

Innovative Assessment Methods for Pediatric Psychology Research and Practice

Monica J. Mitchell, Ph.D., Lori C. Crosby, Psy.D.,
Julia Bloom, B.A., Janelle Hines, B.A., and Scott W. Powers, Ph.D.

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Pediatric psychological research has traditionally relied on self-report measures to examine variables related to pediatric health conditions and outcomes. While self-report methods are an efficient, and often effective, means of collecting data, they have limitations, particularly when understanding the experiences of patients who are diverse in cultural, educational, and economic backgrounds. Furthermore, traditional methods may not fully capture complex risk and resiliency factors of patients and families that are critical to designing effective and targeted interventions.

The goals of this presentation would be to discuss four innovative methods that have been used to enhance research and clinical practice with pediatric populations, including children with sickle cell disease and cystic fibrosis. The presentation will briefly describe how focus group, observational mealtime coding, randomized phone diet diary recall, and phone survey methods have added to the understanding of developmental, cultural, and behavioral factors in pediatric psychology research and practice. Data collected using these methods will be presented. The four methods to be discussed include:

Focus Groups

The authors have conducted 22 focus groups across 4 sites to understand patient, parent, and family perspectives of how nutrition, pain, and transition intervention efforts could be optimized in children with sickle cell disease. Data from these focus groups have led to the development and implementation of a pilot nutrition intervention program, the design of a "Lunch and Learn" series to promote cultural sensitivity in hematology and emergency room staff, and a grant-funded study to develop a culturally sensitive pain and coping questionnaire for children with sickle cell disease. In addition, the data have been used by respective sites to improve and develop clinical services for patients and families.

Observational Mealtime Coding

The authors have completed 3 studies to examine family interactions at mealtimes in children with cystic fibrosis using the McMaster Mealtime Interaction Coding System (MICS). The studies have provided understanding of family strengths and limitations along the seven assessed dimensions, including Task Accomplishment, Roles, Communication, Interpersonal Involvement, and Affective Responsiveness. These data have provided an understanding of how families of children with cystic fibrosis differ from families of non-ill children and

have informed future directions for nutrition education and behavioral nutrition intervention.

Randomized Diet Diary Recall

The authors have conducted a pilot study with 15 African-American participants to compare a traditional weighed and self-recorded method of dietary intake using scales and diet records with a randomized diet diary recall method. The latter method involves a dietitian randomly calling the child/parent (with their permission) on three days within a 2 week period and having the respondent recall what they had eaten within the past 24 hours using a protocol of standardized prompts and visual aids. Parents were then called one week following the completion of the study to assess perceptions of accuracy and ease of the two methods. Data from this study provide implications for how dietary intake could best be captured in culturally-diverse participants and non-traditional families.

Phone Survey

The authors have initiated a study to assess beliefs of adolescents with sickle cell disease who have been generally non-adherent with clinic visits and other preventative efforts. To overcome the potential for response bias, several procedures were implemented to capture a breadth of eligible participants based on the assumption that a high response rate would be needed to improve clinic services for *all* patients. The phone survey involved administering the Health Beliefs Questionnaire to understand adolescent perspectives on health and self-care, and the completion of a survey to obtain information on how the clinic could best meet patients' health and wellness needs within an appropriate developmental and cultural framework. Data from the survey study and how it has informed clinic design and services will be presented.

Given the ever-changing demographics of pediatric populations and their families, it is important that Pediatric Psychology, as a field, encourages and evaluates innovative clinical assessment and research methods. In addition, the validity of traditional methods must be evaluated in the context of patient diversity in cultural, ethnic, economic, and educational status. These factors have documented impact on health attitudes and behaviors of patients, and in turn, on the quality of care that patients receive. In summary, demographic and contextual factors must be considered in assessment so that health care is maximally responsive to the needs of patients and their families.