Filling the Gap: Understanding Responsive Feeding Practices in Early Care and Education Settings

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Project Description. In addition to the type and amount of food children eat within ECE settings, how children eat is an equally important component of a healthful mealtime environment. Responsive feeding, or how children are fed, is defined broadly by creating a supportive nutrition environment whereby caregivers provide healthful food in developmentally appropriate ways and attend to children's cues of hunger and satiety, and children are given the responsibility to decide how much and whether to eat (Satter, 1986). No instrument has been developed specifically to capture and assess responsive feeding practices in Early Care and Education (ECE) settings. Research examining feeding practices of teachers in ECE settings has relied on modifying self-report tools that assess parental feeding practices. Existing parental RF measures and domains are not automatically valid within ECE settings. Basic transference of parental feeding expectations to ECE settings fails to account for the unique parameters of center-based childcare settings, resulting in findings that are inconsistent and difficult to compare and interpret.

The overall objective of the current project is to develop a validated and reliable method to assess responsive feeding practices of ECE teachers during the critical developmental period marked by infants' transition to complementary foods. The underlying premise guiding this project draws from the robust research base that identifies responsive feeding practices by parents as vital for shaping healthy eating habits and behaviors of children, therefore necessitating a better understanding of early childhood teachers' responsive feeding practices with the children in their care. Our central hypothesis is that ECE settings are inconsistent in how infants are transitioned to complementary foods, and that both self-report and observational measures developed specifically for assessing teachers' responsive feeding practices will provide a valid and reliable approach for assessing such behaviors in ECE settings. This project is guided by two aims:

1) Develop and validate a survey measure for directors and teachers to understand how teachers and administrators working in ECE settings make decisions surrounding infants' critical transition to complementary foods, that is specific and appropriate for use in ECE settings and across a breadth of ECE policy contexts (i.e. those participating in the Child and Adult Care Food Program (CACFP), non-CACFP, and Head Start).

2) Develop an observational coding scheme that is specific and appropriate for use in ECE settings to assess teachers' responsive feeding practices.

Research Questions.
1a. Will an ECE-specific Complementary Feeding Self-Report (CFSR) measure be a valid and reliable tool for use in ECE settings?

1b. Do complementary feeding practices of ECE teachers differ based on the policy-based contexts teachers operate within (CACFP, non-CACFP, Head Start)?

2. Will trained observers be able to reliably apply an observational coding scheme to videotaped observations of mealtimes within ECE settings to capture behavioral markers of responsive feeding practices of teachers?

Methods. To develop the CFSR questionnaire measure, a systematic approach to psychometric

evaluation is being undertaken. First, a literature review was conducted to identify existing parental self-report measures exploring the transition to complementary foods and key aspects of each to be included in the newly developed measure. Additionally, original, ECE-specific items and demographic items will be generated and a preliminary questionnaire will undergo expert review for content validity assessment. Following modifications from expert feedback, face validity of the measure will be assessed by conducting cognitive interviews with N=12 providers across the three policy contexts. Following modifications, the questionnaire will undergo a final assessment of content validity via a second expert review. Upon establishing content and face validity, and acceptable internal consistency, the final measure will be disseminated to N=150 childcare directors and early childhood teachers serving infants, stratified across the three policy contexts of interest. The questionnaire will be completed at two time points to assess test-retest reliability. The information gathered through this measure will provide us with baseline information regarding when, how, and why children are introduced to first foods within ECE classrooms and across three varying policy contexts of center-based care.

To address Research Question 2, an iterative observational design to develop a responsive feeding coding scheme was conducted. Independent and group observations in three infant classrooms during mealtimes were completed over a five-month period. These observations were used to identify and define teacher feeding behaviors by mapping observations onto existing domains of parental responsive feeding as outlined in the Food Parenting Practices Content Map (Vaughn et al., 2016) and utilizing Satter's Division of Responsibility as a theoretical framework (Satter, 2016). Commonly observed responsive feeding behaviors provided a coding scheme pilot. Utilizing the coding scheme, two mealtimes were video-recorded, independently coded, and discussed as by the research team to refine the coding scheme. The goal of combining both inductive and deductive approaches to coding scheme creation is to identify 3-5 domains from the Food Parenting Practices Content Map that appear most prevalent within the ECE setting. Additionally, a global rating measure will be developed to characterize the mealtime climate of each observation. A checklist will be developed for descriptive purposes to capture global quality descriptors of the ECE setting. Data collection procedures will be pilot tested. Three lunch mealtimes per teacher will be video-recorded and coded utilizing a time-sampling approach whereby the presence or absence of responsive feeding practices will be counted within a predetermined time interval. Further refinement and validation of the coding scheme with the full sample of N=65 providers across multiple ECE settings within the CACFP policy context will be conducted to assess provider feeding practices.

Progress Update. Development of the observational coding scheme is underway. Preliminary findings suggest the domains of 'Restriction', 'Pressure to Eat', 'Encouragement' and 'Praise' represent salient teacher behaviors that are frequently observed within ECE infant classrooms. This responsive feeding observational coding scheme is specific for ECE settings and will continue to be refined and validated as data collection proceeds.

Implications for policy/practice

Findings from this project will provide valuable insight into the effects of policy-based nutrition guidelines on the feeding practices of teachers. Programs such as the CACFP and Head Start can improve the nutrition- and health-related outcomes of children by making findings from this project essential in guiding next steps for policy recommendations on responsive feeding standards for ECE settings.

Implications for research

The development of ECE-specific self-report and observational measures to assess teachers' use of responsive feeding is a novel contribution to the responsive feeding and ECE literature. Valid and reliable measures specific to ECE settings will enable the evaluation of teachers' feeding practices at local, state, and national levels.

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