Exploring Wellness Among Childcare Staff in North Carolina: Creating a Culture of Health for Adults and Young Children

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November 18, 2016

A paper presented to the faculty of The University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Public Health in the Department of Maternal and Child Health.
Chapel Hill, N.C.

Approved by:

First Reader

Second Reader
Abstract

Objectives

The early childhood education workforce is an important partner in childhood obesity prevention. However, childcare providers tend to have high obesity rates. This project’s goal is to develop an understanding of childcare staffs’ goals, needs, and experiences related to wellness.

Methods

Qualitative interviews were conducted with childcare center directors and teachers who participate in Shape NC, a childhood obesity prevention program.

Results

Staff report having wellness routines, feel that their workplaces benefit their health, see themselves as role models for children’s health, and expressed interest in receiving support for workplace wellness programming.

Conclusions

Staff perceive that their health is linked to children’s wellbeing, and are key partners in obesity prevention. Their role can be strengthened by integrating staff wellness into Shape NC training and programming.
Table of Contents

I. Problem Statement 4
II. Research Questions 6
III. Literature Review 6

Health Status of Childcare Workers
Worksite Wellness
Worksite Wellness in Childcare Settings

IV. Worksite Wellness in Shape NC 16

V. Methodology 19

Instrument Design
Site Selection
Interview Process

VI. Results 23

Feedback from Directors
Personal Factors
Workplace Factors
Self-Efficacy

VII. Analysis 29

Wellness Champions
Role Modeling

Parent Engagement and Involvement

VIII. Limitations 34

IX. Applications and Recommendations 34

Blending Staff Wellness into Shape NC Content
Sustaining Staff Wellness

References 40
Acknowledgements 43
Appendices 44
I. Problem Statement

Overweight and obesity begins early in North Carolina; approximately 35% of North Carolina children are overweight and an estimated 28.5% of children ages two through four are considered overweight or obese, a statistic that has risen dramatically in the past decades.\(^1\) The CDC estimates that nationwide, 1 in 10 preschool children are considered obese.\(^1\) Disaggregated by family socioeconomic status, race, and county of residence, obesity among some childhood populations is even higher and obesity in preschoolers is negatively associated with parental income level.\(^2\) Children with obesity or overweight early in life are at a greater risk of experiencing obesity and its associated comorbidities as adults. Obesity and the health outcomes associated with it impede good health, quality of life, and mobility and account for an estimated $147 billion in medical costs.\(^3\) With the prevalence of obesity among children under 5 approaching 30%, and projected future obesity-related costs, communities have increasingly begun to focus on early intervention and prevention of obesity in childhood. At the national level, The Institute of Medicine’s (IOM) 2011 Early Childhood Obesity Prevention Policies Committee made recommendations targeted towards parents, health professionals, and childcare professions, as did the White House Task Force on Childhood Obesity. In North Carolina, several state bodies have honed in on childcare centers as drivers of obesity prevention, including a 2010 legislative task force, the Division of Public Health, and the 2005 North Carolina Health and Wellness Trust Fund.\(^1\) The NC Institute of Medicine (NCIOM) convened a task force on Childhood Obesity from 2011-2013, producing a report entitled “Promoting Healthy Weight for Young Children: A Blueprint
for Preventing Early Childhood Obesity in North Carolina.” Among the community and environmental strategies recommended, the IOM identified childcare providers, early care and education settings, and childcare technical assistants (TA) and consultants as key loci for obesity prevention initiatives.¹ Within North Carolina, Shape NC, a six-year, six-million dollar initiative of the Blue Cross Blue Shield Foundation of North Carolina, is a critical partner in obesity prevention. Housed within the North Carolina Partnership for Children (NCPC), Shape NC convenes an array of evidence-informed interventions and tools to expand best practices for obesity prevention in early care and education (ECE) settings, and ultimately, to increase the proportion of children entering kindergarten at a healthy weight. Shape NC focuses on preventing obesity by addressing the following content areas in childcare centers: child nutrition, physical activity, screen time, breastfeeding, and outdoor play and learning. Using a socioecologic perspective, Shape NC and other childcare-based interventions focus on modifying behaviors and food patterns in environments that serve young children.

As childcare centers take on active roles in preventing obesity, the Early Care and Education (ECE) workforce becomes the conduit to implement and sustain obesity related interventions. Yet childcare providers themselves tend to have a higher incidence of obesity and health conditions associated with obesity than the general population ⁴,⁵ In addition to the health and quality of life concerns associated with obesity and obesity-related conditions, the health status, behaviors, and attitudes of childcare staff may have direct and indirect impacts on the children they serve. Shape NC hinges on staff participation in center activities and support of policies intended to reduce childhood
obesity. It follows, then that their understanding of and commitment to obesity prevention can mediate the success and impact of Shape NC.

II. Research Questions

The ECE workforce takes an active role in guiding children in healthy eating and active play, but to what extent do staff address their own health and wellness needs while passing on these lessons to children? As Shape NC takes hold in centers, creating staff commitment to health promotion is a critical factor for implementation. Indeed, challenges with staff buy-in were mentioned at each of four regional focus groups assessing Shape NC Phase II (2013-2016). For many centers, having a “wellness champion” on staff or in leadership is a key driver for success. An inquiry into the role of wellness champions and wellness culture is intended to shed light on factors that help staff commit to health and wellness at work and at home. Finally, teachers are critical components of the Shape NC intervention; their wellness is integral to the program’s success. As it expands, Shape NC takes a holistic approach to health and wellness, which includes empowering providers to engage in self-care. The purpose of this qualitative study is to develop a richer understanding of the goals, needs, and challenges of health and wellness in the workplace as experienced by early educators in North Carolina’s childcare centers. Information gathered from staff will help guide Shape NC’s approach to staff wellness in the future, furthering the goal of providing healthy starts for young children.

III. Literature Review

Health Status of Childcare Workers
With an increasing focus on the role of childcare centers in obesity prevention, there is a growing body of literature on the health status and behaviors of early care and education providers. Concerns about the salary and benefits of childcare staff undergird discussions of health status and behaviors in the early care and education sector. A statewide survey of Colorado early care and education leadership revealed that the statewide average annual income was $26,230, which, while above the federal poverty line, is “significantly below the self-sufficiency standard across most communities” 6 pg. 16 Additionally, 39% of ECE leaders reported offering no health benefits, though 29% stated that they would like to offer health insurance. 6 Income was reported as the primary reason for staff turnover, which 70% of ECE leaders name as an issue. Increasing wages for ECE professionals was a key recommendation of this 2015 survey; low pay is seen as a barrier to entry, retention, and program quality. Colorado cited models such as the WAGE$ project, used in North Carolina, among other states, which subsidizes ECE teacher wages. 6

Income, and the mental and emotional strain of ECE work, are primary stressors on the health and well-being of ECE workforce 7 The 2015 IOM Roadmap for Transforming the Workforce for Children Birth through age Eight sees the link between work environment and status and health status as a “vicious cycle” for the workforce, and a limitation on quality of care. “The early care and education workforce is at risk financially, emotionally, and physically, subject to a vicious cycle of inadequate resources…and low wages that is difficult to break. Appropriate income, resources, support, and opportunities are essential for bringing excellent candidates into the workforce, retaining them as they further develop their knowledge and skills.” 7 p. 478 The
IOM also raises concerns regarding the social and emotional wellbeing of the ECE workforce, citing high rates of depressive symptoms among ECE workers, particularly those in low-income settings, and recommends that centers promote self-care and wellness strategies, such as “finding time for relaxation, reflection, hobbies, and exercise; and getting adequate sleep.”  

As in the US population as a whole, obesity and its comorbidities are a concern among childcare staff. Traditionally, childcare center health programming focused on sanitation and communicable diseases. While still areas of concern, a focus on primary prevention of obesity and chronic disease through nutrition and physical activity has gained momentum over the past decade. Additionally, the impact of caregiver health on quality of care has been explored in the literature. A 1996 study by Gratz and Claffey of 446 randomly selected childcare workers in Wisconsin found that 87% of respondents rated their health as “good” or “excellent.” However, among other health concerns, nearly 69% of childcare teachers reported being overweight. In 1990, roughly 30% of adult women in Wisconsin were considered overweight or obese. Teachers and family childcare home providers also reported “dramatic changes” since beginning their work in incidence of health concerns such as stomach acid, backaches, fatigue, headaches, and muscle strain. Forty-three percent (43%) of the sample reported not engaging in physical activity suggesting a marked disparity between health behaviors and perception of health.  

Similarly, in a mixed method study of childcare workers’ health behaviors, health status, and perceived health status, Baldwin, Gaines, et al. (2007) found that while over 85% ranked their health as good or excellent, over 50% had a BMI placing them in the
range of overweight or obese. Because of the risk of bias in self-report, the authors suggest the actual percentage may be higher. The sample also reported significant levels of emotional strain: 32.6% felt depressed for two weeks or more and 64.5% reported that difficulties were “overwhelming.”

Whitaker and colleagues (2013) explored the health status of Head Start employees in Pennsylvania, predominantly single and low-income women, as compared to non-Head Start employees in the same socio-demographic sectors. Using an anonymous web-based survey, the authors collected data on six physical health conditions associated with stress: obesity, asthma, hypertension, diabetes/pre-diabetes, severe headache/migraine, and lower back pain. All six of the measured adverse health conditions were more prevalent in the Head Start sample than in the general population. Nearly 22% of Head Start staff reported three or more adverse conditions. Obesity was also prevalent among 37.1% of Head Start staff—a 9.8% higher incidence than the national sample.

Childhood obesity prevention activities occur alongside other priorities in childcare centers. Further, individual teacher motivation and knowledge, and resources such as money and equipment can be barriers to making recommended nutrition and physical activity changes. A study on barriers to obesity prevention in Head Start found that locally administered programs had “too little time and money and too many competing priorities to implement” the “I am Moving, I am Learning” initiative, designed to reduce the rates of childhood obesity among children enrolled in Head Start. Hughes and colleagues (2010) also explored the role of staff as conduits for nutrition and physical activity, as well as staff wellness. Enhancing the health of providers in Head Start has the twin benefits of improving staff personal health and creating wellness role models for
children in care. The authors state: “promoting physical activity and healthy eating among staff members may make them positive role models for children and parents and strengthen staff members’ ability to teach healthy behaviors. Thus, wellness should be considered one of the staff’s professional development goals.” Fifty-seven percent (57%) of the 1,583 directors surveyed felt that their staff “do not generally have a problem encouraging children’s healthy eating,” and nearly half of directors reported that their “staff do not generally have a problem encouraging children’s gross motor activity.”

While ECE staff serve as role models for eating and activity, nutrition scholars caution that there is more nuance to creating healthy food habits in young children than simply encouraging them to eat their vegetables. Provider’s attitudes and health belief may play a role in children’s health. A literature review by Larson and colleagues cites two studies of Head Start programs, which found that a majority of providers “support healthy eating by sitting with children at meals and eating the same foods.” However, providers rarely ask children to assess their own satiety, focusing instead on the amount eaten and encouraging children to eat. Further, while providers may encourage children to try healthy foods, only 47% report integrating nutrition-education into the classroom through practices such as reading books on healthy food. Staff may have limited support to do so; in 2011, less than half of surveyed childcare staff received annual training on nutrition. Other findings in the literature reveal how gaps in knowledge may impact both providers and children: for example, 54% of providers reported cooking only food that they knew children liked.
Though identifying a clear need for professional development around childhood nutrition, Larson and Ward (2011) identify two promising policies that highlight the role of staff as role-models for children. Firstly, staff in many centers surveyed must either eat the same food as children or “do not consume foods or beverages in front of children that are different from what children are served.” Secondly, many centers restrict access to sugar sweetened beverages—at least 70% of programs in one survey make no soda or vending machines available for staff use.12

**Worksite Wellness**

Workplace health promotion practices, are “employer initiatives directed at improving the health and wellbeing of workers, and in some cases, dependents. They include initiatives designed to avert the occurrence or progression of disease.”13 p.927 Employer motivations to host workplace wellness initiatives range from a desire to increase awareness of health and enhance quality of life, to a desire to shrink medical costs and reduce absenteeism. Other employers see these programs as attracting the “best talent,” and “reducing turnover.”13 p.928 Goetzel and colleagues (2014) argue that the focus on return on investment (ROI), and indeed, the expectation of a positive ROI, has skewed perspective on these programs, and there may be other measurements of program success that are less measurable.13

Performance metrics for worksite wellness evaluations typically include improvements in health and wellbeing of workers, cost savings, and “enhanced individual and business performance metrics.”13 p. 927 An array of best practices helps worksite wellness programs become successful and sustainable. A review of programs and literature found ten components of quality and sustainable worksite wellness
programming: 1) linking programs to business objectives, 2) executive management support, 3) multi-year strategic planning, 4) employee input, 5) an array of program offerings, 6) outreach to high-risk individuals, 7) incentives, 8) program accessibility, 9) effective communication, and 10) evaluation of program success. Workplaces that have implemented these best practices with successful results include recognizable firms such as Dell Inc., USAA, The Dow Chemical Company, and Johnson & Johnson.13

Large-scale reviews of worksite wellness reveal mixed results. The Community Guide Task Force, an initiative of the CDC, states that a “well-designed” program can have a positive influence on health behaviors. Chapman, et al., (2012) completed a review with the well-publicized finding that participants in workplace wellness programs had about 25% lower costs due to medical expenses and absenteeism. Lerner, et al. (2013), and Serxner, et al (2013), found mixed results on financial impact, noting a “great deal of variability in program design, execution, and evaluation.”13 p. 933

Workplace wellness was included as a component of “building a culture of health” in the Prevention and Public Health Fund of the Affordable Care Act. Viewing the workplace as a locus for health promotion and altering health behaviors, worksite wellness initiatives are increasing nationwide. In 2010, 77% of large manufacturing firms offered some type of employee wellness programs; only 29% of small businesses offered such programs, though that represents a significant increase from 16% in 2005.14 Worksite wellness encompasses an array of activities, and a spectrum of intensity. Across all employment sectors, an estimated 46% of all employers provide some time of physical activity program; 38% provide weight management, and 25% offer disease management programs.15
The CDC views well-executed workplace wellness programs as catalysts fostering a culture of health both within an office and on a broader, community-wide scale. Key tools for creating a workplace culture of health include, “1) financial and organizational support for evidence-based health promotion interventions; 2) consistent communication with workers that encourages positive health behaviors; 3) social and organizational supports from peers and supervisors; 4) policies, procedures, practices, and organizational norms that support a healthy lifestyle (for example, access to healthy foods and physical activity or banning smoking on company grounds); 5) financial or other types of incentives for participation in health improvement activities; and 6) a common purpose that is dedicated to a healthier workforce.”

The CDC cites two key findings in its promotion of workplace wellness programs: absenteeism was 25-30% lower among participants in workplace wellness programs; and a systematic review of financial impact studies found that workplace wellness programs offer a $3.27 return on investment for every dollar spent.

Much of the research on workplace wellness has occurred in large firms. For smaller firms, nonprofits, and direct service providers such as childcare centers, a significant barrier to full implementation of an effective workplace wellness program is simply that “wellness programs can be expensive and staff intensive, and changing the wellness culture of an organization takes time and consistent effort.” Wienke and colleagues (2016) posit that an alternative or complementary model to create a culture of health is that of “wellness champions.” The logic of wellness champions rests in social behavior theories, and the knowledge that obesity is strongly linked to social relationships and environmental contexts. Champions act as both educators and peer
support. “Studies demonstrate that with proper training and ongoing guidance, peers can effectively and efficiently promote wellness.”\(^{17}\) This research may buoy efforts to create a culture of health among smaller staff and enterprises with fewer resources.

Complementary to the idea of fostering “wellness champions” is the notion of a “culture of health”, understood as a workplace that “places value on and is conducive to employee health and well-being.” Employers with successful wellness programs have learned that isolated “perks” or programs, such as an on-site fitness center or menu labeling, will not have much impact unless they are part of an overall culture that permeates all aspects of company life.”\(^{18}\) A culture of health may include individual, ad-hoc programs related to health and wellness programs, but is rooted in company or agency values and norms that support health.\(^{18}\)

**Workplace Wellness Initiatives in Childcare Settings**

In a study of a worksite wellness program at a childcare center, Gosliner, et al. (2010), found that while sustained behavior change among participants had limited statistical significance, intervention groups demonstrated increased self-efficacy in discussing health and wellness topics with parents or clients, as measured with a validated self-efficacy tool.\(^{19}\) In the six childcare sites receiving a wellness intervention, their food environment showed statistically significant improvements: intervention sites provided more fresh fruits and vegetables at regular meals and snacks, as well as at celebrations, compared to control sites, who increased their intake of sweets and sugar-sweetened beverages (SSB). On an individual level, staff at intervention sites had statistically significant changes only in consumption of SSB, while staff at control sites
reported slight increases in SSB consumption (p=.04), and borderline significant changes in other health behaviors.\textsuperscript{19}

In a study of WIC sites in California, Crawford and Gosliner (2004) found that recipients of wellness intervention (“Fit WIC”) also increased their self-efficacy in talking about wellness and nutrition with parents, and showed decreased level of discomfort talking about children’s weight. Sixty-four percent (64\%) of staff who received the intervention stated they felt “very comfortable” encouraging WIC parents to engage in physical activity with their children, compared to 35\% of staff at non-intervention sites. While there was still discomfort and limited self-efficacy specifically discussing weight issues, 92\% of staff at Fit WIC sites reported “making changes” in how they talk about weight, (p < .01). Additionally, post-test surveys at WIC intervention sites found that those staff members were more likely to view their workplace as supportive of efforts to make healthy choices (p < .01). Similar to Gosliner’s study in childcare settings, staff behavioral changes were limited in their statistical significance, though increases in healthy behaviors were reported.\textsuperscript{20}

A 2015 study by Hibbs-Shipp and colleagues found a high level of interest in worksite wellness among Head Start providers. Of 154 providers surveyed, only 20.1\% reported a “healthy lifestyle,” and 89\% reported that they want to be more active. Around 40\% reported rarely cooking meals at home. Accordingly, participants expressed interest in stress reduction, weight management, and healthy cooking. The vast majority (86.6\%) expressed a desire to participate in wellness programs offered through their Head Start center.\textsuperscript{5}
These findings suggest that while personal behaviors may be more intractable to change, worksite wellness programs may play a pivotal role in improving the culture of health in settings serving children 0-5 and their families, as measured by self-efficacy ratings, and changes to menus and food policy. Moreover, ECE staff demonstrate enthusiasm and clear interest in gaining new health behaviors or knowledge. For programs that rely on the motivation and commitment of childcare professionals, such as Shape NC, worksite wellness programming, focusing on enhancing provider wellness, knowledge, and “buy-in” may strengthen implementation and sustainability of nutrition and physical activity programming.11

IV. Prior and Current Staff Wellness Programming in Shape NC

Shape NC featured a staff wellness component in its first phase (2011-2013). During phase I, project goal #7 was defined as:

“At least 75 staff….will implement staff wellness strategies and achieve improvement in at least one of the following health goals set for the project:

- Participate in 30 minutes of physical activity three times per week
- Eat three to five servings of fruit and vegetables (non-potato) most days of the week
- Drink no more than one-12 ounce sweetened beverage per day
- Not smoke” 21

The worksite wellness program piloted in Shape NC Phase I centers was called “Healthy for the Holidays,” which included a center assessment for childcare directors, a Saturday workshop for staff that included personalized health screening, with tests like blood pressure, BMI, and step tests; and incentives for participation.

After the initial assessment, participants created their own goals and received booklets that helped them monitor, meet, and expand their wellness goals. For example, “take 2,000 steps per day” in week one might become “take 10,000 steps per day” by the
fifth week. Each participant shared their activity logs with partners at UNC Center for Health Promotion and Disease Prevention (HPDP). HPDP produces Go NAP SACC (Nutrition and Physical Activity Self Assessment for Child Care), the childcare center assessment tool used to guide Shape NC practice. Each participant received personalized, weekly feedback. Baseline data on participants indicated that of staff who participated in the pilot “Healthy for the Holidays” workplace wellness program, 88% were overweight or obese, 24% higher than the national rate.

Three hundred and thirty-six staff took an initial health behavior survey and 95 were tracked from baseline. Ultimately, 74 adopted or made improvements in at least one health behavior area after participating in Shape NC’s worksite wellness program. Between September 2011 and September 2013, the cohort demonstrated significant positive changes (see table 1, below), showing improved health behaviors in areas such as exercise, fruit and vegetable consumption, and sugar sweetened beverage consumption. Though daily cigarette consumption had declined, more staff began smoking than quit during the phase I staff wellness intervention.21

Table 1: Shape NC Phase I Staff Wellness21

<table>
<thead>
<tr>
<th>Activity Measure</th>
<th>September 2011</th>
<th>September 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of staff attaining 90 or more minutes of exercise per week</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>Average servings of fruits and vegetables consumed daily</td>
<td>3.3</td>
<td>3.8</td>
</tr>
<tr>
<td>Percent of staff eating 3-5 servings fruits and vegetables daily</td>
<td>53%</td>
<td>67%</td>
</tr>
<tr>
<td>Sugar sweetened beverages consumed per day</td>
<td>1.3</td>
<td>0.8</td>
</tr>
<tr>
<td>Percent of staff who do not smoke</td>
<td>89%</td>
<td>87%</td>
</tr>
</tbody>
</table>
Of course, these improvements represented those staff members who met these health behavior goals, as well as those who decreased physical activity, fruit and vegetable consumption, or increased soda consumption; for example, 15 staff decreased their intake of fruit and vegetables, while 35 increased.21

Participants responded well to personalized feedback, and some “desired even more personalized attention.” Centers reported that they “valued the team/challenge environment and the peer support.” However, the process of providing individualized feedback proved cumbersome, and ultimately hard to scale in subsequent phase of Shape NC, which focused on spreading to 240 new centers. Despite interest—66% of 145 surveyed providers reported being “very interested” in worksite wellness—and healthy changes reported by staff members, the worksite wellness initiative did not continue during Shape NC Phase II, which focused on spreading the intervention to more sites throughout the state. Continuing such a time-intensive program was deemed unfeasible. (Oral communication, Alyssa Hill, August 2016)

Though a staff wellness initiative was not a formal component of Phase II (2013-2016), six Shape NC sites were given the opportunity to participate in a UNC pilot study called ‘Care2bFit,’ managed by the UNC Center for HPDP. This smaller pilot branches off from a larger, multi-year study called “Care2bWell,” another childcare focused workplace wellness intervention. Care 2b Fit is an 8-week program that provides childcare teams with FitBits to track steps and sleep, which participants may keep after the duration of the program. The FitBit syncs automatically to UNC Center for HPDP, which allows center staff to offer personalized feedback in a less labor-intensive way.
than the Phase I staff wellness project. Centers also receive initial education on physical activity, diet, and other health areas. The level of knowledge about physical activity sometimes “isn’t very high” says Regan Burney, one of the study’s investigators. Her team augments gaps in knowledge by providing “magazine quality” materials to employees, distributing bulletin board materials, and working to build enthusiasm among directors. Care 2b Fit monitors changes in moderate to vigorous physical activity by assessing whether or not participants are syncing their FitBits, and steps per day.

Burney notes that childcare settings provide some unique challenges and opportunities for staff health and wellness; the environment is a naturally more active one, since participants work with kids, and spend time on their feet and outside. However, the low level of knowledge, among other barriers such as weather, particularly North Carolina heat, knowing how and where to work out, and needing ideas on healthy food options, are areas where UNC Center for HPDP offers coaching and tries to build director capacity. Burney sees the potential for staff to better role model healthy habits for children, though is uncertain if a direct effect on children and their BMI is measurable. However, a director and staff who cultivate a culture of health may show more appreciation for new and healthy food, may do more active classroom activities, and be able to be more active with students. (Oral communication, Rebecca Burney, August 22, 2016)

V. Methodology

Tenets of qualitative research guide this non-experimental qualitative inquiry. The researcher employed a qualitative approach using in depth interviews with a purposive sample of program stakeholders. This inquiry draws on elements of phenomenological
research. Phenomenological research describes the “lived experiences of individuals about a phenomenon” and then seeks to distill the experiences of participants into the “essence,” or “a grasp of the very nature of the thing.” For this project, the object of inquiry was “staff and workplace wellness”, as experienced by childcare teachers, directors, and technical assistance providers. A constructionist worldview undergirds this approach—that is, that the “goal of research is to rely as much as possible on participant views to the situation” ideally, “the participants can construct the meaning of a situation.” This project seeks to understand the perceptions, interpretations, and relationships that shape staff experience with workplace wellness and health. Further, the researcher hoped to gain a clearer picture of staff goals and motivations for their personal wellness. The goal of this investigation is to develop a deeper understanding how the early education workforce conceives of “wellness,” and to use their insights to aid Shape NC implementation and expansion.

**Instrument Design**

For the study, a structured, qualitative interview guide was developed. A review of the literature guided the development of the interview (Appendix A). Themes of interest include personal wellness and self-care, initiation of positive or negative health habits, motivation, perception of work site’s influence on health, experience with or interest in worksite wellness programming, and self-efficacy. Self-efficacy was included based on findings from Golsiner’s study of childcare centers and the Fit WIC program in California; as conduits of the Shape NC program, childcare providers’ sense of self-efficacy, that is, their familiarity with and confidence in themes of health and wellness, is critical for sustaining a robust culture of health. Interviews are a useful tool to gain
insight about a phenomenon that is challenging to observe in a short timeframe, such as the day-to-day culture of health and wellness in a childcare center or personal health habits. They also allow participants to provide “historical information,” critical in understanding the influences and experiences that form participant health and wellness routines.  

The questions were developed to be neutral and open-ended to allow for positive or negative feedback. As seen in the literature, childcare center environment can take a toll on providers’ physical and mental health, with emotionally exhausting work and low-wages leading to higher-than-average incidence of mental and physical health concerns. Meanwhile, in North Carolina and other states, childcare centers are becoming a focal point for obesity prevention among both staff and children. Attempting to word questions neutrally was intended to allow staff to present a full and honest perspective of any tension they might feel, and their workplace’s impact on their health and functioning. The interview questions were reviewed by Kimberly McCombs-Thornton PhD, Director of research at NCPC.

Across Shape NC sites, childcare providers have an array of experiences with workplace wellness. A staff wellness initiative was a component of Shape NC Phase I, though high turnover of childcare staff makes it less likely that the same staff would still be in place. Currently, six Shape NC sites are participating in “Care2bFit,” and others have initiated wellness programs on their own as centers, or as part of local Smart Start partnership initiatives. A tiered question about experiences and interest was developed to capture this range of wellness programming. For purposes of this process, wellness and self-care were explained to participants as “encompassing the things you do to take care
of yourself, physically and emotionally.” Prompts were included in the interview guide to give examples of what activities constitute workplace wellness, as some teachers may not be familiar with “workplace wellness” as a theme.

**Site Selection**

Interviews were conducted with directors and staff at sites in Orange County, Chatham County, and Onslow County. A purposive sample was used, in an effort to capture different types of centers, representing a range of experiences with Shape NC, enrollments, resource levels, and geographic locations. Shape NC technical assistants in Chatham and Onslow County made connections with sites to whom they have provided technical assistance, and which they deemed likely to participate. Technical assistants were valuable gatekeepers in this process and provided introductions, context, and helped build rapport between myself and participating centers. The participating child centers are listed below (Table 2). Shape NC status reflects the length of time the center has participated in Shape NC, and to what degree they are meeting best practices in childhood obesity prevention. Because of the small size, and the bias towards sites receiving technical assistance, this sample is not necessarily representative of all Shape NC participants.

**Table 2: Participating Centers**

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Location</th>
<th>Enrollment</th>
<th>Shape NC Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>Orange County</td>
<td>47</td>
<td>Shape NC 2011-2016 Shape NC Demonstration Site, 1</td>
</tr>
<tr>
<td>Site B</td>
<td>Chatham County</td>
<td>46</td>
<td>Shape NC 2011-2016 Shape NC Demonstration Site</td>
</tr>
<tr>
<td>Site C</td>
<td>Chatham County</td>
<td>21</td>
<td>Shape NC 2014-2016 Expansion Site, 2</td>
</tr>
<tr>
<td>Site D</td>
<td>Onslow County</td>
<td>59</td>
<td>Shape NC 2016 Expansion Site</td>
</tr>
<tr>
<td>Site E</td>
<td>Onslow County</td>
<td>90</td>
<td>Shape NC Phase II Expansion Site</td>
</tr>
<tr>
<td>Site F</td>
<td>Onslow County</td>
<td>108</td>
<td>Shape NC Phase I Model Early Learning Center MELC³</td>
</tr>
</tbody>
</table>

1. Demonstration Sites meet the majority of Shape NC best practices in all five Shape NC content areas. There are 16 high performing sites around NC that support other Shape NC sites by offering tours.
2. Expansion sites are newer Shape NC sites that focus on one or more Shape NC content areas
3. MELC are Shape NC sites that are actively engaged in Shape NC work in all best practice content areas.

**Interview Process**

Drawing on best practices for effective qualitative data collection, interviews were conducted on-site with center directors and childcare providers. Directors were typically interviewed in their office, and staff were interviewed either in their classrooms during downtime, or in directors’ offices. A process recording approach was used, wherein copious notes were taken during the session, detailed information was recollected and added immediately after, and notes were then transcribed into a word document. Directors and teachers gave informed consent to participate in this project, and were informed that their feedback would be used both to inform Shape NC programming and to support the completion of an academic paper.

**Analysis**

The researcher drew on both deductive and inductive analytic approaches to analyze staff and director feedback. While themes from the interview guide (personal wellness and self-care, initiation of positive or negative health habits, motivation, perception of work site’s influence on health, experience with or interest in worksite wellness programming, and self-efficacy) served as preliminary codes for interview content, analysis of those categories guided the development of cross-cutting themes.

Once coded and themed, relevant data from all the interviews was compiled into a tabular form for analysis and interpretation.
VI. Results

Feedback from Directors

Each of the directors readily agreed that a healthy or health-conscious staff had an impact on children; the most common answers dealt with role-modeling, which each of the directors discussed in some way. Said the director at Site C, “what they [the children] see is what they’re going to carry over and be used to.” The director of Site F remarked, “they’re watching everything you do, what you put in your mouth, also.” Several directors discussed the benefits of a wellness oriented teaching staff. The directors at Site F and Site A both mentioned that staff that attend to their physical health tend to be happier and more engaged in their work. The director of Site A remarked that “You don’t have staff out sick…they’re healthier, they’re moving, they’re livelier,” giving anecdotal credence to some research on worksite wellness programming. The director of Site F observes that the physically taxing work of childcare can become easier when employees are healthier, “If you feel good, you don’t mind coming to work and being active with the children. If you get down and play with them on the floor, they’re easier to watch.”

Directors recalled a range of experiences with worksite wellness initiatives. Site B and Site F both undertook “Biggest Loser” style competitions in the past year, with Site B having more sustained success in the program, based on how long it went on, and how many staff were involved. Site C and Site D both described informal efforts contributing to a culture of health, such as aiming to drink plenty of water or staff-led exercise. Site A had recently completed the six-week Care2BFit pilot study with UNC. The director offered enthusiastic feedback about this experience, sharing that her team had embraced the challenge, and that integrating Care2bFit into their workday helped build momentum.
She reported that “it takes a minute and it takes people helping people to get it done…the spirit of competition came out in other people.” She also shared how helpful the FitBits were in keeping motivation up: “if people didn’t have the visual, I think they wouldn’t do it.”

Directors shared an array of ideas for how Shape NC could support their work in building a culture of health. The director at Site B remarked that including staff wellness in the Go NAP SACC center assessment tool would make it a priority, rather than a supplemental activity. In many of the conversations, staff wellness, child wellness, and overall center procedures were intertwined; the director of Site C suggested that support in accessing organic food and discounted gym memberships would be two resources to make the center healthier. In this instance, since children and staff share meals, organic groceries are also a part of staff wellness. The director at Site A remarked that building a multi-sector, integrated approach to obesity prevention would help keep staff wellness a priority; to her, an exchange of research, resources, and ideas was seen as a helpful approach to keeping directors like her engaged in this work.

**Personal Factors among Teachers: Personal Wellness, Goals, and Motivation**

Nine teachers at six centers were interviewed. All of the teachers interviewed reported that they have some kind of wellness or self-care routine. Four teachers described exercise, diet, and wellness priorities that exist outside of their workplace. These four teachers have wellness routines they engage in because of intrinsic motivation or family support. A teacher at Site D eagerly described a morning routine of prayer, water, and a 5k walk bookended by stretching. The other five teachers describe health and wellness routines that are based primarily in their workplace. One teacher at Site C
remarked, that most of her “stepping out of the box” for new and healthy foods happens at work, and that she “stays active with the kids.”

Of the teachers who articulated personal wellness habits outside of the workplace, many shared that they actively try or have tried in the past to pass along these habits to their peers. “I share some of the things I do,” said a teacher at site B, such as taking walks around the parking lot at lunch, or printing out diabetic, low-sugar recipes. The teacher at Site D remarked, somewhat playfully, that she likes to walk with her colleagues, but “they can’t keep up.”

Teachers offered a range of motivations for engaging in health and wellness. Five teachers described disease prevention as a motivator, citing family history of cardiac disease and cancer, or their own diagnoses and a desire to manage their current health. Two teachers mentioned a desire to stay healthy and not need medicine. Six teachers offered a clear response when asked about goals. Three respondents shared long-term goals relating to longevity and quality of life. One teacher at Site D reflected that she wants to "live a long time and be healthy, you won't see my school agers pushing me around." A teacher at Site C shared that she wants to stay as young as she can for as long as she can, and keep her “big kid mentality.” The other three teachers shared concrete goals including exercising more, losing weight, and “finding a new way of eating” in response to a food allergy diagnosis.

**Workplace Factors among Teachers: Influence on Health, Support, and Workplace Wellness**

Eight teachers decisively stated that their workplace had a positive influence on their health. Teachers at Site B and Site A described the busy and active nature of their
work in the classroom. Says one teacher at Site A “we have to keep up with the little ones…they’re quick, they have lots of energy.” Two teachers specifically mentioned the emotional health benefits of their workplaces: “working with children is the most positive thing I can think of,” said a teacher at Site E, compared to working with adults, where she said “I feel like I make more money, but I feel like my health is poorer.”

All nine felt that their workplace was supportive of healthy eating and physical activity. Staff shared many examples of how their workplaces demonstrated support for healthy eating and physical activity, showing how staff and directors together create enabling contexts for healthy choices. Examples noted at the staff-level include changing snacks and drinks served at staff meetings and celebrations (Site F, Site B) and inclusion of physical activity in staff activities such as teacher workdays or staff meetings (Site A, Site C). Child-centric policy changes that trickle up to staff include family-style dining (Site F) and eating the same food the children eat (Site C, Site D).

Some staff clearly articulated that the overall culture of their workplace was supportive, and that they felt a sense of mutual support and accountability, absent a formal wellness program or initiative. A teacher at Site E offered that staff is “doing it on their own,” stating that “we care about each other, we talk to each other, we check in…I’ll tease you and say ‘what are you eating?!’” A teacher at Site C expressed a similar sentiment that her workplace was simply conducive to making healthy choices, “When you’ve got a group also doing it, you don’t even think about it….you just do it.” “We’re all big water drinkers…we support each other,” she stated. Center leaders were singled out as drivers of these enabling contexts at five of the six centers visited.
All the staff interviewed were familiar with workplace wellness programming. Teachers from Site B and Site A both discussed experiences with workplace wellness programs. Site B tried out a yearlong “Biggest Loser” competition, and the teacher also referenced on-site exercise classes, and an “Eat the Rainbow” initiative. Two of the three Site A staff had recently finished participation in the 8-week Care2bFit staff wellness program, and their enthusiasm was palpable. One teacher shared that “it [the FitBit] made me aware of my steps…I was not aware of how little movement I was doing.” Another remarked that “walking with everybody, seeing what they’re doing…friendly competition” had been meaningful parts of the process for her. Both articulated benefits, such as sleeping better, drinking more water, and lowering blood pressure. One remarked that she liked getting the feedback from the FitBit and from the Care2BFit team at UNC, “I loved when Regan would give you feedback, she’d give you another goal that was achievable” such as increasing steps by 2,000 per day.

The staff at other centers mentioned ad hoc wellness initiatives, such as a water aerobics class after a staff meeting, or leadership providing large cups to increase water consumption. Most staff expressed some interest in participating in structured worksite wellness program, though with varying degrees of enthusiasm. In most cases, discussions of champions, director roles, and personal wellness were livelier and more detailed. One teacher at Site C said “I don’t think it would be a bad thing,” and a teacher at Site D said “that could work well here.”

Self-Efficacy

All staff expressed confidence about talking with parents about healthy food and physical activity. However, teachers had few concrete examples of sharing nutrition and
physical activity knowledge with parents; rather, participation in health-related programs like Shape NC, NC Steps, or a center-based Community Supported Agriculture (CSA) program appears to be a way to let parents know a center’s prioritization of healthy food and active play. Shape NC may serve as shorthand for the kind of play, learning, and eating that happens in a center. While the teacher at Site F remarked that she feels “pretty comfortable” talking to parents about healthy food and physical activity, she confidently stated that parents “know we’re a Shape NC Site and what that means for the classroom and the children… we say ‘you’re going to see things here that you don’t see at other sites…like the raised garden bed.’”

Teachers seem to have many more opportunities to demonstrate self-efficacy talking with children about food and active play. All the teachers gave concrete examples of how they foster an appreciation for healthy eating and active play. For some, this is clearly an area of great passion that infuses all their work. The teacher at Site E shared how she wants to cultivate a passion for healthy food, citing her Italian heritage as an influence. She described talking with her kids about food as much as she can; with the older children she discusses topics such as how exercise expends calories from foods; with younger children she might engage them by talking about the names and colors of fruits and vegetables. She shared that she wants to help children understand how and when food grows, and hopes that that can help them develop their own tastes, giving the example of learning how to appreciate the seasonal strawberry, as opposed to the ones available year round. A teacher at Site C finds that, now that she possesses more knowledge about food and health, “We’re talking to them [children] more openly…we’re
more aware, and we pass it on to the children, so that when they’re older and out in the world” they might make healthy choices.

**VII. Analysis: Interpretation of Emergent Themes**

An inductive approach to data analysis helped identify several emerging themes that ran throughout the interview content: staff and leadership champions, concern about parent engagement and involvement; and role-modeling behavior and attitudes for children. Together, these themes seem be critical components that contribute to the strength of the culture of health at childcare centers. Shape NC program planners might view these as areas for exploration and focus as they work to integrate staff and center wellness in Phase III.

**Wellness Champions**

All of teachers and directors indicated that wellness champions play a significant role in building and sustaining a culture of health in an organization, echoing the work of Wienek and colleagues (2016).\(^{17}\) The teachers interviewed at Site D and Site B recognized their own roles as champions, describing specific efforts they have made to educate peers and children about wellness practice; both of these women appeared to be appreciative of efforts made by their directors to foster a culture of wellness. Both teachers at Site C identified the center’s co-directors as champions for wellness, citing their efforts to introduce fresh healthy food to both students and staff, and the positive ways they have encouraged staff to engage in physical activity. Though the teacher at Site F was identified as a wellness champion by the Onslow County technical assistant, she referenced the need for people to take on informal leadership roles as champions and
health promotion advocates, highlighting a need for staff commitment, participation, and multiple wellness champions.

Finally, while each of the teachers at Site A gave examples of how their director serves as a champion for health and wellness, they also shared examples of how they and other staff offer consistent and enthusiastic support for health and wellness, making particular mention of their experience with FitBit challenges and how much they enjoyed cheering each other on both virtually and in person. One teacher mentioned: “I like how you can add friends and see what they’re doing, when one person is down…we send them a little cheer.” During the interview, one teacher shared that she had been in a slump with her activity goals, and the other two offered on-the-spot support, encouragement, and concrete suggestions for how she might continue to engage in physical activities as it gets darker earlier, offering ideas like walking at the mall or around a lit parking lot. While they gave ample credit to the director for her role, each of the teachers at Site A seemed to personally take on the role of wellness champion.

Directors also brought up the values of champions in promoting and sustaining Shape NC work. Among leadership, little distinction was made between champions for Shape NC implementation and worksite wellness champions, likely because Shape NC programming and provider wellness efforts are tightly linked. The director of Site A sees one of her NC PreK teachers as the original champion for Shape NC, and believes that significant change can start with one. She stated, “nobody starts it unless someone else is already doing it…it takes somebody to be a leader,” she said. The director of Site D cited one of her teachers as a key influencer, recalling that the teacher “started walking, the rest of us complaining about how ‘we fat’ (laughs). Folks started walking a bit.” Though this
group activity eventually fell by the wayside, their wellness champion has maintained her walking routine, and is trying to figure out how to bring a Zumba instructor in for a staff group exercise class.

With a growing appreciation for the social and environmental factors impacting childhood obesity, research into the role of influencers, gatekeepers, and champions offers guidance on how interventions might take center social dynamics into account and strengthen information sharing among teams. Identifying and working in partnership with workplace “champions” may be a critical way to enhance implementation of obesity prevention interventions. Using tools such as social network analysis could help program planners identify the formal and informal information sharing and expertise that exist within organizations, and through technical support, strengthen ties of information sharing. A strongly linked information network suggesting a decentralized, bidirectional exchange of information may be the most effective way to disseminate new knowledge and practice. Whether implementing Shape NC best practices that trickle up to staff or starting a formal worksite wellness program, champions are a critical piece of both initiating and sustaining the work.

**Role Modeling**

As demonstrated in their strong sense of self-efficacy described above, all the teachers were focused on children, and see the Shape NC changes and staff wellness efforts as tightly linked. All of the staff and directors interviewed mentioned the importance of role modeling, clearly seeing their influence on children’s willingness to try and enjoy healthy food. The desire to have a positive impact on children’s health came up as motivation in all of the interviews. Four staff decisively linked their wellness
goals and behaviors to their students. A teacher at Site C remarked that teachers are “teaching the children to eat right and try new foods.” Her willingness to try new foods, particularly at the center, is part of “trying to teach these children to have a better life.”

Staff identity as early childhood professionals shone through when talking about their health goals and their ideas for healthy workplaces: a desire for an on-site garden, parent-child meals, children’s ability to appreciate fresh food, and a hope to see kids grow up healthy were all mentioned. At Site A, teachers described being fit and able to play with children, lead activity, and be down on the floor. Teachers discussed engaging in active play, more so than nutrition role-modeling, and talked about “dancing with the kids” and “keeping up with the little ones.”

**Parent Engagement and Involvement**

As teachers focused on how their wellness knowledge and practice can impact the children at their centers, their vision often extends beyond the hours children are in their care. Some staff seem to view parents as supportive partners, primarily those at Site A and Site C. These teachers noted that center parents tended to be supportive of their work around healthy eating and active play, and suggested that those practices are also modeled at home. Site A teachers mentioned that many parents walk or bike with their children to school. Meanwhile, teachers at Site E, Site D, and Site B expressed a desire to connect with parents so that the habits children learn in the centers could carryover to home. The teacher at Site E shared that "a lot of young families don't know how to cook...[I] want kids to know that food doesn't come from a box or a bag." The teacher at Site D similarly stated that parents "don't go home to cook, they stop at the nearest fast food.” Both cautioned that approaching parents non-judgmentally is critical, that you
have to “educate” without being “bossy.” Questions about how to achieve the desired “carryover” to home remain; teachers shared anecdotes about successfully helping children taste and enjoy new vegetables, “mama will come and say ‘he doesn’t eat that at home,’” says a teacher at Site D, who also suggested parents might want recipes they can try at home. Engaging parents appears to be a critical component of how ECE staff understand their role of promoting health in young children. It may be valuable for Shape NC to tap into this particular area of concern. Staff may have insight into how to engage parents; similarly, staff may benefit from learning low-cost parent engagement strategies in their centers.

**VIII. Limitations**

This project has numerous limitations. Firstly, the small sample size is a major limitation on the generalizability of these sites to the entirety of sites participating in Shape NC. Further, Shape NC technical assistants identified these sites because they were motivated and likely to participate, a bias that further limits the conclusions that can be drawn from these discussions. A more rigorous analysis of staff wellness would certainly include a random sample of Shape NC sites drawn from each participating region. Further, a mixed methods analysis of staff wellness may contribute to a fuller picture of staff wellness and its relationship to Shape NC implementation and sustainability. Though questions were intended to elicit a range of feedback, the potential for social desirability bias in interviewees was high. Staff members may have felt compelled to paint their perceptions of Shape NC, staff wellness, and their personal health and wellness in a more positive light. As a representative of Shape NC, the interviewer likely contributed to this bias. Despite limitations, these interviews may lay the groundwork to
include staff wellness in the implementation period of Shape NC Phase III, or to explore staff wellness programming as a theme in the future evaluations of Shape NC.

**IX. Applications and Recommendations**

Positive findings for Shape NC and broader childhood obesity prevention emerged from these discussions. Not only did all of the interviewed staff have some kind of wellness routine, each of them saw their workplace as having benefits for their physical or mental health, and were able to clearly articulate benefits and health changes stemming from their workplaces. This suggests that childcare centers engaged in Shape NC are indeed having a positive impact on staff health behaviors and knowledge, regardless of whether or not they engage in formal worksite wellness programming. These positive effects could be further amplified by integrating staff wellness resources into Shape NC programming.

**Blending Staff Wellness into Shape NC Content**

- A commitment to children’s wellbeing was a thread running through the interviews, suggesting that educators connect their own wellness habits to their students’ wellness. How might we capitalize on this powerful motivator? If commitment to children is a shared value among early childhood educators, highlighting staff position as “role models” may be an important component of future Shape NC training and orientation. Shape NC staff should deliver content not only as policies and practices impacting young children, but should develop a holistic approach that invites educators to consider their role in young children’s health. Educators interviewed for this study linked an increase in their own knowledge with a drive to provide children with healthy habits. It follows then that providing teachers with ongoing opportunities to learn about, practice, and take ownership of healthy eating and exercise may help them be more actively
committed to Shape NC goals. Providers gain knowledge about health and wellness from their directors, Shape NC trainings and continuing education, from TA, and from online resources like Shape NC’s online webinar series. Messaging about provider wellness should be integrated into all of these information channels. Blending staff wellness into professional development around Shape NC content areas may be a fruitful approach, particularly for those educators who do not have a wellness routine outside of the center.

Intensifying the support educators receive for their own health and wellness may help staff better reach out to parents, an area of concern for many. At this stage, most felt comfortable sharing knowledge and practices with children, but were less likely to connect with parents. Providing staff with knowledge and skills about healthy habits, as well as strategies for engaging parents could help teachers expand their role-modeling into the community.

Lastly, alongside a holistic approach to wellness that includes staff health, there are practical and concrete considerations that may facilitate staff buy-in and motivation for health and wellness programming. As one TA remarked, making wellness easier for people may involve considerations like offering childcare for an evening health program, offering incentives, and having enthusiastic director support.

**Sustaining Staff Wellness: The Role of Champions, Directors, and Technical Assistants**

Directors and staff look to champions to further the work of Shape NC and staff wellness. Indeed, champions and their day-to-day efforts were discussed more than individual programs or wellness efforts, such as the “biggest loser” projects described by two sites. Champions can motivate others to join them on a walk or play a part in
changing the food habits of staff. It seems most efficacious, however, to have multiple champions in an organization, as one champion may burn out. Camaraderie and support observed at Site A highlighted how a shared commitment to wellness among staff could sustain healthy changes. Certainly, the benefit of the wearable technology they received makes this center different than the others, but sharing the role of ‘champion’ seems to be powerful in creating a workplace where health is the norm. Teachers and directors at Site E and Site C both reflected on culture in which healthy choices were affirmed and supported, with or without a formally structured workplace wellness program.

Of course, supporting champions and tapping into teachers’ sense of self-efficacy and identity as a role model is a more nebulous prospect than initiating an ad-hoc walking program or nutrition activity. As Kent (2016) writes, sustaining a culture of health involves active participation at all levels:

“*It involves leaders* practicing healthy behaviors, implementing health promoting policies and practices, creating a healthy work environment, and allocating sufficient resources for programs to be sustained over long periods. *It involves managers* encouraging employees to incorporate healthy activities into the workday and shaping organizational norms so that they promote health. In addition, it means actively engaging *employees* in the process of shaping and building wellness offerings, so that the program meets the needs of individuals and their families.”

There are numerous strategies Shape NC might employ to support directors and teachers in creating and sustaining a culture of health. Indeed, among specific requests related to how Shape NC could help, directors indicated that guidance and technical assistance for staff wellness was welcome. Site B’s director shared that while staff wellness is critical, staff wellness programming is neither their first priority nor their expertise, and momentum may wane. To that end, she suggested that staff wellness might be incorporated into the Go NAP SACC center assessment tool. Site A’s director also
mentioned that even just sharing research, news, and facts about obesity may help reenergize and refocus staff. New resources, ideas, or materials can help keep momentum strong. Across all sites, TA were seen as a valuable resource for Shape NC content, and could expand their guidance to include staff programming. Directors see the benefit of staff wellness, and Shape NC can support them in maintaining that commitment. Specifically, TA may be a critical driver in providing directors with resources, support, and ideas for building a culture of health in their workplace. In its third phase, Shape NC can ready its TA partners to deliver staff health and wellness content, and to help directors see themselves as champions for health and wellness.

Finally, childcare staff may face the same economic barriers to wellness that many do: high costs of health care, higher prices for healthier foods, towns and cities that are not walkable. However, despite these barriers, the tone of the interviews and perspective of the childcare workers was predominantly positive. As a final recommendation, the role of teacher pay and benefits should be considered. In the literature on health of childcare workers, low wages are a pernicious factor that make the ECE workforce likelier to experience obesity and comorbidities.\textsuperscript{4,6,7} One director shared that her staff was insured, and that their attention to wellness helped keep their premiums down, and one of the technical assistants shared that low-pay was a barrier to maintaining wellness in and outside of the center. To what extent could higher wages and comprehensive benefits package support teachers in living healthy lives? The potential contribution to staff health should be considered alongside other benefits of raising the wages of childcare staff.
This sample of staff and directors share a belief in the connection between their own health habits and the health of the children they serve. This critical connection ought not be overlooked in childhood obesity programming, and indeed, understanding the degree to which provider wellness mediates the risk for childhood obesity is an area for further inquiry. As this intervention expands, the crucial role of provider wellness should be integrated into every level of Shape NC programming: from content area trainings, to technical assistance providers, to support and resources offered to center directors. The early education workforce delivers intervention, and their own health and wellness habits may mediate the degree to which they engage with Shape NC programming. To continue making meaningful progress in reducing childhood obesity, teachers and directors should be supported and encouraged to build a culture of health in their workplace for both children and adults.
References


Acknowledgements

This project grew out of my time spent working at Shape NC with the wonderful Jessica Burroughs, MSW/MPH and Alyssa Hill, MS. These two passionate professionals welcomed me onto their team and provided me with a supportive and collaborative learning environment, enabling me to learn so much about making change and building partnerships. I am also grateful for the support I received from Kim McCombs-Thornton, PhD, who helped me figure out how to ask the right questions. I am so appreciative to technical assistants Rachelle Hardison and Lexie Wolf who spent time orienting me to their communities. Most of all, I appreciate the dedicated childcare staff who took time out of their busy days to share with me their insights into health and wellness. Their commitment to giving kids a healthy start was palpable, and I was energized by each and every one of my conversations.

Finally, I am grateful for the support and suggestions I received from Professors Lewis Margolis and Dorothy Cilenti in the Department of Maternal and Child Health. I have been motivated, supported, and moved by my MSW/MPH cohort throughout my graduate education, as well as this paper-writing process. Lastly, the continual encouragement I’ve gotten from my incomparable partner, Max Lazar, have kept me going all along.
**Appendix A: Interview Questions about Workplace Wellness: Questions for Childcare Staff**

<table>
<thead>
<tr>
<th>Area of Interest</th>
<th>Question(s)</th>
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| Establishing Rapport and Comfort         | • Name  
• How long have you worked at the center? How long in childcare?  
• Thank for agreeing to talk with me!                                                                                                                                                                      |
| Personal Health                          | • How would you describe your wellness and self-care currently? Wellness and self-care encompass the things you do to take care of yourself, physically and emotionally.  
• Possible use of self-assessment of health behaviors, like the one used in Phase I, or another instrument.                                                                                           |
| Health Goals                             | • How would you describe your goals for your health in the short-term and long-term?                                                                                                                                                         |
| Initiating Healthy Changes and Behaviors | • Reflecting back on the past few months, have you made any changes in your everyday health habits, such as drinking more water or aiming to take a walk a few times a week?  
  o If yes, what helped you get started and sustain those changes?  
  o If not, what small change might you be interested in making? What might help you to start?                                                                                                                                 |
| Motivation                               | • What kind of things motivate you to take care of yourself, such as exercise, eating fruits and veggies, or not smoking?                                                                                                                                 |
| Perceptions of Workplace Support for Healthy Habits | • Do you believe your workplace contributes to your health? How so?  
  *Probes*  
  • This can be in positive ways (*prompt*) or negative ways (*prompt*)  
  • Do you perceive your center as supportive of physical activity? How so?  
  • Do you feel like your childcare center, boss, and coworkers would support you if you were trying to eat healthier?  
  • *If yes or no*: How so?                                                                                                         |
| Experience with or Interest in Workplace Wellness | • Has your workplace ever initiated a wellness program?  
**Probes**  
• *If uncertain:* Workplace wellness programs are usually center-wide programs that are designed to help teams improve health in some way.  
• Things like a “fitness month” or a “steps challenge” might be examples, or a team-wide decision to try to drink more water and less soda.  
• Some wellness programs include getting to meet with a nurse or a health educator and make health goals.  
• *If yes:*  
  • We know your work as a childcare provider is incredibly busy already, but did you choose to participate in the wellness program? Why or why not?  
  • It can be hard to sustain the energy around new habits, and sometimes they can slip away. Have you been able to stick with any new habits from your workplace wellness program?  
  • What were the highlights of the wellness programs? What kind of changes did you try out as a result of the workplace wellness program?  
• *If No*  
  • Are you interested in participating in a wellness program with your coworkers at your center?  
  • What might you like to learn or do?  
| Barriers and Enabling Factors | • In thinking about your health goals, what kind of support from your coworkers or director would help you achieve your goals or support you in making healthy changes?  
• It can be hard to make changes and keep them going. What do you see as barriers to reaching your self-care goals?  
| Self-Efficacy | • How comfortable do you feel discussing physical activity with parents?  
**Follow up:**
Questions for Directors

- Has your center taken part in any workplace wellness initiatives?
  - For directors who have participated or currently participate in wellness initiatives:
    - What was the experience like for you and your team?
    - How have you built on that wellness experience and any changes you made as a team?
    - In your opinion, what does it take to build momentum for wellness among teams? What have been barriers to building momentum and obtaining buy-in?
    - What is the impact of healthy staff on children?
  - We want to use this info to improve implementation of holistic wellness programming: what might help you and your team to create culture of health here?

- For those who have not participated in any workplace wellness programming
  - What is your level of interest in initiating a wellness program among your team? What might you hope to achieve by doing this?
  - What is your perception of wellness and self-care at your site?
Questions for TA

- What resources are necessary to support staff in making and embedding healthy changes in the center environment?
- What successes have you observed in workplace/team wellness? Where have you observed barriers?