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What Parents Really Think About Their Feeding Practices and Behaviors: Lessons Learned from the Development of a Parental Feeding Assessment Tool

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Interest in the role that parenting assumes in child obesity has increased the need for valid and reliable screening tools that are specific for populations targeted by programming efforts. While low-income families comprise a large audience for Cooperative Extension obesity prevention programs, valid and reliable self-administered parenting assessments for this population are lacking. Development of such tools requires understanding low-income parents' interpretations of questions related to their parenting. The current paper reports on interviews conducted with low-income parents (N = 44) of 3- to 5-year-old children during the development of a tool to assess parenting in the context of feeding. Interviews revealed areas of potential discrepancy between parents' and researchers' interpretations of items that may affect parents' responses and subsequent measurement validity when used in Cooperative Extension community intervention setting. Three themes emerged that may interfere with valid and reliable assessments of constructs: fear of being labeled a "harsh parent," response bias due to previous knowledge, and discrepancy in interpretation of the intended construct. Results highlight complexities of constructing parent-report assessments of parenting for low-income audiences, and potential hazards of using research-focused tools with high respondent burden. Guidelines for educators assessing parents' feeding behaviors are presented.

Keywords: nutrition education, parent education, childhood obesity, qualitative methodology, parent feeding behaviors

The role that parenting assumes in the development of child obesity is of increasing interest to both researchers and practitioners. Recently, young children and their parents have been a particular focus of research and programming as obesity rates in 2- to 5-year-olds show a

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continual rise since 1980 (Fryar, Carroll, & Ogden, 2012). Low-income children in this age range demonstrate an even higher rate of obesity than the general population, with 14.4% of 2- to 4-year-olds classified as obese, compared to 10.4% of all 2- to 5-year-olds in the U.S. (Dalenius, Borland, Smith, Polhamus, & Grummer-Strawn, 2012). In an effort to combat obesity, there has been an increased interest in understanding the role that parents have in the development of children's dietary habits, both empirically and programmatically (Gerrards, Sleddens, Dagnelie, de Vries, & Kremers, 2011). Effective parent education-based intervention efforts require reliable and valid tools to accurately measure parenting. Unlike a research setting with one interviewer collecting data from one participant in community-based programming, such as Cooperative Extension, self-administered tools are most useful and essential for groups of 5 to 30 participants. However, parent-report with low-income parents can present unique barriers, such as low-literacy levels and lifestyle characteristics that may cause parents to misinterpret questions. This paper reports on interviews conducted with low-income parents of young children as part of the development process for a parent-report measure designed to assess parenting quality within the context of children's dietary behaviors. Parents' misinterpretations can inform Cooperative Extension educators to more accurately assess parents' behaviors.

For optimum success in early childhood obesity prevention, a multi-disciplinary approach (Lanigan & Power, 2008; Ontai, Williams, Lamp, & Smith, 2007) that focuses on diet, physical activity, and general parenting is recommended. In contrast to parenting behaviors, general parenting is described as the style parents convey with their behavior (i.e., authoritative, authoritarian, permissive, neglectful), which sets the contextual tone for parent-child interactions (Darling & Steinberg, 1993). A recent review of intervention programs that utilize this approach supports the value of including general parenting in child obesity prevention intervention efforts (Gerards et al., 2011). Despite the increased risk of obesity in low-income children, the review failed to identify any parent education-based programs for obesity prevention that specifically target low-income families. However, low-income families are the targets of USDA-funded child obesity primary prevention interventions through Cooperative Extension (i.e., Expanded Food and Nutrition Education Program [EFNEP] and Supplemental Nutrition Assistance Program Education [SNAP-Ed]). In order to inform the design of effective parent education-based obesity prevention programming for low-income families, valid and reliable assessment tools designed to assess parenting practices within the feeding context of low-income families are needed. Within group-based settings, such as those used in Cooperative Extension programming, self-administered assessment tools with a low respondent burden are ideal.

Assessing general parenting in low-income audiences can be challenging, as many of the existing parenting measures are validated with middle-class audiences, and the behaviors assessed may look different in low-income households (Ontai et al., 2009a). This discrepancy can lead to misinterpretations of the questions being asked. The Caregiver Feeding Styles Questionnaire (CFSQ; Hughes, Power, Fisher, Mueller, & Nicklas, 2005) is one exception. Designed

specifically to measure feeding styles with low-income, ethnically diverse parents of preschool-aged children, the CFSQ identifies parenting styles used when feeding young children (i.e., authoritarian, authoritative, indulgent, and uninvolved). While the CFSQ has been used widely as an assessment tool for empirical research, the high reading level precludes it from being used as a self-administered tool with low-income parents who tend to have low-literacy abilities (Johns & Townsend, 2010). In order to develop a valid self-administered parent-report tool with this audience, researchers must first understand how low-income parents interpret questions about their parenting when feeding their children.

The current paper reports on parent interviews conducted during the development of My Child at Mealtime (MCMT; Ontai et al., 2009b), a self-administered parent-report tool adapted from the CFSQ and designed to assess general parenting styles in the feeding context among ethnically diverse, low-income, and low-literate parents of preschool-aged children. Using items from the CFSQ, interviews were conducted to determine how parents interpreted each item. Parent responses were used to word items for accurate interpretation by the target audience. This paper aims to highlight areas of divergence in item intent and participant interpretation.

Methods

Participants and Procedures

A total of 44 parents (41% Hispanic, 21% African-American, 21% Caucasian, and 17% other) participated in the interview process. Participants were recruited from three Head Start preschool programs in a mid-sized, Northern California city, and had at least one child between the ages of 3 and 5 years. Of the participants interviewed, 93% were female, and 55% reported being married. All interviews were conducted in English.

The parent interviews were part of a larger study (Healthy Kids; Townsend et al., 2009) to establish reliability and face validity for parent self-administered assessments of child obesity determinants. Questions for the MCMT tool were adapted from the 19-item CFSQ (Hughes et al., 2005), which assesses caregiver feeding style by investigating four separate areas: use of contingency management, caregiver control, communication with children, and making food accessible and child friendly. Based on recent empirical support (see Ontai, Ritchie, Williams, Young, & Townsend, 2009a, for a review), additional items were added to assess family structure and routine at mealtimes, resulting in a total of 27 items.

Parent Interviews

All interviews took place at the Head Start site where the participating parent's child was enrolled. Parents were asked to review subsets of items with an interviewer using open-ended

questions in order to improve readability and face validity (Banna, Vera Becerra, Kaiser, & Townsend, 2010). For each item in the subset being tested, the interviewer asked parents to read the question and respond in their own words to the following prompts: What do you think the question is asking?, How would you answer the question?, What would this behavior look like in your house?, How would someone who parented differently from you answer the question?, and What would the behavior look like in that house? In cases where responses indicated misinterpretations of researcher intent, parents were told the intent of the question and asked to come up with their own wording to represent it. An iterative process was used whereby questions were reworded, based on parent responses, and the new wording tested with different parents in subsequent interview sessions (Litwin, 1995). Subsets of questions were rotated across interview sessions in order to receive feedback on each item from a range of parents across Head Start sites. Retesting of individual items was conducted until consensus was reached (Banna et al., 2010).

Results and Discussion

Of the original 19 items from the CFSQ, parents suggested altering the wording of 17 items to improve clarity and understanding, resulting in improved readability and face validity. In addition, parents preferred rephrasing of all items to first person (e.g. “Beg the child to eat dinner” to read, “I beg my child to eat his food”). Feedback to the open-ended questions revealed three major themes in parents’ responses to questions about their dietary-related parenting behaviors:

1. Fear of Being Labeled a Harsh Parent,
2. Response Bias due to Previous Knowledge, and
3. Discrepancy in Interpretation of Intended Question.

1. Fear of Being Labeled a Harsh Parent

Some parents expressed concern that the interviewer would evaluate their parenting practices as too harsh. One question in particular that focused on physically struggling with a child to get them to eat (original wording: “Physically struggles with child to get him/her to eat;” Hughes et al., 2005) evoked considerable concern. Originally intended to assess parental over-control during feeding, some parents expressed the belief that affirmative responses would be considered abusive, and possibly be reported to authorities. One parent stated, “I know a lot of parents wouldn’t answer this question honestly because they would be scared of what you would think of them.” Another parent expressed that she would be concerned to answer such a question honestly for fear of being judged as too aggressive. While these parents initially reported that their answers to the question would be “never,” in follow-up discussion, they would readily describe having to physically pick up the preschooler and place him in his chair to get him to eat.

Parents reported that including the word “physical” in the question was more egregious to them than giving an example of the struggle (e.g., “I have to put my child into her chair to eat.”), despite the physical nature of interaction. Consensus was reached on the final wording of “I struggle with my child to get her to eat (pick her up and put her in the chair).”

Additionally, parents expressed feeling that some of the other behaviors assessed were harsh parenting behaviors. For instance, when responding to the question about whether their child skips meals, one parent considered it harsh to force a child to eat when not hungry, while other parents felt it would be considered neglect to let a child skip a meal. Similar concerns of neglect were expressed by parents in response to letting children leave food on their plate, which was seen as equivalent to letting them go hungry. These responses highlight the importance of being mindful of individual parents’ interpretations of “appropriate” parenting behaviors, and that fear of being judged as “harsh” can be a strong determinant of parent responses.

2. Response Bias due to Previous Knowledge

Nutrition education for low-income parents is widely available and many parents talked about being exposed to programs through Head Start, Women, Infants, and Children (WIC), or EFNEP. In some of these cases, parents referenced the influence these classes have had on their feeding practices with regard to food selection and number of servings from each food group. In some cases, parents would start their responses with statements such as, “I know I am supposed to . . .,” or “Head Start taught us that I should . . .,” making it clear that their knowledge diverted from the actual behavior in which they engaged. While overall, the benefits of these programs were evident in their answers, occasionally parents incorporated the knowledge gained from these classes in non-optimal ways. For instance, parents endorsed forcing their child to eat (e.g., “I tell my child that she needs to eat an item on her plate”) in order to fulfill daily vegetable requirements. It was clear that previous knowledge drove assumptions about “correct” answers.

3. Discrepancy in Interpretation of Intended Question

In some cases, parent responses revealed discrepancies between the researchers’ intent of the question and the parent’s interpretation. One question for which this discrepancy was particularly evident was family mealtime. While family mealtime is widely included in conceptualizations of healthy feeding behaviors (Patrick & Nicklas, 2005), what a family meal looks like in low-income households may vary from the ideal conceptualization. Table 1 demonstrates the iterations of the family mealtime question and parents’ interpretations of each version. Of importance are the lifestyle factors common in low-income households that resulted in discrepant interpretations, such as lack of a table big enough to accommodate the entire family, parents’ desire to watch television while eating, and nontraditional work schedules that prevented all family members from eating at the same time.

Table 1. Example of Development of the Family Mealtime Item and Feedback from Parents

Version	Phrasing of Item	Feedback from Parent Interviews
1	Your child eats dinner alone.	Almost all parents indicated knowing that children were not supposed to eat alone, and they did not do this. However, many parents mentioned that their family ate at the same time, but in separate physical locations.
2	Your child eats dinner sitting alone.	Parents indicated that although they were not eating, they would often sit with their child while the child ate.
3	Your family eats dinner together.	Participant's definition of family was a factor with this question. Some indicated that if one member of the family was absent from the meal, but the rest of the family sat down together, they would not endorse this item.
4	Your child eats dinner with at least one adult.	Parents suggested simplifying the wording by eliminating "at least."
5	Your child eats dinner with an adult.	Parents indicated a preference for items phrased in the first person.
6	My child eats dinner with an adult.	Again, participants would endorse this item if they were eating at the same time as their child, but in a different physical location within the house.
7	My child sits and eats dinner with an adult.	Some families indicated that due to work schedules, dinner was not the main meal that the family shared.
8	My child sits and eats with an adult.	Final wording

Similar discrepancies in interpretation occurred for the item assessing television viewing while eating. For instance, some parents assumed that they should only endorse the item if the television was tuned to children's programs. Parents reported that adult programming (such as the news) would not be of interest to the child; therefore, the child would not pay attention to it during the meal. Others felt that if the television was not in view (even if it could be heard), or if it was located in a separate room but could still be seen, that they should not endorse the item. As a result, a consensus was reached to change the original wording of the item "My child watches TV while she eats," to "A TV is on when my child eats."

Implications for Cooperative Extension Educators

Child obesity prevention and intervention programs targeting ethnically diverse, low-income families in group settings need effective assessments with a low respondent burden that can be parent-administered in the group setting. The current paper highlights the complexities with constructing such tools and the potential hazards of using existing tools to inform treatment and interventions which have only been validated for research purposes or in higher SES groups. High reading demands and lack of specificity can result in misinterpretations of the question and possibly invalid answers due to the lack of relevance to the lifestyles of this population.

Based on the parent interviews, we propose some practical recommendations for educators and researchers to use when assessing parent feeding behaviors in ethnically diverse, low-income parents of young children. Considering parents' concerns of being labeled a harsh parent, it is important that educators ensure that parents feel safe, comfortable, and free from judgment. Second, educators need to be aware that everyone has a different idea of what is the "right" way to parent, which may influence answers. Although these personal opinions were often indicative of parents' feeding practices and were appropriately captured via the assessment tool, they may influence how parents behave with their children. Third, based on parents' responses regarding the influence of past intervention programs, facilitators should be aware of the potential impacts these previous experiences may have on assessment. Finally, based on the discrepancies in interpretation of constructs that arose, Extension educators should avoid using intangible terms (e.g., family mealtime) but rather use specific descriptive wording to communicate the intended concept.

References

- Banna, J. C., Vera Becerra, L. E., Kaiser L. L., & Townsend, M. S. (2010). Using qualitative methods to improve questionnaires for Spanish speakers: Assessing face validity of a food behavior checklist. *Journal of American Dietetic Association*, 110(1), 80–90. doi:10.1016/j.jada.2009.10.002
- Dalenius, K., Borland, E., Smith, B., Polhamus, B., & Grummer-Strawn, L. (2012). *Pediatric nutrition surveillance 2010 report*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Retrieved from http://www.cdc.gov/pednss/pdfs/PedNSS_2010_Summary.pdf
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, 113(3), 487–496. doi:10.1037//0033-2909.113.3.487
- Fryar, C., Carroll, M., & Ogden, C. M. (2012). *Prevalence of obesity among children and adolescents: United States, trends 1963-1965 through 2009-2010*. NCHS Health E-Stats report. Hyattsville, MD: National Center for Health Statistics.
- Gerards, S. M., Sleddens, E. F., Dagnelie, P. C., de Vries, N. K., & Kremers, S. P. (2011). Interventions addressing general parenting to prevent or treat childhood obesity. *International Journal of Pediatric Obesity*, 6, e28–45. doi:10.3109/17477166.2011.575147
- Hughes, S. O., Power, T. G., Fisher, J. O., Mueller, S., & Nicklas, T. (2005). Revisiting a neglected construct: Parenting styles in a child-feeding context. *Appetite*, 44(1), 83–92. doi:10.1016/j.appet.2004.08.007
- Johns, M., & Townsend, M. S. (2010). Client-driven tools: Improving evaluation for low-literate adults and teens while capturing better outcomes. *Forum for Family and Consumer Issues*, 15(3). Retrieved from <http://ncsu.edu/ffce/publications/2010/v15-n3-2010-winter/johns-townsend.php>

- Lanigan J., & Power, T. G. (2008). Obesity prevention and health promotion: How family life educators view their role. *Journal of Extension*, 46(6), Article 6FEA5. Retrieved from <http://www.joe.org/joe/2008december/a5.php>
- Litwin, M. S. (1995). *How to measure survey reliability and validity*. Thousand Oaks, CA: Sage Publications.
- Ontai, L., Ritchie, L., Williams, S. T., Young, T., & Townsend, M. S. (2009a). Guiding family-based obesity prevention efforts in children, Part 1: What determinants do we target? *International Journal of Child and Adolescent Health*, 2(1) 19–30. Retrieved from https://www.novapublishers.com/catalog/product_info.php?products_id=19565
- Ontai, L., Sitnick, S. L., Sylva, K., Leavens, L., Davidson, C., Shilts M., & Townsend, M. S. (2009b). *My Child at Meal Time*. University of California Cooperative Extension. Retrieved from http://townsendlab.ucdavis.edu/PDF_Files/mychildmealtime/MCAMTbooklet.pdf
- Ontai, L., Williams, S., Lamp, C., & Smith, D. (2007). An integrative approach to addressing childhood overweight: Inclusion of parenting information in nutrition education programs. *Journal of Extension*, 45(3), Article 3FEA2. Retrieved from <http://www.joe.org/joe/2007june/a2.php>
- Patrick, H., & Nicklas, T. A. (2005). A review of family and social determinants of children's eating patterns and diet quality. *Journal of the American College of Nutrition*, 24(2), 83–92. doi:10.1080/07315724.2005.10719448
- Townsend, M. S., Sylva, K., Davidson, C., Leavens, L., & Sitnick, S. L. (2009). *Healthy kids*. University of California Cooperative Extension. Retrieved from: http://townsendlab.ucdavis.edu/PDF_Files/healthykids/HKbooklet.pdf
- Townsend, M. S., Sylva, K., Martin, A., Metz, D., & Wooten-Swanson, P. (2008). Improving readability of an evaluation tool for low-income clients using visual information processing theories. *Journal of Nutrition Education and Behavior*, 40(3), 181–186. doi:10.1016/j.jneb.2007.06.011

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