

Journal of Hunger & Environmental Nutrition



ISSN: 1932-0248 (Print) 1932-0256 (Online) Journal homepage: https://www.tandfonline.com/loi/when20

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To cite this article: Shannon E. Jarrott, Qiuchang Cao, Holly I. Dabelko-Schoeny & Michelle L. Kaiser (2019): Developing Intergenerational Interventions To Address Food Insecurity among Pre-School Children: A Community-based Participatory Approach, Journal of Hunger & Environmental Nutrition, DOI: 10.1080/19320248.2019.1640827

To link to this article: https://doi.org/10.1080/19320248.2019.1640827

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Developing Intergenerational Interventions To Address Food Insecurity among Pre-School Children: A **Community-based Participatory Approach**

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ABSTRACT

Children and older adults are especially vulnerable to the negative effects of food insecurity. Intergenerational strategies often engage youth and elders in shared programming that supports each group's needs. With community partners, we established a community-based participatory action research (CBPAR) partnership to improve knowledge, access, and consumption related to healthy food at four child care centers in two states using intergenerational practices. The current paper represents work of a dedicated planning year (Year 1) to develop implementation and research plans for subsequent years of the 5-year grant. Work was guided by Israel and colleagues' CBPAR principles.

KEYWORDS

Food security; healthy food access; community food access; intergenerational program; early childhood; older adult; communitybased participatory action research

Introduction

The United States Department of Agriculture (USDA) defines high food security as the absence of indicators of barriers to access sufficient food. Nationally, nearly one in five children lived in a household that experienced food insecurity in 2013, meaning that they faced barriers to adequate food. ² Older Americans comprise another population particularly vulnerable to food insecurity. Even with the availability of nutrition programs like congregate meals funded by the Older Americans Act, 15.5% of adults aged 60 or more faced food insecurity in 2013. ^{3,4} Members of these age groups keenly feel the impact of food insecurity; they are especially vulnerable to the detrimental physical and cognitive effects of poor diets. 5,6 These negative consequences reflect barriers residents face to accessing sufficient nutritious food in their neighborhoods. For example, food stores in communities characterized by food insecurity mainly sell alcohol and tobacco with limited fresh produce. When fresh produce is available, price is a significant barrier to consumers, who frequently opt for less expensive, high-calorie foods.⁸ Improving food security requires attention to the heightened vulnerability of these groups.

Intergenerational strategies intentionally connect youth and older adults for mutual benefit. Intergenerational methods prove particularly powerful for the voice they can give to age groups that are frequently marginalized. Although many food programs are open to all ages, none in the research literature have aimed to harness the synergy of uniting young and old to collaborate on mechanisms associated with greater food security. Intergenerational strategies are responsive to the demographics of many food insecure families and build on decades of community-based efforts engaging young and old to support each other's development and needs. 10

We created Food for a Long Life (FFLL) to improve healthy food access in two communities - one each in Ohio and Virginia - identified as food deserts, areas in which residents face difficulties accessing affordable or quality fresh food. 11 Rates of food insecurity are similar in the geographic areas served by FFLL - 17% in the Near East Side of Columbus, Ohio and 18% in Lynchburg, Virginia - and higher than average levels in their respective states. Poverty rates are higher as well - 42% in the Near East Side and 25% in Lynchburg, compared to a national average of 13.5%. 12,13,14 Characteristic of food deserts present in these communities; for example, in the Near East Side all the food and beverage stores are convenience marts offering primarily low-grade food. 12 In Lynchburg, residents are much more likely to lack transportation (4%), which is compounded by lower availability of grocery stores (.20 per 1,0000 population compared to a state rate of 2.4 per 1,000). 15 Recognizing a community need reflective of inequitable access to basic resources, we employed a community-based participatory action research (CBPAR) approach incorporating intergenerational strategies to pursue project goals related to improved healthy food access.

CBPAR engages researchers and community members as co-creators of research questions and data collection methods, as well as partners in interpreting data and disseminating results. CBPAR holds particular relevance when working with populations that have faced historic marginalization economically or politically, as is the case for many food insecure households. For example, in a geographic area inclusive of the Ohio sites, Kaiser and colleagues determined that African Americans and persons relying on public transportation are more likely to experience food insecurity than others in this same area. Food insecure families are more concerned with food prices than food secure families. They are more likely to turn to corner markets, which carry limited healthy items. To engage community members to address inequitable access to healthy food, varied age-inclusive initiatives can be pursued.

A Sustainable Community Project grant from the USDA funds the current study. The grant program, administered by the Children Youth and Families at Risk program, aims to deliver educational programs by connecting the Land-Grant and Cooperative Extension Systems with families and youth at risk of not meeting their basic needs (retrieved from https://nifa.usda.gov/ funding-opportunity/children-youth-and-families-risk-cyfar-sustainablecommunity-projects). Programs are intended to reflect community-identified needs and incorporate evidence-informed practices. Grantees receive five years of funding; Year 1 of FFLL is mandated by funders as a planning year. Using CBPAR strategies, our planning year entailed listening sessions with representative community stakeholders, formation of an advisory group, and shared interpretation of listening sessions that contributed to plans for program implementation and evaluation in Years 2-5. The current paper details Year 1 efforts as they reflect Israel and colleagues' nine CBPAR principles and concludes with a discussion of lessons learned that inform subsequent project planning, implementation, and evaluation.¹⁶

Background

CBPAR frames the FFLL approach to improving knowledge, access, and consumption related to healthy food using intergenerational strategies. We begin with an overview of the CBPAR principles we adopted, continuing with literature on food security among young children and older adults. The review concludes with a definition of intergenerational programming and examples of this strengths-based approach used to meet the needs of varied groups.

Community-based Participatory Action Research (CBPAR)

Researchers increasingly incorporate CBPAR to address health disparities in marginalized communities whose members share a geographic, cultural, or political identity. 18,19 The history of CBPAR traces back to Lewin's action research of the 1940s, which aimed to (a) solve problems through collaborative research with practitioners and (b) redistribute resources by increasing the power of residents within communities. 18 With varied frameworks used across diverse physical, health, and social science disciplines, CBPAR scholars focus on communities' historical, cultural, and social contexts, striving to balance research with action through coalition building, community empowerment, and maintaining effective community partnerships. 18-20

The current project employes the framework created by Israel and colleagues, who offered nine principles of CBPAR (see Table 1).21 They emphasized partnership building, communication, and maintenance strategies that evolve through iterative, contextually sensitive and strengths-based processes. The emphasis on shared participation in all aspects of the research process addresses the common power imbalance found in traditional health research programs. The liberating nature of CBPAR makes it suitable for understanding experiences of marginalized communities.¹⁸ It has been applied to address a broad range of problems in social science such as food security,

Table 1. Israel and colleagues' principles of community-based participatory action research (CBPAR) aligned with Food for a Long Life (FFLL) Year 1 efforts.

Israel's principles	Application to FFLL efforts
CBPAR acknowledges community as a unit of identity.	Involved community stakeholders from different groups to extend the network of connections and ensure that participants, families, program staff, and community partners were involved. Identified cultural beliefs and community norms around communication strategies, community engagement, and program plans.
2. CBPAR builds on strengths and resources within the community.	Listening sessions sought out local expertise, asking respondents about strengths and needs of community families. Relied on community stakeholders to identify existing healthy food resources in the community.
 CBPAR facilitates a collaborative, equitable partnership in all phases of research, involving empowering and power-sharing that attends to social inequalities. 	Invited stakeholders at community conversation to interpret and confirm emergent themes from listening session data. Invited research questions from discovery council. Focal community partners co-constructed FFLL programming protocol.
 CBPAR fosters co-learning and capacity building among partners. 	University researchers presented data to community partners, who assisted with interpretation. Community researchers communicated opportunities that could enhance capacity to meet project goals and community needs.
5. CBPAR integrates and achieves a balance between knowledge generation and intervention for the mutual benefit of all partners.	Partners adapted protocol in response to cultural contexts, which informed a staggered start to programming across sites and varied methods for engaging families. Data collection periods altered to accommodate school holidays and enrollment of new families.
 CBPAR focuses on the local relevance of public health problems and ecological perspectives that attend to the multiple determinants of health. 	University researchers identified sites based on evidence of food insecurity and associated risk factors, such as proximity to grocery stores. With community leaders they considered resources, such as local food partners, to invite child and elder programs to join FFLL.
7. CBPAR involves systems development using a cyclical and iterative process.	To support sustainability, systems development included establishing partnerships between county Extension offices and the sites. University researchers met weekly; key informants were routinely consulted on programming and data collection methods.
 CBPAR disseminates results to all partners and involves them in the wider dissemination of results. 	Data updates were routinely provided in a sharable format to community researchers. FFLL social media outlets expanded dissemination. A year 1infographic was created with key research and community stakeholders.
CBPAR involves a long-term process and commitment to sustainability.	With four years to implement FFLL programming and evaluation, we initiated procedures to build systems to respond to changing contexts, such as creating partnerships that can sustain beyond the grant-funding period.

nutrition, and community organizing.^{8,20,22,23} CBPAR researchers strive to empower communities, promote mutual learning, and build community assets.¹⁸ Israel and colleagues emphasized that each CBPAR collaborative

might benefit from creating its own set of guiding principles. For our Year 1 focus on planning, their principles, grounded in the literature, provided a valuable framework to explore the potential of a CBPAR strategy to address food insecurity of elders and children.²¹

One illustration of applying the CBPAR approach to food access comes from San Francisco where researchers partnered with the local Literacy for Environmental Justice (LEJ) organization to reduce alcohol and tobacco sales and increase the availability of healthy food in the corner stores of economically disadvantaged neighborhoods.²² Researchers and local policymakers developed a voluntary policy called the "Good Neighbor Program," which provided incentives to corner stores to sell fruit and vegetables. Fresh produce sales in the area rose from 5% to 15% in the first seven months of the program, while alcohol sales dropped from 25% to 15%. 22 Partners collaborated on legislation (AB2384 Improved Access to Fruits and Vegetables) supporting a "Healthy Purchase" fruit and vegetable program at corner stores.

Food Security

Children who experience food insecurity face immediate risks of diminished physical, psychological, and behavioral outcomes.^{24,25} Additional research points to long-term effects on mental health, including depression and suicidal ideation.²⁶ Young children are particularly vulnerable to the longterm negative consequences of food insecurity given their rapid development during this time.²⁷ Children's complex nutritional needs and their immune systems are under development, aided by early childhood nutrition. For lowincome households, meeting those nutritional needs can be a challenge.

Food insecurity impacts elders' health as well; those without adequate healthy food access exhibit lower cognitive function and face greater risk of depression and heart conditions than food secure age peers. 28,29 Older adults may tackle difficult choices between food and medications; elders reporting persistent food insecurity were eight times more likely to associate medication non-adherence with inability to pay for medicine. ³⁰ Medication non-adherence may contribute to higher rates of doctor and hospital visits identified among food insecure older adults.³¹ Vulnerability in this age group is compounded by other age-related factors; for example, an older adult may have funds to purchase food but lack the means to access or prepare it due to limited mobility.³² Families can be a resource to these elders, but co-residing with children and/or grandchildren may indicate vulnerabilities of all household members.

Initiatives to address healthy food access vary as much as the people utilizing them. Focusing on the role that practitioners can play, the fourth author reviewed a range of local food-related initiatives.8 Partners collaborated to expand healthy offerings in corner stores, launch urban gardens, deliver education, and advocate for social justice in food policy decisionmaking.8 Community-based food strategies reflected a CBPAR approach in terms of building diverse membership that included research, practice, and resident experts ranging from social workers to dietitians, urban farmers, health professionals, and residents.8 The following section illustrates how community food access efforts align well with intergenerational and CBPAR strategies.

Intergenerational Programs

Intergenerational programs bring together youth (usually 25 years of age and younger) and older adults (usually ages 50 years and older) for shared activity that mutually benefits participants. They have addressed a range of opportunities and needs in communities, including achieving grade-level reading among students (Experience Corps), increasing youth and older adult physical activity (CATCH Healthy Habits), and encouraging social engagement of frail elders and young children. 33-35 Utilized as a strengths-based approach to meet individual and community needs intergenerational strategies are a natural complement to CBPAR methods for empowering communities to generate knowledge and collaborate on issues salient to its members.³³ Paralleling Israel's CBPAR principles, intergenerational strategies can forge a shared identity, build on strengths, and facilitate co-learning and collaboration among young and old members of a single community.³⁶

The current paper presents the Year 1 planning effort for FFLL, which entailed application of Israel and colleagues' CBPAR principles in two communities experiencing low healthy food access. We further describe the advantages and challenges of implementing CBPAR principles with community partners.²¹ Because our goal for the current paper is to reflect on the engagement process with advisory groups and stakeholders rather than reporting findings concerning human subjects, IRB approval was not required for the current paper.

Method

Israel and Colleagues' Principles of CBPAR

Israel and colleagues' principles of CBPAR integrated both literature and their own experiences of working with community partners in the CBPAR tradition.²¹ The list of principles is neither linear nor static, and different partners will enter and exit the collaboration, contributing to some but not all efforts. In the following section, we describe four components of the project's Year 1 community assessment activities: program launch, listening sessions, community conversations, and Discovery Council meetings. We align the CBPAR principles with examples from these efforts in Table 1.²¹



Implementation of CBPAR in Year 1 of FFLL

Program Launch

Using public data (e.g., census data and local needs assessment data) and building on existing community-university partnerships, university researchers identified food insecure communities and established partnerships with child care centers in these communities that serve at-risk families. FFLL was officially launched in Ohio in August 2016, and Virginia in October 2016. University researchers met with existing partners and used a snowball technique to identify other potential collaborators in the respective communities. These individuals represented early learning and adult day programs, area foodbanks, community health initiatives (e.g., corner store produce programs), and Supplemental Nutrition Assistance Program (SNAP) educators and other nutrition educators from county Extension offices. Individuals possessing practice, policy, technology, and research expertise discussed project goals and identified potential additional community partners, communication strategies, and next steps. Stakeholders shared critical insights about the needs and strengths of the communities.

Listening Sessions

Following the program launch, researchers invited staff and parents from partnering child and adult care programs, elder care-recipients, and key community informants (e.g., directors of local university-community health initiatives) to contribute to listening sessions as a method of community assessment conducted from December 2016 to May 2017. Consistent with an ethnographic method, university and community researchers - community members involved with the CBPAR but affiliated with neither the university nor Cooperative Extension systems - explored the culture of the community, including needs and assets as defined by its members.³⁷ Across 12 listening sessions and multiple one-on-one conversations in the two states, 75 participants, including child and adult care staff or administrators, elders, parents, and food, community-development, or social work partners offered responses to semi-structured, open-ended interview questions exploring the broad needs and resources in the community as well as those specific to food security. Detailed notes taken by a trained non-participant observer were analyzed by university researchers for themes reflecting community needs and resources. The assessment continued with community and university researchers, who sorted the themes to identify cultural beliefs about the community, its members, its position in larger society, and the degree to which individuals subscribe to the cultural beliefs.³⁷

Community Conversations

In June 2017, university researchers presented to community researchers in each state the initially identified themes gleaned from the listening session interviews. Attending these events were invited representatives who had

participated in the launch and listening sessions, or who had been recommended as potential contributors by other community representatives. Specifically, a small number of parents, caregivers, and staff from participating child and elder care programs attended, along with representatives from local corner store initiatives, the Public Health department, advocacy groups, and state early childhood initiatives. Attendees engaged in cultural consensus building, sorting the listening session themes into cultural domains of broad needs and assets as well as issues specific to food security of community members.³⁷ Themes unrelated to food security and contributing factors were acknowledged and grouped into a future topics theme to be addressed subsequently as it extended beyond the immediate scope of FFLL. Participants discussed what additional information should be incorporated, and community members were asked if they would like to be involved in subsequent steps as a member of their state's FFLL advisory group, or Discovery Council. Participatory analysis and triangulation of data were performed during Discovery Council meetings, as members verified the cultural beliefs and used these to chart the course for FFLL programming, scheduled to begin in Year 2.

Discovery Council

Stakeholders involved in the FFLL launch, listening sessions, or community conversation meetings self-selected whether to continue as a community researcher in Discovery Council meetings, where participatory analysis and data triangulation were conducted - twice in Virginia and three times in Ohio during summer 2017. Discovery Council meetings centered on aligning listening session themes with (a) FFLL programming initiatives, (b) outcome indicators, and (c) data collection methods. The resultant programming initiatives prioritized for the following year varied slightly across sites, reflecting the context of each childcare setting.

In Ohio, plans for Years 2–5 of the project include nutrition education in the children's classrooms and complementary intergenerational nutrition programming at both sites, creation of a small, emergency food pantry at one site, and collaborating with stakeholders to connect families with available local resources. In Virginia, children at each of the two sites would also receive nutrition education, including intergenerational nutrition programming, and Extension agents scheduled quarterly family events to complement the nutrition curriculum (e.g., a healthy cooking demonstration followed by a shared meal). Participatory data analysis would repeat as research partners gathered programming implementation and outcome data. We planned for results to aid the group in building and testing its model of healthy food access. Next, we turn to lessons learned from FFLL's critical planning year.³⁷



Lessons Learned and Implications

FFLL Year 1 planning data allowed researchers to identify several themes for continued practice by the community and university researcher partners. Themes were primarily identified by the university researchers, including project administrators and staff working in the field with community researchers. As well, themes reflect input from community researchers at Discovery Council meetings or during informal exchanges with university researchers responsible for delivering programming. A limitation of our analysis is the absence of a community researcher as a co-author; with stronger relationships developed in Year 1, shared authorship should be evident in future dissemination products.

CBPAR Is the Right Approach for the FFLL Initiative

While expertise on issues related to healthy food access rests with practitioners, community members, and university researchers, CBPAR is disquieting for some. Community members may appreciate the opportunity to offer input but find it daunting to engage fully in the process when they face other demands. As well, it is important to acknowledge that marginalized communities, especially those with high racial diversity have historically been exploited in research.³⁸ Efforts to engage community members without burdening them were employed to increase involvement, such as conducting listening sessions with individuals and small groups to accommodate staffing requirements and busy family schedules. We further engaged those voices in data interpretation and decision-making around program planning. By reporting back on how community members' input informed programming decisions, university researchers encouraged community members' trust that their contributions were meaningful.

Despite Appropriateness of the Model, It Was Difficult to Engage Some **Partners**

Engaging some segments of the community, such as parents, proved difficult in Year 1. One plausible explanation is that these caregivers juggle multiple, demanding responsibilities such as employment, transportation, and caring for other family members. Competing roles can lead to conflict and overload, thereby reducing parents' time and energy for participation.³⁹ Another explanation for low levels of parent input is that families knew their child would graduate to a different school before programming began in Year 2, thereby reducing parents' interest.

Logistics also limited family engagement. For example, parents of children attending one school - a Head Start program - do not routinely visit the school because transportation is provided to the children. Drawing these parents to a listening session or even an individual conversation at school was difficult, whereas parents at the three other sites could be reached directly when they transported their children to and from school. Different strategies were explored with the Head Start parents and continue to evolve, such as involving teachers in delivering project materials during home visits.

Some eligible families may have declined participation in Year 1 planning efforts due to burnout, especially in university communities and those of high racial diversity that are often treated like research labs for universities.⁴⁰ Participants may have experienced short-term programs that left a void when researchers withdrew from the community after completing data collection. Over the course of long-term projects, fatigue may set in as researchers repeatedly request input - a risk FFLL must prepare for. In Ohio, for example, the community had recently participated in a number of other conversations through Partnerhip Achieving Community Transformation, the health department, and a food-mapping study. 8,12,41

The Flexibility of CBPAR Enables Recognition and Incorporation of Historical, Political, Socioeconomic, and Other Contextual Factors

Year 1 efforts required the university researchers to learn about the contextual factors influencing community needs and assets; census data were insufficient in this regard. For example, political decisions about highway construction and voter districting contributed to a history of geographic constraint in one community, limiting access to healthy food resources and discouraging transit to neighboring communities with adequate resources. 12 This contextual factor pointed to the potential value of programs like FFLL.

Socioeconomic factors, such as work and dependent care responsibilities informed data collection and interpretation efforts. In Year 1, this involved individual listening sessions on the go as parents entered the school to pick up or drop off a child before or after work; group listening sessions for parents simply were not feasible. Community conversations were scheduled to overlap with center hours so that parents and caregivers would have supervision for their child or elder while they attended the meeting. Data interpretation performed during the Discovery Council meetings incorporated the cultural expertise of Council members. For example, teachers shared stories about the unhealthy nature of traditional foods (e.g., greens cooked with bacon and ham) families enjoyed, suggesting that the project share recipes and lessons for cooking healthier alternatives. Another partner addressed families' reluctance to access resources like farmers markets because of concern about how they would be received at the settings, which they perceived were predominated by wealthier community members. These varied historical and cultural influences helped to shape in Year 1 the



programming to be implemented in subsequent years. CBPAR encourages such flexibility across sites even within a single study, which has proven essential in FFLL programming.

It Is Difficult to Implement All the CBPAR Principles; Some are Salient at **Different Points**

Year 1 efforts concentrated on knowledge generation to inform intervention development. Full implementation of the principle, balance knowledge generation with intervention efforts, should be achievable with the launch of programming in Year 2 but was not the goal of Year 1.²¹ We initiated work on the principle developing systems by establishing the Discovery Council; membership fluidity in Year 1 reflected a trial period where community members considered how the project's goals aligned with their own.²¹ Project leadership will continue building and strengthening salient partnerships. As FFLL continues with program implementation and evaluation, the principle regarding involvement of community partners in data interpretation and dissemination is imperative. 21 Experiences in Year 1 highlighted the power of collaborating with community researchers; dissemination efforts involving community researchers as co-authors have begun.

CBPAR Often Faces Funders' Constraints, Limiting Equality of the **Partnership**

While the Year 1 community assessment confirmed the need and interest to address healthy food access of children and elders affiliated with the community sites, the group was constrained by funding guidelines, thereby limiting a truly collaborative, equitable partnership. 42 An overarching theme from the listening sessions was that both communities face a high level of need that extends beyond access to nutritious food. Such findings are common in CBPAR and reflect a commitment to address many needs of members. 43 We acknowledged and documented the other needs described by community researchers and revisited the purpose of the funded project at the community conversations. Future programming may allow partners to incorporate other needs within the food-focused initiatives. For example, in connecting families to food-related resources, they may also be connected to other informational or material resources, such as clothing or library resources. As well, CBPAR scholars such as Lawson described the collaborative research endeavor as a long-term commitment. 43 Thus, university partners in FFLL should explore parallel or subsequent endeavors with community researchers, such as improving healthy food access of families not enrolled at one of the sites.



Not All Community Partners Need to Be Involved in All Project Decisions

We learned another lesson in Year 1 described by Israel and colleagues -CBPAR can appropriately entail "key partners" representing the community for some tasks. 21 At the conclusion of Year 1 Discovery Council meetings, some decisions had been made about programming by the full Council, such as concentrating on nutrition education for the children and incorporating intergenerational strategies into some of these education activities. Other decisions, the group decided, would be addressed through follow-up involving key university and community research partners rather than the full Council. For example, a childcare director and Extension educator coordinated plans for family events to be implemented with the launch of programming. These decisions, and their associated outcomes, were then relayed back to the Discovery Council at subsequent meetings.

University Researchers Learned the Value of Being There with the **Community**

There are a number of good reasons for community members to shy away from university researchers seeking partnership and data from its members. Efforts to learn from and with our partners, rather than assume the lead role at every turn, was unsettling but strengthened relationships. Community partners would have preferred to launch programming in Year 1; their families had needs that FFLL could help to meet, and partners were sometimes frustrated by the researchers' pace. However, as the year proceeded, paths were cleared to programming and data collection efforts. Rushing programming to meet an immediate need would likely have resulted in missteps damaging to relationships, which are the core of CBPAR. With relationships initiated, FFLL community and university researchers, partners, and participants are committed to what comes next.

Next Steps in the CBPAR Process

Intergenerational strategies and CBPAR offer complementary approaches to working in communities lacking adequate healthy food access. FFLL adopted these methods to initiate a program designed to build sustainable partnerships that increase knowledge, access, and consumption related to healthy food for young children, older adults, and their families. Both incorporate strategies to give voice to groups typically approached from a deficit view.

Guided by Israel and colleagues' principles, FFLL community and university research partners shared in data collection and interpretation during Year 1, which shaped intergenerational nutrition programming implemented the following year. 21 Lessons learned in Year 1 are carried forward in the project

as relationships continue developing through programming and evaluation efforts. University researchers attend site and community events (Lesson 7) to increase the number and strength of community connections, such as with the local public library. By engaging focal participants with close ties to specific project initiatives, some individuals find it easier to engage in the CBPAR process (Lessons 2 and 6). Community and university researchers can adapt programming to reflect historical, political, socioeconomic, and other contexts (Lesson 3). Some principles will become newly relevant when programming is initiated. 16 Next steps for FFLL involve acting on plans developed in Year 1, evaluating their impact and potential for sustainability, and continuing to engage in the iterative process of CBPAR.

Current and potential practice and research partners may find implications of our findings for their own work. Educators may also identify implications for instruction. First, community members offer expertise that no researcher can fully master working with data from varied populations. Practitioners and researchers alike must build mutual trust and share expertise to effectively address pressing social, economic, and health issues such as chronic diet-related health equity concerns. 44,45 Researchers have to earn the trust of community members by engaging in the community with the community. We earned trust by attending family nights and talking with parents, staff, and administrators about programming and data collection efforts. Students studying research methods would benefit from CBPAR training and experience that conveys the value and means for gathering and utilizing community wisdom.

While building a collaborative effort, partners may need to identify nonnegotiable aspects of the work. These may be set by funders and may revolve around scope of work, population served, and use of funds. As diverse needs were identified in our conversations with community members, we reminded them of the project's focus on healthy food access among the young children at the sites using intergenerational strategies. Community members also have non-negotiables reflecting their values, goals, and resources, which will influence their involvement in the project.

The CBPAR approach incorporates flexibility, which is critical. While researchers and practitioners often aim for standardized intervention strategies, shared interpretation of data with participants may indicate that varied implementation and even evaluation methods lead to greater success and sustainability. Such variation encompasses communication, programming, and evaluation strategies involving focal community stakeholders, such as parents. Through shared interpretation of formative evaluation, output and outcome data, collaborators may identify different programming strategies that can be equally effective in different settings. FFLL anticipates relying heavily on shared data interpretation to develop flexible programming and evaluation protocol to optimize implementation



and outcomes in each community. By exploring CBPAR methods, groups can draw on the collective expertise of community partners to forge their own principles for community-university research partnerships that address local needs of multiple generations by uniting their collective strengths.

Acknowledgments

The authors greatly appreciate the partnership of community and university researchers contributing to the project in Year 1, including Discovery Council members, Gina Ginn, Sandy Graham, Jenny Lobb, Jill Naar, Elizabeth Speidel, Karen Tanner, and Crystal Tyler-Mackey.

Funding

This study was supported by a USDA CYFAR Sustainable Community Project (#2016-41520-25615), "Food for a Long Life: A community-based intergenerational project."

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