Qualitative Inquiry: An Overview for Pediatric Psychology

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Objective: To provide a framework for critically evaluating qualitative research to professionals interested in pediatric psychology. Qualitative methods emphasize the phenomenological experience of participants and may be pertinent to studying contextual factors that contribute to child health and well-being.

Method: A basic overview of the types of qualitative research, methodological procedures, and ethical considerations is provided. Examples are drawn from qualitative studies that focus on child and family health.

Results: The article concludes with guidelines for examining qualitative research and recommendations for use in pediatric psychology.

Conclusions: Qualitative methods have the potential to address important issues in pediatric psychology.

Key words: qualitative methodology; children's health.

Recently, there has been increasing interest in the application of qualitative methods to the study of psychological issues (Gilgun, Day, & Handel, 1992; Krahn, Hohn, & Kime, 1995). Qualitative methods are rooted in disciplines such as sociology and anthropology that take as their starting point the context in which study participants are embedded. In pediatric research, qualitative modes of inquiry can provide ways to gain a better understanding of relatively rare medical conditions, generate hypotheses in a new area of research (Weiss, Marvin, & Pianta, 1997), and focus on the meaning or phenomenological experiences of patients and families (Brody, 1987). Given the importance of context in understanding health and illness (Kazak, Segal-Andrews, & Johnson, 1995), qualitative methods may deserve pediatric psychologists' attention.

Because the majority of psychologists are trained in quantitative methods and have little exposure to qualitative approaches, pediatric psychologists may feel ill-equipped to examine reports that may be of potential value to their research and practice. Like quantitative research, qualitative research can be evaluated according to established standards. Thus, the purpose of this article is to provide the pediatric psychologist with a framework for critically evaluating qualitative research. We provide a basic overview of the major goals and types of qualitative research, the methodological procedures used in qualitative research, and ethical considerations. We conclude with an annotated checklist for reviewers and make recommendations for the use of qualitative methods in pediatric psychology.

One aspect of clearly written qualitative reports is the identification of the writers' biases and expectations. Accordingly, we feel it is important for us to identify our own limitations and biases as authors here. We are primarily family researchers and our knowledge of qualitative methodologies has grown

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from work interviewing and observing multiple family members engaged in the process of ascribing meaning to everyday acts (e.g., Fiese, 1997). We were trained primarily as quantitative psychologists in the traditions of deductive reasoning, hypothesis testing, the use of standardized measures, and a concern for generalizability of findings. We do not believe, however, that quantitative and qualitative methodologies are incompatible, but rather that each may inform the other (Brannen, 1992). Our focus is primarily on the use of qualitative research from a phenomenological perspective; consequently, we will not be addressing the use of traditional case studies or action research (see Bogdan & Biklen, 1982).

Goals of Qualitative Research

What is qualitative research? At its most basic level, qualitative research is a process by which the data of words and pictures are analyzed in a systematic way (Bogdan & Biklen, 1982; Gilgun, 1992). Relying on words as the source of data calls for a considerable level of precision when formulating the questions to be addressed in a study (Hammersley, 1992). Just as it is possible to generate trivial numbers in response to poorly formed hypotheses, qualitative inquiry extends beyond the mere collection of written or verbal material and is subject to systematic scrutiny.

Qualitative methods are best suited for asking questions that pertain to understanding the meaning that individuals or groups make out of experiences. The first goal of qualitative research is to learn how people make sense of their experiences rather than focusing on outsiders' views of what people do (Ambert, Adler, Adler, & Detzner, 1995). Although qualitative methods have been used for well over a century (see LaRossa & Wolf, 1985), modern qualitative methods grew out of the “Chicago School” of sociology. During the 1920s, theories of symbolic interactionism predominated the social sciences in general and the study of the family in particular. Symbolic interactionism focuses on the connection between symbols, or shared meaning, and interactions, notably nonverbal actions and communications (La Rossa & Reitzes, 1993). In order to understand how individuals used symbols in the formation and maintenance of groups, researchers needed to “get inside the heads” of their subjects. Rather than bring individuals to the laboratory, researchers went into the field and directly observed individuals and groups. Often these researchers focused on everyday, mundane events of individuals in an attempt to immerse themselves in the culture of the individuals or groups under study. For example, Bossard and Boll (1950) were interested in how the daily routines of family life reflected patterns of family organization and adaptation. They directly observed families conducting their routines as well as collected diaries of important events in the families' lives. Much of the current interest in folk psychology (Bruner, 1990) is compatible with qualitative methods and the emphasis on the symbolic meaning associated with everyday acts.

The second goal of qualitative research is to generate hypotheses and build theories. One example of this process is the use of grounded theory in qualitative inquiry. Grounded theory relies on inductive reasoning to derive theories based on detailed observations (Glaser & Strauss, 1967). The researcher enters the field of study with an open mind and seeks to discover key issues that may be the foundation for hypotheses and theory construction. These hypotheses are often tested directly during the data collection phase, and the theory may be altered to fit the findings. In this regard, the theory is “grounded” in detailed observations and scrutiny of the data. Consistent with deductive modes of inquiry, the qualitative researcher seeks to confirm theory that is compatible with the data (Neuman, 1997). Qualitative researchers may return to the original data set after hypotheses have been generated, or they may collect a new set of observations in order to test their newly generated theory. For example, in their exploration of the process by which adolescent cancer patients cope with their illness, Hinds and Martin (1988) re-interviewed their original sample and contacted some new participants after they had generated hypotheses in order to validate their findings.

Types of Qualitative Methods

There are four basic types of qualitative methods: participant observation, in-depth interviewing, textual analysis, and document analysis (or archival studies). Participant observation involves the researcher's immersion in the field of study. This may include ethnographic studies where the researcher lives closely with the participants under study and is poised to gain the confidence of the group. For example, Burton (1992) was interested in the expe-
periences of African American grandparents raising the children of drug-addicted parents. In order to immerse herself in the lives of her participants, Burton took part in family rituals such as holiday celebrations and church attendance and observed and interviewed participants over a period of several months. This approach enabled the researcher to gain intimate knowledge of the grandparents' caregiving stress and revealed multiple unmet needs that run counter to the popular depictions of African American grandmothers, for example, as "powerful matriarchs whose endless sources of strength and wisdom provide the core for family survival" (p. 745).

In-depth interviewing is one of the most prevalent qualitative procedures. In-depth interviewing may take the form of talking with an individual, members of a family, or a group over a period of several hours, days, or years. The purpose of the interview is to gain an in-depth understanding of each individual's perspective and to capture the "insider's" view of a situation (Bartunek & Louis, 1996). Through her in-depth interviews with parents of children with life-threatening, chronic illnesses, Cohen (1993a, 1993b, 1995b) has fashioned a theory about the process of parents' coping with sustained uncertainty. By eliciting detailed accounts, Cohen has uncovered insights about the psychological impact of these parents' experiences that quantitative data could not likely capture. For example, one participant recounted:

He's checked all the time and we die a little bit every time she tells us she's gonna do it [the diagnostic test]. They never call you after they've done that. If it's a problem, she says she'll call us. So you wait and listen and every time that phone rings for the next two weeks, you jump right out of your skin. (Cohen 1995b, p. 68)

Textual analysis is a third type of qualitative methodology. In this instance, verbatim transcripts of interviews or conversations are examined. For example, Tannen and Wallat (1987) analyzed videotaped and transcribed interactions between a parent and a pediatrician during the medical examination of an 8-year-old child with cerebral palsy in an effort to describe how mismatches in the expectations and cognitive schemas of parents and pediatricians can decrease the efficiency of pediatric exams and fail to alleviate parental concern.

The fourth type of qualitative methodology is the use of archival data or document analysis. Examples of this approach include the study of family budgets, catalogues of household objects, scrapbooks, or legal documents (e.g., Csikszentmihalyi & Rochberg-Halton, 1981). In the pediatric psychology literature, Cohen (1993a, 1993b, 1995a, 1995b) has utilized published autobiographies of parents' experiences with their children's chronic illnesses to validate the findings derived from her own interviews with parents.

Match Between Research Methods and Questions

Just as measurement in quantitative methods is optimal when it is theory-driven (Wallander, 1992), the choice of methods used in qualitative research should match the research question and be informed by theory. For example, Cohen (1993a) used in-depth interviewing to ascertain parents' reactions to the diagnosis of a life-threatening illness in one of their children. The in-depth interviews revealed how the parents dealt with the ongoing uncertainty of their child's condition. If an archival method had been used, such as reviewing medical process notes, it is unlikely that this pattern of parental struggle would have been revealed. Thus, in-depth interviewing would be the method of choice in this case, whereas the use of archival data would not.

Qualitative Research Procedures

The first step for all qualitative researchers is to identify their potential biases and to determine the degree of their involvement in the data collection phase. Because we are family systems researchers, theories of family relationships drive our observations that focus on how relationships change among and between family members. Qualitative researchers attend to the interplay between their overarching theories and the context in which they collect data. If, for example, the researchers were interested in how parents react to the diagnosis of mental retardation (this issue), it would be important to identify the context in which the interviews were being conducted. If the interviews were being conducted by a health professional, diagnostic information would be a central aspect of the interviewer's agenda. If, however, the interviews were conducted by a parent of a child with a similar diagnosis the interviews would necessarily have a different focus or partiality. This consideration is based
on the notion that all interviews are conducted in a context that includes not only the questions being asked, but also characteristics of the relationship between interviewer and interviewee, and the overarching theory of the inquiry (Mishler, 1986).

Second, qualitative researchers must determine the degree to which they want to be involved in the lives of their participants (Daly, 1992). In some cases, involvement will not extend beyond the interview context (e.g., Cohen, 1995a). In other cases, however, the researcher becomes immersed in the daily rhythms of the participants and becomes privy to the intimate details of the participants' lives (e.g., Burton, 1992).

Once the researcher identifies the context for the study, data collection proceeds and hypotheses are formulated. In some cases data has been collected under the auspices of another project and the hypothesis-generating phase involves a careful review and re-review of the data (e.g., Tannen & Wallat, 1987). In other cases, the interviewer may alter aspects of the interview to follow a newly generated hypothesis (Riessman, 1993). Through the process of generating hypotheses, theories are developed and substantiated by the data.

Finally, qualitative researchers must consider the adequacy of their data and conclusions. Adequate data have been collected when new hypotheses are no longer generated and saturation has occurred (Morse, 1994). In this regard, adequacy refers to the amount of data collected in relation to the theory being generated and not to the number of cases in the study (Neuman, 1997). Whereas the power of quantitative analysis is often evaluated according to the number of participants in relation to the number of measures being used, the power of qualitative analysis is determined by the degree to which the theory is supported or the analysis contributes to theory development.

Adequacy of the researcher's conclusions can be verified in a variety of ways. If a coding scheme has been developed, it is possible to establish indexes of interrater reliability based on agreement in content categories. Freedman, Litchfield, and Warfield (1995) had three researchers independently identify themes from their focus groups with parents of children with developmental disabilities; when disagreements emerged, the researchers discussed each case until they reached a consensus.

The process of triangulation may also be used where different types of data (e.g., quantitative and qualitative) and methods (e.g., observations and interviews) are compared to determine whether the findings corroborate one another (Silverman, 1993). For example, in order to confirm the parenting experiences reported by a group of mothers with a severe mental illness, Sands (1995) drew upon case records, treatment provider perspectives, and observations of the mothers interacting with their children and treatment staff.

Confirmation may also be incorporated to assure adequacy of the findings. In this situation, the researchers seek verification of their interpretations by directly asking the participants whether the researchers' conclusions are tenable (e.g., Hinds & Martin, 1988; Thorne & Robison, 1988). Finally, the findings from different groups can be compared to validate the theory (e.g., Sands, 1995). For example, by comparing the reports of mothers with severe mental illnesses to those of demographically similar nonmentally ill mothers, Sands (1995) discovered that the mentally ill mothers viewed motherhood as more central to their existence, expressed less ambivalence and stress related to parenthood, and were less interested in assistance with parenting. From these data, Sands concluded that the mentally ill mothers' experiences with loss and intrusive aspects of the mental health system made them reluctant to share their parenting needs. Given that the children of mentally ill parents are at heightened risk of developing psychological problems themselves, Sands was able to use her data to recommend more indirect and supportive methods of parenting assistance for these women.

Ethics

The qualitative researcher's investment in uncovering the insider's view of a situation may present ethical considerations not often confronted by researchers who are invested in maintaining an impartial stance with their study participants. Several conditions arise in qualitative research that deserve special attention.

In survey and other types of quantitative research, informed consent is routinely given at the beginning of the project and extends across the length of data collection. Although in-depth interviewing also typically involves informed consent at the beginning of the project, the participant may reveal sensitive material during the course of the interview that was not anticipated at the time of the original agreement. In this circumstance it is preferable for the researcher to repeat acknowledgment to
the participant that he or she may recall any aspect of the data (interview content) at any time of the study. The participant reserves the right to have any of the material withdrawn from the recorded version of the interview.

A second ethical consideration is the fact that there may be considerable role ambiguity for researchers and practitioners in clinical settings (Daly, 1992). As a part of the interview process, participants take the interviewer into their confidence and may seek and experience therapeutic effects during the interview process. The researcher is no longer an "objective outsider" but considered a confidant and potentially a therapist. Qualitative researchers are advised to recognize their limitations and to give careful forethought to the limits of their involvement with participants.

**Guidelines for Evaluation**

We have prepared this brief overview to introduce pediatric psychologists to some of the goals and types of qualitative research. Should qualitative research become more prominent in pediatric psychology, it will be important to have accessible guidelines for the review process. The proposed guidelines are not meant to be exhaustive and should be used in conjunction with the reviewer's knowledge and expertise in the substantive area of the study in question. The experienced reviewer will note that many of the guidelines for qualitative research are consistent with those for evaluating quantitative reports. The guidelines are presented in Table I.

**Future Applications in Pediatric Psychology**

We have attempted to demonstrate through this brief overview some of the unique contributions that qualitative research can make to the field of pediatric psychology. Several areas in particular may benefit from qualitative inquiry and thus warrant highlighting here.

First, because qualitative research focuses on the meaning that events or situations hold for individuals, qualitative inquiry can help researchers better understand how patients' and families' perceptions of health and illness influence their interactions with the health care system. For example, Cohen's (1995a) work on parents' interpretations of their children's symptoms during the diagnostic phase of chronic illness suggest that this process may influ-

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<th>Table I. Guidelines for Evaluating Qualitative Reports</th>
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<td><strong>Objectives</strong></td>
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<td>Rationale for the study is clear.</td>
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<td>Theory is acknowledged.</td>
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<td>Sample is adequately described.</td>
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<td>Procedure matches research question.</td>
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<td>Procedures are clearly described.</td>
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<td>Findings are presented clearly and with sufficient detail.</td>
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<td>Interpretation of findings are adequate.</td>
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<td>Validity and reliability issues are addressed.</td>
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<td>Contributions to the literature are evident.</td>
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ence parents’ compliance with treatment strategies. Other qualitative findings (e.g., Jost & Haase, 1989; Price, 1993) have demonstrated that families’ experiences with health care personnel’s sensitivity to their emotional needs can have a major impact on their perceptions of the quality of the care they receive. Because families draw upon their unique belief systems in interpreting health and illness (Fiese, 1997; Kazak, 1989; Patterson & Garwick, 1994) and because health care providers and families may approach health care issues from entirely divergent frames of reference (cf. Cohen, 1995b; Tannen & Wallat, 1987; Thorne & Robinson, 1988) qualitative approaches to exploring families’ experiences with health care systems appear to be particularly valuable. Qualitative research also holds promise in exploring the perspectives of the often overlooked consumers of pediatric care, the children themselves (e.g., Ely, 1992; Hinds & Martin, 1988).

Second, qualitative research may be useful in the study of rare and understudied populations. Given the relatively rare occurrence of some diseases and disorders, it is not always possible to locate a study sample large enough to reliably use the inferential statistics involved in quantitative analysis. Furthermore, when attempting to study conditions for which etiology, course, and treatment are not clearly established, the researcher may uncover useful insights by seeking an appreciation of the patient’s and family’s experience rather than making potentially faulty assumptions that can result in the collection of meaningless or uninterpretable data.

Similarly, qualitative methods can also be particularly useful in the study of underrepresented groups who are often at elevated risk for health problems (e.g., the poor, urban dwellers, persons with mental illness). Qualitative methods may provide insight into cultural issues relevant to health and illness. It has been documented that individuals from different cultures may respond differently to health care systems (Penn, Kar, Kramer, Skinner, & Zambrana, 1995). This differential response may be due, in part, to cultural differences in understanding what it means to be healthy or ill. Closer scrutiny of individual interpretations may shed light on some of these issues.

Our focus thus far has been on the use of qualitative studies and individuals. It is also possible to consider applying qualitative methods to issues surrounding systems of health care. Archival studies of decision making and case management may be particularly revealing given the recent changes in medical practice brought on by managed care.

Finally, we argue that qualitative research has the potential to contribute to policy issues relevant to pediatric psychology. It is often difficult to adequately describe complex psychological processes to legislators and policy makers. To help bring critical issues of health and illness to the forefront, it is important to make our field “come alive” to policy makers. The rich images encapsulated in some qualitative reports may aid in creating powerful messages for individuals outside of the pediatric mainstream.

In summary, qualitative modes of inquiry may enrich the pediatric psychologist’s understanding of health and illness. Our review has been necessarily brief and interested readers may want to review some of the original resources cited here before evaluating qualitative research. It is important to recognize that qualitative research is a labor-intensive resource-consuming process and, when conducted well, involves considerable rigor and effort. Systematic qualitative inquiry can provide a fresh perspective to old questions as well as generate new ideas. It is unlikely that qualitative methods will replace more quantitative methods; indeed, comprehensive programmatic research would benefit from employing a variety of methods that best address the topic of concern. Increasing attention to contextual factors in child health and well-being may position the qualitative researcher in a more essential role in pediatric psychology.

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