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Kaitlyn M. Eck

Colleen L. Delaney

Melissa D. Olfert

Karla P. Shelnut

Carol Byrd-Bredbenner

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Kaitlyn M Eck¹ , Colleen L Delaney¹, Melissa D Olfert²,
Karla P Shelnett³ and Carol Byrd-Bredbenner¹

Abstract

Objective: Obesity is a public health concern for children and adults and effective obesity prevention programming is needed urgently. The effectiveness of health-related messaging and interventions is influenced by the way content is framed. HomeStyles is an obesity prevention program, which aims to promote health through the frame of improved quality of life.

Methods: Thus, focus groups were conducted with English- and Spanish-speaking parents of school-aged children (ages 6–11) to identify key quality-of-life determinants as described by parents.

Results: Parents (n = 158) reported that their quality of life was influenced by family happiness and parent and child health (e.g. adequate sleep, exercise, healthy diet). Many parents expressed that their busy schedules and lack of family time were detrimental to their quality of life. Work–life balance and financial stability were other factors commonly noted to impact quality of life. Spanish-speaking parents also reported being undocumented and feeling a lack of a sense of community negatively influenced their quality of life.

Conclusion: Considering parent-defined quality-of-life determinants when framing health-related messaging and developing interventions may increase participant interest and ultimately improve health-related behaviors. Next steps in the HomeStyles project include using parent-reported quality-of-life determinants to guide the development of intervention materials.

Keywords

Parents, child, quality of life, Hispanic Americans, focus groups

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Introduction

Obesity is a public health concern for children and adults alike. In the United States, one-fifth of school-aged children (ages 6–11 years) are classified as obese (body mass index (BMI) for age \geq 95th percentile).¹ Overweight and obesity pose many physical and mental health risks. For instance, overweight kids have poorer mental and physical health than their normal-weight counterparts.^{2–4} Overweight children are also likely to grow up to be overweight adolescents and adults.⁵ Expanded obesity prevention programming is urgently and profoundly needed to attenuate obesity rates.

HomeStyles is a two-stage (1—families with preschool children; 2—families with school-age children) childhood obesity prevention program designed to enable and motivate parents to shape their home environments and weight-related lifestyle practices to support optimal child growth while also reducing the risk of childhood obesity. This program recognizes parents as key influencers who create the overall

structure/lifestyle of the home environment. Indeed, as role models and gatekeepers, parents strongly influence children’s weight-related behaviors^{6–9} and thus have a fundamental role in safeguarding child health by cultivating obesity-preventive home environments and lifestyle habits.^{10–14}

Research on the effectiveness of public service announcements and anti-tobacco advertisements has shown that the message content and emotions evoked by advertisements

¹Department of Nutritional Sciences, Rutgers University, New Brunswick, NJ, USA

²Department of Animal and Nutritional Sciences, West Virginia University, Morgantown, WV, USA

³Department of Family, Youth and Community Sciences, University of Florida, Gainesville, FL, USA

Corresponding author:

Kaitlyn M Eck, Department of Nutritional Sciences, Rutgers University, 26 Nichol Ave, New Brunswick, NJ 08901, USA.

Email: kmd260@scarletmail.rutgers.edu



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influence their ability to elicit behavior.^{15,16} Research has also shown that the effectiveness of health-related interventions is influenced by how the content is framed.¹⁷ Therefore, to increase the relevance and resonance, and thus the effectiveness, of the program, HomeStyles frames childhood obesity prevention strategies in a manner that is responsive to parent-defined quality-of-life (QOL) priorities. The concept of “quality of life” incorporates an individual’s personal view of factors that positively and negatively affect life and the degree to which the individual feels personal needs are being satisfied and he or she is able to pursue happiness and fulfillment.¹⁸

The PRECEDE-PROCEED health program planning model provides the framework for HomeStyles’ development, implementation, and evaluation process. This community-based participatory research model was selected because it aims to promote health as a means for achieving improved QOL as the goal.^{19–21} Furthermore, this model increases the likelihood of program effectiveness by assuring that the broad array of factors affecting the target audience’s health behaviors is considered.^{19–23}

The PRECEDE portion of the model guides the development of HomeStyles. The four planning activities of PRECEDE include elucidating the *Predisposing*, *Reinforcing*, and *Enabling* factors associated with performance of behavior and initial *Evaluation* activities to identify behavior change stimuli. The PROCEED portion of the model guides the program implementation and evaluation phases. The first step in PRECEDE, the focus of this article, is to describe the factors affecting QOL as defined by the target audience.

Individuals often are not motivated to change behaviors simply to improve health; the real driving forces of change are improving factors that bolster overall life satisfaction.²⁴ Thus, elucidating the factors affecting the target audience’s QOL yields insights into probable motivators educators can harness to promote behavior change.¹⁹ Little is published with regard to the QOL determinants of parents of school-age children. Yet, their role in establishing home environments and family lifestyles and serving as family gatekeepers, the impact parents can have with regard to family weight-related behaviors (e.g. foods available, screentime limits) makes it imperative to elucidate their QOL determinants in order to frame health-related messaging in a manner that is likely to encourage behavior change. Thus, to address research gaps and facilitate development of stage 2 of the HomeStyles program, the aim of this study was to determine the factors affecting the QOL of parents of school-age children, the target audience of stage 2 of HomeStyles, and subsequently apply findings to educational materials for this audience.

Methods

The Institutional Review Boards for Protection of Human Subjects at the authors’ universities approved this investigation. Participants gave written informed consent.

Sample

Parents with at least one school-age child (6–11 years) residing in Florida (FL), West Virginia (WV), or New Jersey (NJ) and who spoke either English or Spanish were recruited to participate in a 60-min focus group addressing small, easy changes they could make to their homes and lifestyles to help kids grow up even healthier. Recruitment announcements were distributed electronically (email, websites) and as printed flyers in a wide array of community sites. Parents were paid \$25 for taking part in a focus group.

Instruments

Parents completed a brief form gathering demographic information (e.g. age, education level, children’s ages) prior to the focus group. The semi-structured focus group guides were developed using standard procedures.^{25,26} During the first half of the focus group, parents discussed QOL factors. The QOL aspect of the PRECEDE-PROCEED model provided the framework for focus groups, which aimed to explore factors affecting parents’ QOL and those that could improve it. In the second half of the focus group, parents discussed one or two topics related to lifestyle practices (e.g. family mealtime behaviors, fruit/vegetable intake, screentime usage). This article reports the QOL data only, with the goal of informing the development of a variety of health-related interventions. Results from the health-related topics portions of the discussion are reported elsewhere.^{27–30}

All researchers conducting the focus groups completed formal training and practice sessions to ensure that data were collected in a consistent manner by all researchers at all data collection sites. Focus groups were led by a trained moderator, conducted in the primary language of the parents (i.e. English or Spanish), and held in a variety of community settings. A second trained researcher took extensive notes of the focus group discussion and transcribed them within 48 h. The researcher who moderated the focus group appraised the notes for precision, completeness, and authenticity. Notes taken during Spanish-language focus groups were translated into English by the researchers leading and recording notes of the focus groups. Researchers conducting each focus group conferred to discuss the notes and refine them.

Data analysis

Descriptive statistics were computed using SPSS version 21.0 (Chicago, IL). A team of three researchers trained in standard content analysis procedures independently analyzed the focus group data to identify trends.^{31,32} Standard procedures produce systematic, objective descriptions of qualitative data trends.³³ Researchers discussed their individual content analyses to reach common agreement. Focus group data were analyzed throughout the data collection period with new results continuously compared to the

Table 1. Determinants of life satisfaction: themes from focus group discussions with parents of school-age children (n = 185).

Determinants of life satisfaction: themes from focus group discussions with parents

Factors affecting parents' QOL

Factors having a positive effect on QOL

- Family happiness and cohesion
- Parent health
- Family time
- Work–life balance
- Parent leisure time away from kids
- Parent time with spouse
- Job security
- Financial security
- Faith/spirituality
- Community support

Factors having a negative effect on QOL

- Family conflict
- Poor child health
- Busy schedules
- Being undocumented

QOL: quality of life.

previously collected data with the goal of determining when data saturation occurred and data collection could cease.^{31,34}

Results

Parents (N = 185) participated in 1 of 65 focus group discussions. Participants were mostly female (95%) and had at least some college education (77%). Parents were 38.24 ± 5.62 SD years old and had 2.45 ± 0.99 SD children under the age of 18 living in their homes. More parents participated in English-language focus groups than Spanish-language focus groups (68% and 32%, respectively). Participants were distributed fairly similar across states (n = 66 FL, n = 59 NJ, n = 60 WV). There were few differences between the two language groups; those that emerged are described below. The key life satisfaction determinants are presented in Table 1.

Major factors affecting parents' QOL

When asked to identify the factors most important in determining how happy they feel, parents agreed that one of the main determinants was “family happiness—if my family is happy, then I am happy.” Family cohesion (“having love in my family”) and “lacking of conflict across the board” were key to their contentment—acknowledging that they wanted to live in a “happy family environment” with “family connections and support” that kept the family “united in the good and bad times.”

Parents understood that conflict—like “when kids are bickering at one another” or “when you and your spouse have

problems and are fighting”—can cause chaos and “stress in a marriage” and divorce that interfered with the happiness of the entire family. One commented, “If my family isn’t stressed, then I’m not stressed. But, if they’re all stressed, then I have to manage their stress.” Parents recognized that “stress is not good, it will affect everything; there is such an important role that stress plays on your health.”

Health was also a primary determinant of parents’ QOL. Parents indicated that having “good health is number one” (e.g. “(adequate) sleep,” “eating good food,” “exercising,” “how much water I drink”). Personal good health was important because it helped them “take care of my family and make sure I am there for them.” Parents also noted that family health affected their QOL because “when someone [in the family] gets sick—that impacts the day-to-day” and that “nothing affects me more than when my children are sick.”

“Time is a big factor” that affected parents’ satisfaction with life. “Spending quality time with my family” “is more important than anything else” because “family is important to me.” Many felt that there is “never enough time in the day” and that they were “always rushing through day-to-day life” because of “busy and hectic schedules” and “need[ing] to manage my own schedule and my kids’ schedules.” An important contributor to time stress was children’s activity schedules, which “can be very challenging to manage” especially because parents are “transporting kids to activities.” In addition, parents indicated that their own employment contributed to time scarcity because there is “never enough time between working full-time and three kids.” To have more time, some parents wished to “be in a position where I can work part-time and spend more time with my kids.”

English-speaking parents also cited the importance of having time away from their children: “something other than your family, like a career” and being around other adults outside the family, commenting “I need to be around people older than 18” and have a “connection and relationship to other people.” Having time for their spouse was also important, with parents remarking that they “want to be involved with the kids without sacrificing time with my spouse.” In addition, parents’ happiness depended on having personal “me” time so that they had “time to pursue passions and be connected to people” and “freedom to do outside things that I enjoy—sometimes that gets put on the back burner to make the family happy.” To feel fulfilled, parents also wanted personal “time to develop goals and motivation” so that they could “better [themselves] and work toward goals.” Personal time was also desired to enable participation in “self-care” like “exercising,” for “rest and quiet time,” and to have “time to myself to relax and decompress.”

Having consistent employment and job security was a significant contributor to parents’ satisfaction with life because it meant that they were “able to provide for them [family]” and “maintain ourselves.” The desire to “feel secure financially” was common. “Financial stability is important because there is more stress when the money is

Table 2. Suggested methods to address QOL through health interventions.

Factors affecting parents' QOL	Potential methods to improve QOL
<i>Factors having a positive effect on QOL</i>	
Family happiness and cohesion	Highlight the ability of health behaviors, such as parent–child co-play and family meals, to strengthen family bonds
Parent and child health	Expand parent outcome expectations of healthy eating and physical activity to include improved (immune status) child health status and illness resistance
Family time	Frame healthy behaviors, such as family meals, as a way to involve kids in food preparation and increase time together as a family
Work–life balance	Build flexibility into interventions (e.g. make it online, brief) to help parents incorporate participation into their busy schedules
Parent leisure time away from kids/parent time with spouse	Offer time-saving strategies that both improve health and allow parents to have more personal leisure time, such as planning and preparing meals in advance. Promote intervention as a way to increase family time
Job security/financial security	Provide tips for healthy eating on a budget or suggest free or low-cost ways families can be physically active together
Community support	Instill a sense of community by holding group classes or creating a social media page for the intervention

QOL: quality of life.

tighter.” Having employment meant that parents were “able to provide for them [family],” “get bills paid,” “afford what we need,” and save for “retirement.” Parents also felt that “there is never enough money to do everything you want to do” and afford all the things they wanted kids to have (e.g. kids’ participation in “sports gets expensive”).

Sufficient, steady income was important; however, parents’ work responsibilities presented other challenges. Many realized that it was important to “not stress about work,” “separate work from home life,” and “balance my family and career,” but found it difficult because they had set themselves “high expectations at work and home—when expectations aren’t met, then life starts to unravel.” In addition, parents were concerned about “not being in control of children’s care during the day.”

Some Spanish-speaking parents reported that “The major factor that affects us is being undocumented; this is one of the largest barriers that we encounter. We can’t get better jobs, we can’t visit our family in Mexico—it affects everything.” “When we think about going to visit family, we aren’t able to. I think to myself, what I am going to do?” Parents also commented that being undocumented “is one of our battles” and that “there isn’t anything that affects us more.”

Some parents also indicated that “faith” and “spirituality” were significant contributors to their happiness. A few reported that feelings of self-worth played a role in their satisfaction with life (“if I feel like I am making a difference in the world”).

An array of factors were mentioned as hindering parents’ QOL. These included education (“not being able to go to university”), timing of parenthood (“having kids at a young age really affected my life”), criminal record, and appearance choices (“I have tattoos and I know I am stereotyped”). Other barriers to happiness named were time-use decisions

(“I spend too much time on social media”), “laziness” and lack of motivation, “emotional instability,” “bad friendships” and “toxic relationships,” and parenting practices (“I’m not able to tell my kids ‘no’”). Some Spanish-speaking parents reported their inability to speak English well and unrest in their country of origin interfered with life satisfaction.

Factors that could improve parents’ QOL

To improve their QOL, parents wanted more financial stability so that they “don’t [have] to worry about how to pay for different things.” Parents also wanted to be able to “work less and be home more” so they could “spend more time with [their] family.” Parents acknowledged that having better “time management,” “a schedule,” “a good routine,” and “organization” could also help them find more time to spend with their families and improve family “harmony” (Table 2).

Parents felt that their quality of lives would improve if family members had “better relationships with each other.” One relationship-building strategy offered was family playtime:

We play all the time. It’s time for my kids. It has made my kids happier and my life happier. It is something I learned in my second marriage—in my first marriage, we didn’t play as much with the kids. Playing with them makes my life happier.

Parents also observed that proactively protecting family health could enhance QOL. For example, taking time to “provide a healthy meal” would help because “if we had better eating, it would improve our lives.” Other health-promoting strategies parents thought would improve life satisfaction were having a “bedtime routine,” being physically active, and limiting electronic device use (“the kids become so

absorbed in electronics, they don't do anything else"). Psychological health was also cited as a means for improving QOL ("As a mom, you put yourself on the back burner; but I need to make sure I take care of myself as well. I need to get back to putting myself as a priority because I will be no good to anyone if I am not around").

Adjusting their overall mind-set was also cited as a way to boost contentment with life, for example, "simplifying," "slowing down," "being more intentional about the things that really matter and not being distracted," and "lowering expectations about having to be the perfect parent and wife." Acceptance was also part of the mind-set shift with parents who believed it would help "find happiness where you are" and "making what we have work."

A few Spanish-speaking parents indicated that greater community support would improve their life satisfaction. They noted that in their country of origin, "the community is more unified. There is more essence of community" and that "here, you don't know your neighbor."

Discussion

The aim of this study was to identify the QOL determinants of parents of school-age children with the goal of understanding how best to frame health-related messaging to encourage behavior change. The discussion below describes how these findings can be used to inform future obesity prevention programs.

Parents reported that family dynamics had an impact on their QOL, stressing the importance of family members getting along and minimizing conflict. Others have reported similar findings and also identified family interactions including the time spent together, communication, love, and support as the factors influencing the QOL of parents of children with and without disabilities.^{35,36} Previous interventions aiming to change health behavior have been successful at incorporating parental perceived determinants of happiness (i.e. stronger family bonds) into their materials as a strategy for promoting behavior change.^{37,38} For example, Ho et al.³⁹ designed an intervention that promoted preparing and eating meals as a family as a way to improve family communication and bonding and successfully improved family health and happiness. In addition, parents identify family bonding to be a potential benefit of parent:child co-play, suggesting the potential of highlighting the family-strengthening benefits of co-physical activity in addition to its benefits to physical health.⁴⁰

Managing parent work schedules along with children's school and activity schedules was stressful for some parents who wanted a better sense of work-life balance. The desire for work-life balance is a transcultural desire; individuals who are satisfied with their work-life balance are less anxious and are less likely to be depressed while also being more satisfied with their job.⁴¹ Over half of working mothers and fathers report finding it difficult to balance work life and

family life.⁴² In addition to reducing time with family and direct supervision of children, work schedules can also negatively affect children's health behaviors.^{43,44} For example, nonstandard work schedules (i.e. night or evening shift work) are particularly important to consider given their links to children's greater risk of depression and likelihood of engaging in risky behaviors (i.e. drug use, underage drinking, sexual promiscuity).⁴³ Behavior change interventions that communicate benefits beyond improved health, such as increased family time (i.e. getting kids involved in meal preparation), could increase parent interest and engagement and thus the effectiveness of the health intervention.⁴⁵

Some employers who have recognized the importance of promoting work-life balance have implemented supportive programs to foster better work-life balance for employees.^{46,47} The main constructs of these programs include emotional support (i.e. being aware of how work responsibility may affect family life, sympathy for the challenge of balancing work and family life), role modeling (i.e. sharing tips and strategies that have helped others balance work and family life), instrumental support (i.e. allowing flexibility in work schedules and offering services that assist employees in work-family balance), and creative work-family management (i.e. adapting workplace culture to better integrate work and family responsibilities).⁴⁸ The moderate success of these programs^{46,47} suggests that incorporating their constructs in health and nutrition interventions could also address work-life balance QOL needs within the context of the intervention goals. For instance, if parents feel unable to find time or energy to provide frequent family meals or opportunities to be physically active with their children, teaching parents how these activities contribute to their work-life balance could enhance the attractiveness of the intervention and boost intervention recruitment and retention efforts. In addition, creating a program that is flexible and allows parents to fit it in around their busy schedule may be beneficial.⁴⁹

Incorporating stress management tips related to the behaviors promoted in health programs can also address life-balance goals. A study of working mothers found a negative association between income and hair cortisol (a stress hormone) suggesting that low-income mothers experience greater levels of stress.⁵⁰ Mindfulness techniques, particularly in relation to mindful eating incorporated into nutrition interventions, have significantly improved maternal stress levels.⁵¹

Related to work-life balance, parents felt that financial stability was another important factor influencing their QOL, and although parents wished to be able to work less, they indicated that working fewer hours was not feasible as their family relied on their income to pay bills and afford the things they want and need. A study of parents of 4- to 18-year-old children showed that parents are interested in health interventions that consider families' tight budgets.⁴⁹ Although health education programs may not be able to

increase income directly, there are many opportunities to demonstrate cost-saving strategies for performing healthful behaviors (e.g. preparing healthy meals on a budget, affordable ways families can be active together). Addressing parent concerns while increasing their self-efficacy for performing healthful behaviors may be an effective way to help parents improve their health and QOL despite a tight budget.^{49,52}

Focus group results also indicate that parents believed it was important for them to occasionally spend time away from their children to engage in personal pursuits, such as leisure activities. Parents who engage in personal leisure time pursuits have a greater sense of well-being, and for mothers the time spent away from children and engaging with other adults was associated with increased maternal engagement when with their children.⁵³ Thus, interventions may benefit from highlighting the potential for health-related behavior changes to also result in more leisure time for parents. For example, in addition to discussing the importance of preparing and planning meals in advance to support family health, framing the behavior as a time-saving strategy may increase parents' desire to change behavior. This is an example of a person-based approach that highlights the importance of recognizing the needs of the individual who will use the intervention as a means for improving the effectiveness of behavior change interventions.⁵⁴

Some of the Spanish-speaking participants reported that being undocumented had a negative effect on their QOL. Other research has found similar results, describing a constant sense of anxiety in undocumented immigrants.⁵⁵ Spanish-speaking parents also had language barriers and felt that a lack of community support hampered their QOL. Social support has been shown to lessen the negative influence of acculturative stress on physical well-being.⁵⁶ Future health interventions targeting acculturating audience should not only provide culturally sensitive information delivered in the audience's language, but should also be aware of strategies for overcoming road blocks immigration status may pose⁵⁷ to participation in the program and/or performance of recommended behaviors. Program characteristics that build a sense of community support, such as social media pages or events, are some strategies intervention planners could consider offering acculturating populations.^{56,58,59}

Parents' health (i.e. adequate sleep, healthy diet, sufficient physical exercise) was identified as a key determinant of their QOL as it influences their ability to effectively care for their family. Children's health was also frequently identified as affecting parents' QOL. Parents of generally healthy children rate their QOL significantly higher than parents of sick children,⁶⁰ supporting the idea that a child health can have an immense impact on a family's QOL. Bolstering the benefits of health-related behaviors on parents' abilities to care for their families and on children's health may increase parent desire to engage in healthy behavior change. For instance, interventions aiming to increase fruit and vegetable

intake may be more effective if they highlight the immune boosting benefits of fruits and vegetables in addition to other benefits such as weight control.

Although obesity prevention and weight control are the ultimate goals for many researchers, weight is not a particular concern for many parents.⁴⁹ This may be because many parents underestimate their children's weight status.⁶¹ Hence, health communicators should likely consider other health-related factors affecting QOL when trying to address weight control topics.

Parents reported a few health-related factors that they believed would improve their entire family's QOL. One of these factors was providing healthy meals for their family, as they believed that eating healthy meals would have a positive impact on their lives. A systematic review of literature revealed that QOL is generally improved following dietary interventions.⁶² Although the review was unable to identify the cause of improved QOL, several potential mediators were identified including the effect of altered dietary intake on social interactions, personal satisfaction, economics, physical health, and psychological health.⁶² Improving parent understanding of the benefits of a healthy diet on factors aside from weight control and improved physical health may improve the effectiveness of future dietary interventions. In addition, parents identified parent-child co-play as a potential health-related method to improving QOL by making both parents and children happier. Future interventions could focus on both the physical and mental health benefits of active family playtime and promote the potential to build family bonds.^{63,64}

Strengths of this study include using a theoretical framework to develop the focus group discussion guide and having highly trained focus group moderators and note-takers. A further strength is the large sample size drawn from three geographic locations. In addition, this study helps address a gap in the literature by describing the QOL determinants of parents of school-age children and can inform a wide array of interventions focusing on health. It is important to note that the findings of this study are limited in that they cannot be generalized to parents with children in other age groups or to children with chronic diseases, such as obesity. Research has shown that obese children have poorer QOL than healthy-weight children⁶⁵⁻⁶⁷ and obesity prevention interventions can improve their QOL;^{68,69} however, little is known about the effect of children's weight status on parental QOL. Parents in this study reported that their families' schedules and lifestyles had changed greatly since their children were in preschool. Thus, it can be presumed that parent's QOL determinants may also change as their children age. In addition, research has shown that parents of children with chronic health conditions such as autism, food allergies, diabetes, and cancer have poorer QOL and higher levels of stress and anxiety than parents of healthy children.⁷⁰⁻⁷²

Parents are children's primary role models, are food and physical activity gatekeepers, and establish the family lifestyle

and home environment; thus, they have the opportunity to cultivate a “culture of health” in the home.^{6–8,11,12,73,74} Parents also need opportunities to learn obesity prevention strategies that are matched to the realities of their lifestyles and life goals.^{12,75} Obesity prevention interventions targeted to parents of school-age children that are responsive to this audience’s QOL determinants have the potential to improve the health and QOL of the entire family. While this study focused on parental QOL, future health interventions have the potential to contribute to improved QOL for both parents and children. Parental encouragement of healthy behaviors has been shown to improve adolescent weight status as well as health-related QOL.^{76,77}

Conclusion

The PRECEDE model has been effective at improving QOL in a number of health-related interventions with a variety of participants from adults with chronic diseases^{22,78} to healthy adolescents and children^{24,38,79,80} and pregnant women.⁸¹ By predicating childhood obesity prevention interventions on parent-defined QOL determinants, it may increase the attractiveness of these interventions, enhance retention of participants, and ultimately improve weight management behaviors. Next steps in the HomeStyles project include using the QOL determinants reported here to establish the overall tone and thrust of intervention materials and cognitively test parent responsiveness to these materials.

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ORCID iD

Kaitlyn M Eck  <https://orcid.org/0000-0002-5724-2524>

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