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HEROs: Design of a Mixed-Methods Formative Research Phase for an Ecocultural Intervention to Promote Healthy Eating and Activity Behaviors in Rural Families With Preschoolers

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Abstract

Objective: To describe the mixed-methods formative research phase in the development of the *Healthy Environments Study* (HEROs), a technology-based, interactive family intervention to promote healthy eating and activity behaviors for young children in the home environment.

Design: A mixed-method iterative approach, using ecocultural theory as a framework, will guide the development of both quantitative and qualitative formative research assessments.

Setting: Rural eastern Colorado.

Participants: Low-income families (n = 200) with preschool-aged children enrolled at 6 *Head Start*/preschool centers.

Main Outcome Measures: Quantitative and qualitative methodologies will garner insights into 4 key topic areas: (1) food behaviors and environments (Remote Food Photography Method, parent focus group, and survey), (2) physical activity behaviors and environments (parent interview and survey), (3) mobile device use (parent survey and interview), and (4) daily life (ecocultural family interview and teacher/staff group discussions).

Analysis: Results will be interpreted in combination to allow for a holistic understanding of participant behaviors, beliefs, attitudes and values related to each of the 4 topic areas. Collectively, outcomes will provide a comprehensive picture of preschoolers' daily life and inform intervention design and strategies to enhance preschoolers' eating and activity behaviors in the home environment.

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Keywords

child; ecocultural theory; formative research; mixed methods; mobile devices; nutrition environment

INTRODUCTION

Obesity, a multidimensional problem with roots in conception that track into adulthood, is represented disproportionately among children and families from low socioeconomic and minority backgrounds, particularly in rural areas that have limited access to food, activity, and health-related services.[1] Early childhood is a critical juncture at which to address developing habits and promote the adoption of desired behaviors for optimal growth, development, and health and to prevent obesity. Environments where children live, learn, and play shape their eating behaviors and activity patterns. Culturally tailored, effective interventions are needed that can positively affect the environments (home, preschool, and community) in which young children's eating and activity behaviors develop and in which growth occurs.

Daily routines provide structure and stability for children and support optimal growth and development.[2–5] Ecocultural theory (ECT), developed by Weisner,[6] posits that the sociocultural environment of the child and family can explain individual differences in behaviors and outcomes. Furthermore, ECT can be used to understand the daily routines of families as well as how these routines are shaped by the social and environmental context. Ecocultural theory has been employed to inform the development of qualitative interview guides to assess the relationship between daily routines and children's health outcomes[7,8]; however, no studies have applied ECT to daily routines related to eating and physical activity.

To gain in-depth insights into the multiple dimensions of family life associated with healthy growth and development, and how these aspects may influence effective intervention development, a comprehensive formative research approach is integral to intervention design. Too often, formative research is conducted and/or reported at a minimal level.[9,10] However, thorough formative research can yield a much greater understanding of key factors related to health behaviors in the target audience, as well as potential barriers to the proposed intervention, or its facilitators, all of which are crucial for successful intervention development.[11,12] A comprehensive mixed-methods approach with the goal of integrating quantitative and qualitative data can provide a holistic picture of families' daily life.[13] Specifically, a mixed-methods iterative design provides a mechanism to facilitate the development of culturally sensitive interventions and evidence-based practices and can be used throughout a multiyear project to conduct formative research and test theories, as well as develop and validate evaluation instruments and intervention programs.[14,15]

The overall objective of the HEalthy EnviROnments study (HEROs) is to develop and test a technology-based, interactive family intervention to promote healthy eating and activity behaviors (and ultimately weight outcomes) for young children in the home environment. Ecocultural theory is the proposed framework for informing and designing the HEROs

intervention. In addition, a mixed-methods iterative design approach[15,16] will be used throughout the entirety of HEROs to understand the interactions between individual behaviors and environments. This article outlines the formative research phase of HEROs and the methodologies proposed to garner insights into 4 key topic areas: food behaviors and environments, physical activity behaviors and environments, mobile device use, and daily life.

METHODS

Study Design

The quantitative and qualitative methods associated with the mixed-method formative research phase of HEROs are outlined as a logic model presented in the Figure. The study is approved by Colorado State University's Institutional Review Board.

Participant Recruitment

The target audience for this project is rural families enrolled in *Head Start* in eastern Colorado, because this is a population with high rates of obesity and limited access to health services, healthy foods, or opportunities for physical activity.[17] Specifically, the audience includes rural, low-income families with preschool-aged children enrolled in 6 *Head Start*/preschool centers (approximately 775 families) in purposely selected communities of eastern Colorado. Parent recruitment will be carried out in 2 phases; phase 1 will occur in spring of year 1 and the second phase will be in spring of year 2. Two surveys (Parent Survey About Mealtime Environments and Parent Survey About Preschoolers' Mobile Device Use) will serve as both data collection instruments and recruitment mechanisms for follow-up components (ie, surveys will capture demographics and also contain opt-in consent for participation in interviews and focus groups). Parent packets, including 1 of the 2 surveys, with informed consent and interest forms for follow-up components, will be distributed to *Head Start*/preschool centers and sent home via children's backpacks. Parents will have approximately 3 weeks to return the survey and center staff will be engaged in the process to encourage increased participation. Parents will also have the opportunity to return the form indicating interest in a follow-up component for which they will be compensated. Parents will return the survey and forms in a provided envelope to their child's teacher. Staff at each center will collect all envelopes and mail them to the research team in a prepaid mailer. All parents who return the survey will be entered into a drawing for $100. The surveys will be disseminated approximately 9 months apart, to reach a wider audience, with a target of 100 respondents for each survey.

For the follow-up components, participants will be recruited from the pool of parents who returned interest forms for at least 1 survey. Because of the diversity of the *Head Start* population in Colorado, participants will be selected to ensure adequate representation across sites for each follow-up assessment and represent demographics of the sites, as determined by the *Head Start* Program Information Reports. Furthermore, participants will be contacted until a sample of at least 30 is attained. Parents will not be expected to participate in every component of the study; it is anticipated that each parent will complete only 1 or 2 assessments in addition to the original survey. Approximately 5 teachers and

staff members (eg, parent and family coordinators) will be recruited from each of the 6 *Head Start*/preschool centers, for a total of 30.

Assessments

Formative research assessments are grouped by the 4 primary topic areas. The Table 1 lists qualitative and quantitative measurement approaches, aims, and core content areas addressed for individual assessments and sample questions for each assessment. The overarching aim for each topic area, as well as additional details for each assessment, are presented subsequently. All focus group and interview guides will be informed by the literature and the authors' previous research,[5,18–20] and will align with ECT. Quantitative surveys will be distributed in both Spanish and English, but it is anticipated that a majority of follow-up components will be conducted in English because of the reportedly low level (<10%) of families that speak only Spanish at each site. Content validity on quantitative and qualitative assessments will be established via discussion and consensus with experts in the fields of nutrition, child development, anthropology, pediatrics, public health, technology, and instructional design and qualitative methodology. Cognitive interviews will be conducted to establish face validity for survey instruments (n = 3 for both English and Spanish). Qualitative guides will be pilot-tested (n = 3 in English only) to ensure participants understand each question and are answering questions as intended. To establish reliability, test-retest will be used for quantitative instruments developed by the research team.

All study staff will be trained in qualitative interview techniques and best practices.[21] Mock and pilot interviews/focus groups will be performed before data collection to build staff skills, anticipate common challenges in interviewing in community environments, and coach interviewers in the pacing, probing, and depth of interviews.[21] Once data collection begins, the research team will debrief after every 2–3 interviews or after each focus group to discuss new, confirmatory, or contradictory findiings. All qualitative interviews and focus groups will be audio recorded with participants' permission and detailed field notes will be taken to augment audio recordings. Field notes will include observations related to the environment in which the interview or focus group takes place, such as time of day, family members present, and duration of the session.

Food behaviors and environments.—To elicit understanding of food behaviors and environments, assessments will examine typical family dinner environments; quality and quantity of foods served and consumed at dinner; family food behaviors such as food choice, meal timing, snacking, and purchasing; and ideas for intervention components. Assessments are designed to focus particularly on family dinners because this is the eating occasion upon which parents and children most frequently eat together at home.

A pilot study with the Remote Food Photography Method (RFPM) will be conducted with parents and their preschoolers to assess the nutrient intake of parent–preschool child dyads at dinner and provide insight into typical family dinnertime. The pilot study will also be used to determine whether this is a feasible method for dietary assessment in the target families in rural remote areas. Detailed methods associated with the RFPM approach are described elsewhere.[22] Briefly, participants take photos of their meals on their smartphone or tablet via

the SmartIntake app (Pennington Biomedical Research Center, Baton Rouge, LA) and the photos are wirelessly transmitted to a server in near real-time for review of data quality and completeness. Photos will subsequently be analyzed using the established and validated RFPM protocol[23] to assess nutrient intake accurately. Photos and associated details will also be used to assess other elements of dinnertime (eg, overall meal quality, types of foods served, portions of fruits and vegetables served and consumed by children, similarity of parent and child meals, whether adults eat with children, length of mealtime, time of day of dinner). For these additional analyses, existing protocols and scales will be used whenever possible.[24,25] The RFPM has been used successfully and validated in studies with low-income, minority preschoolers[26,27] and adults.[23] For this study, participants will attend a 1-hour training session at their child's preschool to learn how to use the RFPM application on an iPad (Apple, Inc., Cupertino, CA). Two trained research team members will conduct the training session, which will be adapted from existing training modules to ensure appropriateness for the target audience with respect to cultural relevance and a variety of literacy and technology levels. The training session will be interactive and allow participants several opportunities to go through the application and take practice photos on the iPad. After the training session, participants will take the study-issued iPad home and take before and after photos of their dinner and their preschool child's dinner each night for 1 week (7 days total). In addition to photos, participants will be asked to provide written descriptions of the meal components (eg, type of milk: 1% or whole). As part of the ecological momentary assessment associated with the RFPM protocol, text message reminders will be sent to participants (with their permission) approximately 30 minutes before their self-identified dinnertime each night. As an additional ecological momentary assessment component, study staff will monitor the photos and texts as they come in each evening and communicate with participants if additional information or clarification is needed. After 1 week, parents will return the iPads and participate in a short informal discussion about their experience taking the photos. Notes from those conversations will be analyzed to understand the feasibility and acceptability of the protocol among parents in this audience. In addition to parents' feedback, feasibility will be measured by the number of meals for which photos of a sufficient quality (as determined by the RFPM protocol[23]) are received, out of the total possible number of meal photos. All participants will receive $50 for their time.

Participants from the RFPM will also be asked to participate in a focus group at the conclusion of the RFPM study period. Focus group questions will be open-ended and will explore parent perspectives regarding family dinner, including successes and challenges related to dinnertime, family food behaviors related to role modeling, snacking, food purchasing, and parent feedback on possible intervention components. A minimum of 1 focus group will be held in each of the 6 communities, each of which will be conducted by a trained moderator with a second individual serving as a notetaker, based on the methodology of Krueger and Casey.[31] The focus groups will last approximately 90 minutes and participants will be compensated $40 for their time.

A survey on family mealtime practices will be distributed to parents of preschoolers through the methods outlined in the participant recruitment section. The survey will primarily be adapted from existing published surveys that have been used with low-income, minority populations, Project Families and Eating and Activity in Teens,[29,32,33] and the Healthy

Offerings via Mealtime Environment Plus trial,[28] with a few additional questions developed to answer specific study aims. The survey will consist of 18 questions about family mealtime behaviors during the past week (with a focus on dinnertime), 6 about general family mealtime behaviors, 6 on parent beliefs and values related to family mealtime, and 6 related to food preparation. The survey will include demographics and will be translated into Spanish using established translation–back-translation protocols with 2 bilingual native Spanish speakers.[34] The survey will take about 10 minutes to complete and all respondents will be entered into a drawing for $100.

Physical activity behaviors and environments.—To explore physical activity behaviors and environments, assessments will examine parenting practices, perceptions, and values related to their child's movement (motor) skills and physical activity levels.

Face-to-face interviews will be conducted with parents by a trained member of the research team. The interview will consist of 19 open-ended questions addressing 3 key topic areas: family activity habits and values related to physical activity; parent interactions with their child related to activity, including self-efficacy of engaging their child in skill development; and parent feedback on proposed intervention components related to movement skills. All interview participants will also be asked to complete the Parenting SOS Physical Activity Practices Survey,[30] an instrument specific to the preschool audience and used with minority populations.[35] The interview will last approximately 60–90 minutes and participants will be compensated $40 for their time.

Mobile device use.—To examine how mobile device use in this population shapes possibilities for intervention design, assessments will garner insights into types of devices being used among preschool children; frequency, content, and context of use; parent beliefs and comfort with preschool use of technology; and the feasibility of intervention delivery via mobile devices.

A survey asking about mobile device use will be distributed to parents of preschoolers through the methods discussed previously in the participant recruitment section. The survey will include 18 multiple-part questions on frequency, content and context of children's smartphone and tablet use, as well as parent beliefs and comfort regarding their child's use of mobile devices. The survey will primarily be adapted from existing surveys on technology use with young children and widely cited in the literature,[36–42] with additional questions developed to address parent beliefs and comfort. The survey will be translated into Spanish using the study translation protocol described above,[34] face validity will be established through cognitive interviews with the target audience,[43] and necessary revisions will be made. The survey will take approximately 15 minutes to complete and respondents will be entered into a drawing for $100.

Semistructured telephone interviews will be conducted with parents to follow up in greater detail on responses from the preschool technology survey and understand the role of mobile devices in the daily life of families in the target audience. Specific topics will include preschoolers' mobile device use, family practices related to this use, parent values and beliefs related to mobile device use, as well as the feasibility of possible intervention

components. Two trained research associates will conduct the interviews, switching between the role of interviewer and notetaker.[21] The interview will last approximately 30 minutes and participants will be compensated $20 for their time.

Daily life.—To become informed about and understand the daily life of preschool children and their families living in rural areas, interviews with parents and teachers will explore the social, cultural, and environmental factors that shape daily routines in the home and preschool environments. For the purpose of these assessments, daily life is defined as the events that happen in a typical day and the conditions that influence them.

Ecocultural family interviews will be conducted in person with parents.[6,44] The interview guide will be based on the idea that families organize daily routines according to cultural values and available resources.[6] The semistructured interviews will be like conversations and include open-ended questions, probes, and vignettes about a hypothetical family to elicit richness in the information that participants provide. Specifically, probes and vignettes will address daily routines and perceived successes and challenges associated with daily life, particularly related to eating and physical activity. Interviews will be conducted primarily at participants' homes by an experienced interviewer who is trained in ecocultural theory, with another team member present to take notes. The interview will last approximately 90 minutes and participants will be compensated $40 for their time.

Group discussions will be held in person with teachers and staff who interact regularly with families at partner *Head Start*/preschool centers to ascertain children's daily life in the preschool setting. The discussion will consist of a series of open-ended questions aimed at understanding daily routines in the classroom, particularly related to technology use or nutrition/activity education, suggestions on bridging the divide between the classroom and home settings, as well as feedback on possible intervention components. A trained moderator will lead the group discussion, with a second individual serving as notetaker.[21] The discussions will last approximately 1 hour and teachers and staff will be compensated $20 for their time.

Data Collection and Analysis

Qualitative data.—The recordings will be transcribed by a Health Insurance Portability and Accountability Act of 1996–compliant vendor, completed transcripts will be anonymized, and a subset will be verified by the interviewer against field notes and audio files.[45] For each qualitative component, a codebook will be developed.[46] All research team members who will be involved in coding will be trained in coding methods and software, emphasizing strategies to avoid bias and confirm the trustworthiness of the coding.[21] Either NVivo Qualitative Data Analysis Software (version 11, QSR International Pty Ltd, Doncaster, Victoria, Australia, 2015) or Atlas.Ti (version 8, Scientific Software Development GmbH, Berlin, Germany) will be used as the coding platform. Constant comparative analysis will entail group-based qualitative coding in phases with frequent team meetings to achieve consensus, to ensure high reliability in coding practice and interpretation of findings.[47] Upon completion of coding, thematic analysis will be used. Specifically, codes for each assessment will be combined across transcripts and 2–3

members of the research team will review the codes to summarize and identify key themes.[48]

Quantitative data.—Quantitative surveys will be deidentified immediately upon return. Survey data will be entered into Research Electronic Data Capture by members of the research team and verified by different team members.[49] Survey data will be analyzed in SPSS (version 23, IBM Corporation, Armonk, NY, 2015). Descriptive statistics will be calculated for each survey. Chi-square goodness of fit and ANOVA will be used to look at survey results across demographic groups, such as income, ethnicity, parent education level, employment status, and/or child sex. When appropriate, scores (such as levels of technology use) will be created for further analysis.

Mixed-methods analysis.—A mixed-methods approach synthesizing findings from the quantitative and qualitative assessments will be used to provide a more holistic understanding of participant behaviors, beliefs, attitudes, and values related to each topic area. Each dataset will remain analytically separate, but results will be interpreted in combination.[50] For example, data may be used to validate responses across instruments for consistency, expand on participants' ideas to paint a richer picture of the topic, or develop questions to be asked in a subsequent assessment.[51]

DISCUSSION

The comprehensive formative research phase of HEROs has the potential to provide rich insights into the daily life of families with young children and their food-related behaviors and environments, physical activity behaviors and environments, and mobile device use. The focus on rural communities, particularly those with limited resources and of Hispanic ethnicity, is a key element of HEROs. Prevalence of obesity, and corresponding behavioral factors such as poor diets and physical inactivity, are highest in these audiences.[52] Furthermore, rural residents often lack access to primary prevention efforts and facilities that promote healthful behaviors (eg, recreational facilities, grocery stores).[1] Understanding the context of families' daily lives is essential to developing and implementing effective interventions targeted to rural populations.

A strong formative research plan with an embedded theoretical framework allows for the development of an intervention that fits within families' daily life and existing routines. In this study, the researchers used ecocultural theory as a theoretical foundation to direct the choice of methodology. Furthermore, 3 key considerations and approaches were integrated within the ecocultural foundation: (1) developing person-centered assessments, (2) using a mixed-methods approach, and (3) applying a multilayered environmental perspective.

First, a person-centered assessment was prioritized and methods were aligned to elicit parents' and teachers' personal experience with child behaviors in the day-to-day environment. Qualitative interviews coupled with survey data will allow the voices of participants to shine through as they narrate what they are thinking about daily life, child feeding, activity, and mobile device use; what they are doing at home and at school; and what their needs and hopes are for their families' eating and activity behaviors. The long-

term goal is to develop an intervention to meet these specified needs, as opposed to convincing parents to meet researchers' objectives. This goal aligns with the person-centered, qualitative methods that were selected.

Second, a comprehensive, mixed-method iterative design approach was chosen. In each area, the qualitative and quantitative data collection methods will be balanced to achieve a rich and complementary dataset iteratively examining the qualitative data in light of the quantitative data, and vice versa, as each component of the study is completed.

Third, methodologies were chosen bearing in mind the multilayered environment in which child feeding, activity, and mobile device use take place. The assessments were specifically chosen to elicit data about the microenvironment of the home and family routines in daily life. However, there are also environmental interfaces between home and school, between weekends and weekdays, and between ethnic and income groups. The measures are designed to tap into each of these settings and the corresponding family priorities shaping children's feeding, activity, and mobile device behaviors. At the macroenvironmental level, it is important to reflect on the rurality of eastern Colorado and the demographic composition of residents who live there. Like many rural communities, the study area has experienced substantial change through recent decades in how family and community life are experienced. Technology, for instance, is increasingly shaping families' work and recreation, and demographic and political shifts common in rural areas are examples of background influences that shape parents' expectations for their children's future.

Taken together, the person-centered, mixed-method, and environmental values of this formative research informed the selection of specific qualitative and quantitative assessments and are deemed strengths of this study. Challenges are expected, including the ability to recruit a diverse pool of participants that allows for the generalization of findings to this region, and limiting response and social desirability bias. To address these challenges, research staff will continue to engage with study communities and preschools to maintain and build on relationships to attract all potential study participants.

Both qualitative and quantitative data collected in this study, in conjunction with previous research by the authors, will drive the development of intervention strategies. Intervention mapping will be employed to provide a framework to integrate theory, findings from the literature, previous research outcomes, and information collected from the formative research assessments outlined in this study.[53] Novel approaches and intervention strategies, including those that integrate technology such as mobile devices, are needed to positively influence the home food and activity environments of families with young children. The HEalthy EnviROnments study aims to deliver a family intervention tailored to the target audience, which will consist of an instructional program and employ electronic media to help children and parents learn together and build skills related to healthy eating and activity. This interactive technology will increase parents' health literacy, facilitate improvements in the home food and activity environments, and support children's adoption of healthy eating and activity behaviors.

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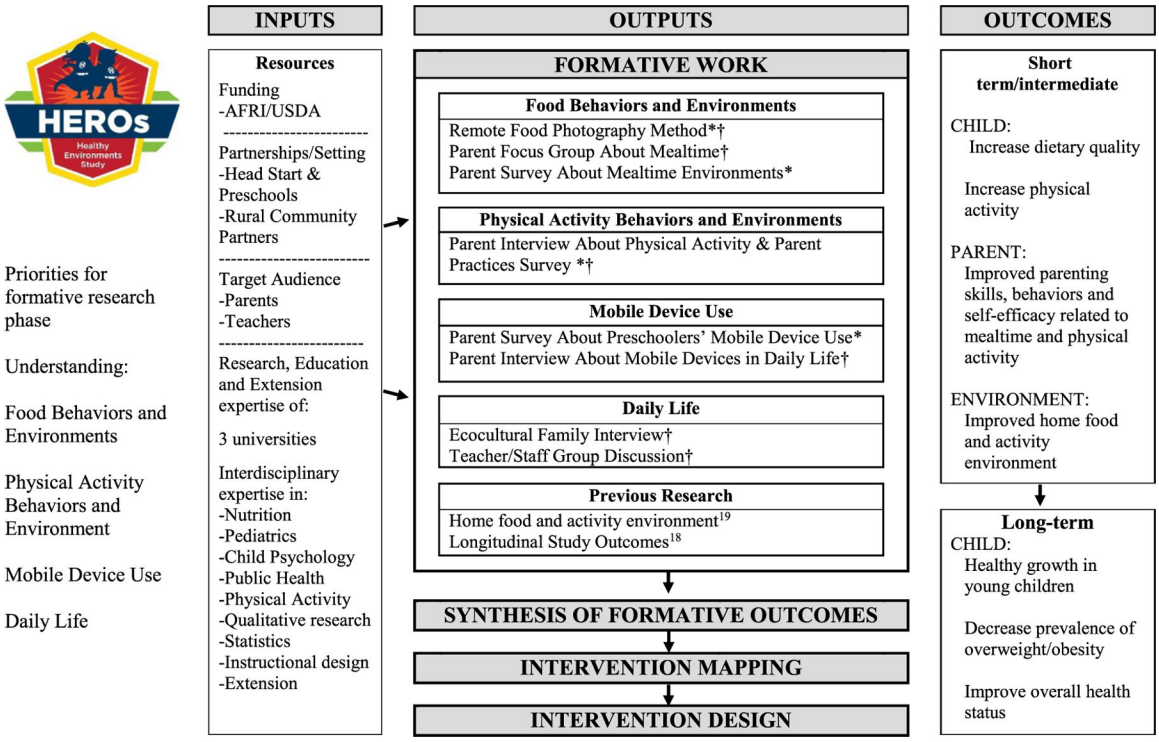

Figure.

HEalthy EnviROnments (HEROs) Formative Research Plan Through an Ecocultural Lens. AFRI indicates Agriculture and Food Research Initiative; USDA, US Department of Agriculture. *Quantitative method; †Qualitative method.

Table 1.

HEalthy EnviROnments (HEROs) Formative Research Assessment Descriptions and Sample Questions

Assessment (Proposed Sample Size)	Core Content Area Addressed	Sample Questions
Food behaviors and environments		
Remote Food Photography Method (RFPM) (n = 30)	Quantitatively assess mother's and child's nutrient intake at dinner; qualitatively assess typical mealtimes, including types of foods served and concordance in parent–child meal content and timing; feasibility of using RFPM with target audience	Questions for participants who completed RFPM: • *What was the experience of taking dinner photos like for you and your family? Would you be willing to complete the RFPM again in the future?* • *Did you learn anything new about mealtimes or how your family eats?* Questions to be answered through analysis of photographs: • *What is the average nutrient intake of parent and child at dinnertime?* • *Do meals meet recommendations for portion size and variety?* • *Are parent and child eating at the same time? Are they eating the same foods?*
Parent focus group about mealtime (minimum 6 focus groups; 6–10 participants/group)	Typical family dinnertimes; successes and challenges associated with dinnertime; role modeling related to food; snacking; food purchasing decisions; parent opinions about possible intervention components related to eating behaviors	• *What makes you feel like dinner with your preschooler is successful?* • *Between everyone eating the same food, everyone in the same place, everyone eating at the same time, and people talking to each other, what are the most/least important parts of the evening meal for you?* • *What makes something a snack for your preschooler? How does your child's snacking affect what he or she eats at mealtime?* • *How do you decide which foods come into your home?*
Parent survey about mealtime environments (n = 100)	Typical patterns associated with family mealtime including frequency of eating together, frequency of eating out, parent beliefs, and values related to mealtime	• *During the past 7 days, how many days did you: eat dinner with your preschooler; eat the same foods as your preschooler; eat dinner at the kitchen or dining room table; eat dinner in the living or family room?* [28] • *During the past week, how many times did all or most of your family living in your household eat a meal together?* [29] • *How is food served at a typical family dinner in your home?* [29] • *How much do you agree with the following statements?* [29] - *It is important that our family eat at least one meal a day together*

Assessment (Proposed Sample Size)	Core Content Area Addressed	Sample Questions
		- *Different schedules make it hard to eat meals together on a regular basis*
Physical activity behaviors and environments		
Parent interview about physical activity and parent practices survey (n = 30)	Family activity habits and values related to activity; parent beliefs regarding preschooler participation in physical activity and movement (motor) skill competence; parent self-efficacy and enjoyment of practicing movement skills with their preschoolers; feedback on intervention components	• *Are there any types of sports or motor skills you wish your child could do that he or she cannot do yet?* • *Will you tell me about any specific things you do with your child related to him or her learning motor skills?* • *What are some reasons you have your child do physical activities?* Refer to original citations for questions from the Parenting SOS Physical Activity Practices Survey[30]
Mobile device use		
Parent survey about preschoolers' mobile device use (n = 100)	Frequency and patterns of young children's mobile device use; parent beliefs and comfort regarding preschooler's use of mobile devices	• *How often does your preschool child use a smartphone or tablet device?* • *Which of the following are reasons you use smartphones or tablets with your preschool child?* • *How comfortable are you with using a smartphone for more than phone calls or using a tablet, or with your child using a smartphone or tablet without you?*
Parent interview about mobile devices in daily life (n = 30)	Preschool mobile device use; typical household practices related to preschooler's mobile device use; parents' values and beliefs related to mobile device use; and parents' opinions regarding feasibility of mobile intervention components	• *Think about the last day or so. When did your child use smartphones/tablets throughout the day?* • *What are some benefits of your child using smartphones/ tablets? What are some downsides?* • *Do you or your family have any rules about how often your child can use a smartphone or tablet?*
Daily life		
Ecocultural family interview (n = 30)	Typical day in the life of families; daily routines, particularly related to eating and physical activity; perceived successes and challenges associated with daily life; parents' hopes related to their children's eating and activity; and how families approach evening mealtimes	• *Thinking about yesterday, tell me about what happened from the time your child came home from school through dinner.* • *What are the best parts of mealtime? What are the hardest parts of mealtime?* • *What are the times when you or your family are being physically active that you enjoy?*
Teacher/staff group discussion (n = 30)	Daily routines in the classroom, including technology use; curriculum related to nutrition and physical activity; bridging the divide between classroom and home settings, and communicating with parents; and feedback on potential intervention components	• *Is technology part of your daily classroom routine? If so, how is it used?* • *What is your current curriculum related to nutrition and physical activity?* • *How do you typically communicate with parents?*

Assessment (Proposed Sample Size)	Core Content Area Addressed	Sample Questions
		• *How much information do you share with parents about what happens in the classroom/center particularly related to food and motor skill development?*