a coherent account of the children’s analyses of the videos and my own field notes and analyses, I found that I had not observed a great deal of behavior that the children described in interviews. Yet I also found many areas of convergence between the

children's comments and my own notes. These areas of convergence were particularly fruitful areas for generating hypotheses and descriptions of trends, and also reflect a means of triangulation in establishing a degree of validity.

During the last week or so of classes at the elementary school I studied, I held follow-up interviews--"member checks" (Lincoln and Guba, 1985)--with several of the children who had participated in the earlier interview groups. Most of these were individual interviews, in contrast with the earlier group interview sessions. While I noticed that children's interest waned somewhat by the fourth session of group interviews, I found the prospect of individual interviews produced renewed interest by children. During the individual interviews, I presented a number of the hypotheses and trends discovered during the observations and group interviews, and asked the children to react to my conjectures. In every case, or nearly every case, those interviewed readily agreed with or corrected my ideas. They analyzed the data of emergent constructions I provided that, in turn, reflected my ongoing analysis of their actions and statements.

Children's Analysis of the Researcher's Role

During these follow-up interviews I also asked youngsters to reflect upon one aspect of my research methods—the roles I played as a researcher. I did this by asking, "Who am I most like: a friend, a teacher, or someone else?" I also asked them what I did during the research that indicated that role. Throughout the interviews, and occasionally during observations in the hallway, I had cultivated a friend role. I also told students I was writing a book and thus a writer role might have been a possibility that the youngsters could affirm. I functioned as a camera operator and a note-taker, which could have been reflected in their responses. Throughout the observations and interviews, I had carefully avoided most aspects of a teacher role, as I believed that a teacher role would keep me from getting honest, reflected responses from children. I tried to differentiate myself from teachers and administrators by asking youngsters to call me by my first name, and wearing casual apparel. Thus I was very dismayed when many of the students informed me that my role was that of a teacher! They explained that this was because of all the questions I asked them. However, several children also mentioned that I was somewhat like a friend. Their comments made me realize how difficult it is to take an "insider" role with children, both because of my adult physical stature and the inherent question-asking framework of researcher (see Graue and Walsh, 1998, and Holmes, 1998). Yet I was also gratified that they offered corrective comments during these and other sessions, including many ideas they would be unlikely to share with their teachers. Their analysis of my methods suggested that I played a teacher role by asking questions, but also showed a friend's concern and acceptance.

Reliability Data as Computed by My Own Children

In addition to the children at the school analyzing video data, and analyzing my interpretations and summations, I also incorporated several forms of analysis by my own children who did not attend the school. I experimented a bit with a quantitative form of preliminary analysis, specifically, recording the number and duration of the three ceremonies that were the focus of my study. When we counted these activities independently, using a randomly selected segment of videotape recorded in the school hallway, I found inter-observer reliability between my twelve-year-old son (John) and me to be 82.5% ($\kappa=.61$), and my ten-year-old (Stephen) and I agreed 92.5% of the time ($\kappa=.85$). Reliability for duration of each ceremony was calculated as a Pearson Product Moment Correlation of .99. Estimation of sex of adjacent children in the school line ceremony was 90% between John and me ($\kappa=.80$) and 95% between Stephen and me ($\kappa=.90$). Race identification of children in line reached 100% agreement between both of my sons and me.

These high reliabilities suggest the possibility that children may be able to help with preliminary analysis, even of a statistical nature, at least in the tabulating of data. I think it is also possible that children can be helpful in the task of interpreting statistical results; they can provide a more emic perspective of the possible *practical* significance of a *statistically* significant finding.

My Own Children's Analysis of Emergent Categories

A bit of background may help in describing this specific example. During the first group interviews I asked children to list all of the possible activities that could take place in the hallway. When all the possibilities they could think of had been listed, I omitted designations that were synonymous or very similar, and still had a list of well over one hundred different actions. I considered organizing this list within some already existing scheme, but I was not satisfied with these categorization approaches. I tried working out my own organizational framework, but I found myself developing and using categories that were as removed from the world of children as the categorization schemes I had studied.

Again, I turned to my own two sons, John and Stephen, and asked them for help. While they were not familiar with the research site or participants-- they attended another school--they were interested in my research and eager to assist me. They were especially helpful with this task because they were similar ages to the children studied, participated in similar peer cultures, and knew something of the research context by contributing reliability data noted earlier. Yet because they had never been to the school, they were also outsiders to some extent. Would they be able to help me categorize this lengthy list of hallway activities?

I began by writing each designated behavior mentioned by participants, on cards, then told my boys to categorize and subcategorize the cards as they thought best. The broadest categories were developed by my older son,

although my younger son convinced him and me that one of the categories was too broad and thus needed to be made into two categories. Each of my sons took turns revising the scheme numerous times, often negotiating and refining categories and subcategories. I made a few comments throughout the process, but was careful not to influence their work very much. The end product was five major categories of activities, only one of which had any subcategories (two), and one of those subcategories having ten subcategories.

Figure 1. Children's Listings of Hallway Activities, My Children's Categories

<p>I. results of your actions paddling (by teacher) teacher getting on us getting in trouble getting sick (could be) getting hurt (could be) falling (could be)</p> <p>II. being nice and good [emic] being quiet measuring (for class project) looking at stuff on the walls looking through windows (empty the) trash doing school work bringing school work whispering walking staying in line</p> <p>III. romance kissing holding hands boy gives girl money but she doesn't like him</p> <p>IV. disobeying talking trading eating candy eating candy off floor laughing dipping (tobacco) cussing shooting birds (making an obscene gesture)</p> <p>A. being wild/wound up or bored playing acting like monkeys dancing acting like Michael Jackson acting cool sneaking away riding horseback on shoulders hitting signs with "teachers" names stuffing things in the water fountain putting paper clips in electrical sockets yelling and screaming pushing (in line) acting up wrestling shoving</p>	<p>1. papers (throwing) paper airplanes throwing paper balls (at people) (playing "baseball") with paper wads and hitting with hand</p> <p>2. doors hanging from door frame pounding on doors kicking doors knocking on doors slamming doors</p> <p>3. walls writing on walls jumping up the walls knocking on walls throwing things against the walls kicking against the walls hitting head against the wall punching or kicking the walls knocking papers off walls</p> <p>4. posts [Stephen noted that "jumping on posts" could also go here] swinging around posts climbing posts</p> <p>5. running [emic] trampling or running over people racing horseplay</p> <p>6. jumping [emic] jumping over people jumping into trash can "slam dunk" trash can jumping on posts</p> <p>7. making hallway look dirty littering (defacing) artwork in hallway writing on strips (that hold papers)</p> <p>8. spitting [emic] spitting water</p> <p>9. doing things to windows banging on windows making faces through windows</p>
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10. doing things with clothing
 taking off shoes and throwing them
 playing keep away with hats and shoes

B. violent or cruel actions towards each other

pulling ears
 choking somebody
 poking in the eye
 stabbing with pencils
 having a knife pulled on you
 calling people names
 making fun of people
 kicking people
 messing with little kids
 eating other people's candy
 talking back/smarming off
 grabbed by neck
 hitting (person)
 punching
 aggravation
 being mean
 fighting
 tripping

V. other stuff you see or hear

dog in hallway
 arguments
 pennies
 hearing a TV
 teacher taking names
 rabbit in hallway
 fussing
 noises
 "bunny hop" (hopping while in line, done by first graders
 imitating teacher)

The listing appeared a bit lopsided, but to their credit the miscellaneous category--"other stuff you see or hear"--was fairly small. I was satisfied that their listing surpassed the other alternatives, including my own attempts, although it fell short of being mutually exclusive and exhaustive (unless you include the fifth catch-all category). I was pleased with the results, but I wish I had asked the participants in my study to try the categorizing. However, it is possible that having more than two children involved might have made the task unwieldy.

Children Interviewing Children

I anticipated the possibility that perhaps children could interview one another as effectively as an adult, at least by the end of a research study in which they had been interviewed several times. I tested this hypothesis by asking the youngsters who participated in my interview groups to interview one another. I thought this would also reflect the degree to which they had analyzed and understood the process of conducting research. During the last week of classes for the year, I invited the children to conduct interviews in the hallway, with me running the camcorder. This also might encourage them to analyze the hallway context itself, I thought. Unfortunately the experiment was a general failure for research purposes, as the children either asked questions that could be answered by a peer with a "yes" or "no" response, or asked questions so vague that no one knew how to respond [or were they telling me something about my own questions?]. While the results did not help my research, the kids had an enjoyable time and it seemed appropriate that this last task was a fun reward.

Other Potential Applications of Children's Analysis to Spirituality Research

My research, an ethnographic study of an elementary school hallway, became a study of children's spirituality by reframing the study as an analysis of ceremony and ritual. Yet each variety of data analysis might be considered in the research of children's spirituality in general. Children readily analyzed video data, at least in the short one to three minute segments in my study. Similarly, youngsters could analyze videos of a wide variety of activities, including those in which the children participate. The video becomes a stimulus to which children respond; a more tangible means of designating what specific activities they are to describe and assess.

Some of the parameters of children's spirituality may be used to help youngsters analyze what is observed. For example, following Hay and Nye (1998, p. 59), children might be asked if they experienced aspects of awareness-sensing, mystery-sensing, or value-sensing during the activities portrayed. I suspect these categories as stated are probably too abstract for children to consider directly, but the individual components of each could be explained, then children could be asked if this was in any way similar to their experiences as portrayed in the video. Similar applications could be made of the other examples described in my work of children analyzing research data.

There are many other possibilities for children being involved in data analysis of spirituality. As categories, trends, and hypotheses emerge, it may be that one or more focus groups of children could discuss many of the emergent issues, correcting and extending those aspects of the researcher's analysis that resonate with their perspectives. Indeed, these emergent perspectives may reflect latent themes that such youngsters may never have considered previously, and thus promote personal insight. However, Hay and Nye (1998, pp. 104-106) emphasize that many children are very self-conscious about spirituality and hesitate to talk about such events. Conversely, a child may be very willing to talk about her/his own spirituality, but less able to link their perspectives and experiences with those of other children because of the individualized nature of children's spirituality (Hay and Nye, pp. 94-100).

Another possibility is that older children, particularly if encouraged to affirm the importance of spirituality experiences, may be able to reflect on the reported experiences of younger children. While it is likely that at least some, and perhaps many, older children might be unwilling to analyze the reported experiences of younger children, others may be willing to do so without condescension or making derogatory comment about the immature reflections of younger children. The advantage of using older children to analyze the comments and descriptions of younger children is the age proximity--because they are nearer the age of younger children, they may be able to recall what their own experiences were like at an earlier age with less of the confounding influence of reformulations of memory as one matures through adolescence and adulthood.

I recall, for example, a boy of about ten years of age who enjoyed having puppet shows and other activities for the younger children in his neighborhood, in which he expressed religious themes and perspectives. He readily created scripts that resonated with younger children's understandings, and seemed to thrive at such activities. This boy was unusual in this respect, I am sure, yet seeking out such children to help with data analysis might aid researchers in gaining a view of children's spiritual experiences that can approximate the perspectives of younger children who are less able to verbalize their understandings.

It is important that, if possible, a wide variety of children be involved in data analysis of peers or younger children. Spirituality itself is a widely varied phenomenon, including both religious and non-religious experiences, and thus the ideal is for those involved in data analysis to come from different backgrounds and perspectives which may each contribute to a fuller understanding of a given spiritual experience. The variety of children desired for data analysis includes youngsters who are verbal and less verbal, popular and less popular, outgoing and withdrawn, majority groups as well as ethnic and cultural minorities. For each of these, the tendency has been for researchers to give greater attention to the former more than the latter, an aspect of research that has subtly skewed our perception of children in general. To the varieties mentioned above, other aspects of the process can be varied as well. Children could conduct data analysis while meeting in groups as well as in individual interviews; at home as well as at school, at church, or in other locations. The dynamics of each setting constitutes a distinctive context in which some aspect of spiritual experience might surface that would be less likely in other locations.

Conclusion

Children's spirituality is both a new and an old area for research. One aspect of children's spirituality, religious conceptualization, has been researched for more than a century, and discussed for many centuries prior to that. On the other hand, children's spirituality is also a very new area for research when one considers the broader understanding of this topic affirmed by recent researchers and theorists, including both religious and non-religious experiences by children who may affirm any one of many diverse religious beliefs, some fusion of multiple religious beliefs, or even no religious belief at all. With the vibrancy of the broader perspective taken by recent scholars in this area, it can be very beneficial to consider unconventional research methodologies as well. That is well represented by researchers investigating children's spirituality using a wide spectrum of qualitative and quantitative methodologies, as is now the case, but is also potentially represented by probing further into the possibility of using research approaches that are still emerging in the qualitative and even quantitative research paradigms. Researchers interested in children's spirituality can, and perhaps must, be innovative in their methods, as the adequate understanding of spirituality probably requires new ways of conducting research. Child-assisted data analysis is one set of exploratory procedures that has potential value in assisting those interested in understanding children's spirituality.

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