**Shining the Light on You:**

**An Evidence-Based Program Designed to Improve the Health and Wellbeing of Family Child Care Professionals**

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**Abstract**

**Objective:** To design and assess the effectiveness of an evidence-based intervention to improve the health and wellbeing of family child care professionals. **Methods:** The early care and education (ECE) workforce, and family child care (FCC) educators in particular, face challenges to their wellbeing, mental and physical health. In addition, the demographics of the FCC workforce – disproportionately composed of low-income women of color - are associated with higher risk for chronic diseases. The *Shining the Light on You* program is designed to address FCC professional wellbeing in a feasible, evidence-based manner. The program includes weekly virtual sessions co-facilitated by a Board-Certified Health and Wellness Coach (HWC) and a Technical Assistance Coach (Early Childhood Specialist) and three individual coaching sessions with the HWC. HWC is built upon a foundation of behavior change theories, motivational strategies and effective communication approaches from psychology, medicine, public health and related fields. Using a mixed methods approach to gather data, participants from three initial cohorts of the program (n=33) implemented in Delaware reported improvement in health and wellbeing indicators. **Results:** Participants reported improvements in social support, physical activity and water consumption from pre- to post-program surveys. In interviews conducted with the participants following the program, participants consistently commented on the connections between all components of wellbeing and the importance of self-care. **Conclusions:** This model demonstrates the potential of integrating best practices from HWC and the ECE system.

**Introduction**

Workplaces are an important determinant of health status across professions and workplace health promotion efforts can contribute to reducing socioeconomic inequalities.1 Research shows that the early care and education (ECE) workforce, particularly family child care (FCC) educators, who care for a small group of mixed aged children in a home setting, struggle with wellbeing, mental and physical health.2 For example, one study of FCC educators showed that 62% had high stress scores and nearly 90% were overweight or obese.3 In addition, the demographics of the FCC workforce – disproportionately composed of low-income women of color - place them at higher risk for chronic diseases.2
Despite this need, few evidence-based interventions have been developed or feasibly implemented with this population. For example, the Care2BWell program was a worksite health intervention designed to increase ECE professionals’ physical activity. Process evaluation data from an initial study showed that implementation varied significantly across sites and no improvements in physical activity were observed in participants.4 The Create Health Futures program, a web-based intervention focused on healthy eating among ECE professionals, had no significant impact on diet quality or dietary behaviors.5 In contrast, the Cultivating Healthy Intentional Mindful Educators (CHIME) program, which focuses on the social-emotional health of ECE professionals, has been shown to increase emotional wellbeing and mindfulness in pilot studies.6 These past studies show an ongoing need to design and successfully implement interventions with this population.

One promising approach to supporting FCC providers is building peer support. FCC professionals typically work alone, or with one other adult, and have infrequent contact with other ECE professionals. Health research shows that increasing social support can have significant positive impacts on changing and maintaining health behaviors.7 In the field of early childhood, peer support has been shown to serve as a mediating factor for other behavior and practice-based changes in ECE settings,8 especially with FCC professionals.9 Thus creating peer support may be an effective mechanism for health behavior change with this population.

This report describes the conceptual model and preliminary results for the Shining the Light on You program which is designed to address wellbeing among FCC professionals in a feasible, evidence-based manner.

**Shining the Light on You: Program Components**

The Shining the Light on You FCC Wellbeing Initiative is a 15-week virtual program that integrates evidence-based practices from the Health and Wellness Coaching field10,11 and Early Childhood Education sector.9 The program includes weekly virtual sessions co-facilitated by a Board-Certified Health and Wellness Coach (HWC) and an Early Childhood Technical Assistance Coach, and three individual coaching sessions with the HWC (one at the beginning, middle and end of the program). The weekly sessions include introductions to the group and the tenets of health coaching, discussion of habits, the importance of self-care, goal setting and several weeks of topic-specific sessions with guest speakers. Topics are chosen by the group and have included mindful eating, stress reduction and management, sleep, financial literacy and physical activity. Each week, participants share their progress on their goals, talk through barriers and celebrate successes.

The sessions are specifically designed to 1) develop individual and group wellbeing goals; 2) provide ongoing monitoring and support; and 3) connect participants with one another and with existing community resources to meet goals. HWC is built upon a foundation of behavior change theories, motivational strategies and effective communication approaches from psychology, medicine, public health and other related fields. Table 1 illustrates how program components match best practices from the HWC field.11,12

| Table 1. Shining the Light on You, Program Components Mapped to Health and Wellness Coaching Best Practices |  |  |
| **Health and Wellness Coaching Construct** | **Intervention Application** |
|------------------------------------------|----------------------------|
| Participant-Centered Approach            | - Co-facilitation with early childhood technical assistance coach who has experience with the FCC setting  
- Initial survey and intake forms to assess participant needs  
- Regular check-ins to assess program satisfaction  
- Non-judgmental approach to goal setting and support |
| Participants set goal(s)                 | - Participants set their own goal(s) that are articulated to the Coaches and peers |
| Self-discovery or active learning        | - Sessions are engaging, involve small group/pair discussion and activities, exercise and/or practice |
| Content education                        | - 12 weeks dedicated to participant-chosen wellbeing topics (e.g. mindful eating, physical activity, financial stress)  
- Expert guest speakers and connection to relevant community resources |
| Self-monitoring of progress              | - Weekly check-ins with peers  
- Text message reminders to monitor progress |
| Trusted relationship with Health and Wellness Coach | - Icebreakers with Coaches and peers  
- Individual Coaching sessions with HWC |

**Methods**

**Participants**

Data presented in this report was collected from three previous cohorts of the *Shining the Light on You* program (n= 33) conducted in Delaware. Cohorts took place via Zoom during the Fall of 2020, Spring of 2021 and Spring of 2022. Participants were recruited through the Delaware Institute for Excellence in Early Childhood (DIEEC), a statewide organization that provides training, technical assistance and support for child care educators. DIEEC staff circulated flyers and emails describing the program to all FCC professionals in the county, and interested professionals were referred to program staff for more information.

**Measures**

The program has a research-based, mixed-methods evaluation approach that includes pre- and post-program surveys and post-program interviews. This report includes data from post-program interviews with cohorts 1 and 2 (total n=18), pre-program survey data from all three cohorts (n=33) and linked pre- and post-program survey data from cohort 3 (n=15).
Qualitative Interviews

The post-program qualitative interview guide was designed to gather information about participant experience and suggestions for future improvements. The interview guide also included questions pertaining to participants’ experience with the individual health coaching sessions, as well as their perceptions of the impact of the program on their health and the health of the children and families they serve. The interview guide was developed using best practices from the field of qualitative research and reviewed by experts in the field of evaluation and early childhood education before use.

Pre- and Post-Program Surveys

Participants complete pre- and post-program surveys online via the Qualtrics platform. Survey questions were drawn from validated survey instruments, where possible. Social Support was measured using the ten-item Social Provisions Scale (SPS); physical activity, healthy days and chronic disease status were measured using items from the Behavioral Risk Factor Surveillance system; water consumption was measured using a single item from the Food Attitudes and Behaviors Survey ("On average, about how many cups of bottled or tap water do you drink each day? 8 oz of water is equal to one cup. One standard 16 oz bottle of water equals 2 cups").

Interview Procedures

The one-on-one qualitative interviews were conducted via Zoom by a trained staff member in the weeks following the end of each cohort. After each interview, detailed notes with direct quotes were taken from the video recording. Thematic analysis was conducted using the detailed notes, with illustrative quotes identified for each theme. Participants received a $25 gift card for participating in the interview. All study related procedures were reviewed by the Institutional Review Board of the University of Delaware.

Results

Participant Characteristics

The 18 FCC participants from cohorts 1 and 2 were female, identified as primarily non-Hispanic Black or White, with ages ranging from 39 to 61 years. For cohort 3, all fifteen participants were female and 60% identified as Black or African American. On average, participants reported working more than 56 hours per week and serving about eight children in their programs. More than half of participants (54.5%) reported having diagnosed high blood pressure and only 9.4% of participants reported five or more days of moderate physical activity per week. More information about participants from baseline are provided in Table 2.

Table 2. Characteristics of Program Participants at Baseline, Delaware Shining the Light participants (2020-2022) (all cohorts, n=33)

| Pre-Program (Mean or Frequency) |  |
|---------------------------------|--|
| Hours worked per week           | 56.42 hours |
| Received SNAP benefits within the past year | 11.8% |
|------------------------------------------|-------|
| Number of paid days off built into contracts each year (both vacation and sick time) | 9.89 days |

| Health Status Indicators | |
|--------------------------|-------|
| Number of days physical health not good in the past 30 | 6.31 days |
| Number of days mental health not good in the past 30 | 7.43 days |
| High Blood Pressure | 54.5% |
| Diabetes | 9.1% |
| Pre-Diabetes or borderline Diabetes | 18.8% |
| Asthma | 6.1% |
| No participation in physical activity or exercise in past month | 25.0% |
| Participation in 5+ days per week of moderate physical activity | 9.4% |

**Pre- and Post-Program Survey Results:** For cohort 3 (n=15), total mean score on the Social Provisions Scale (SPS) increased from pre- to post-program (paired t-test; p=0.028). Participants reported more frequent engagement in physical activity and greater water consumption. Before the program, six participants (50% of those with paired surveys) reported never engaging in moderate physical activity. After the program, all six of these participants reported engaging in moderate PA at least once per week, with three of those original six participants engaging in PA three or more days per week. A similar pattern emerged with water consumption; half of participants reported infrequent water consumption (1-3 cups per day) at the beginning of the program and all of these respondents increased their water consumption by the end of the program.

**Qualitative Interview Results:** Twelve of eighteen participants from cohorts one and two engaged in the post-program interviews. Participants from both cohorts described how participating in the program positively influenced their health, their role as a FCC provider, and how they engage with the children they serve. Many also described the positive impact of being surrounded by other FCC providers throughout the program.
Impact on Health

Improvements in areas of nutrition, physical activity, sleep, and stress were commonly mentioned throughout the interviews. As one participant remarked, “I’m sleeping more, I’m drinking more water, and I’m losing weight.” Another participant expressed a similar sentiment and built upon the importance of her changes, “Well, I’m working out now... three times a week I have to do it or I have to do it. I don’t have any choice because it’s good for me. It’s good for my mind. It’s good for... everyone around me too... it takes the stress out.”

commented on the connections between all components of wellbeing and the importance of self-care. One participant explained, “I’m more aware how important it is what I feed my body, not just food, you know... And how important it is to care for me so I can care for everybody else.” Similarly, another participant said, “It’s just about the focus on me and you know taking care of me. Like because that’s where it all begins, you know. [If] we’re not taking care of ourselves then I mean daycare, personal, everything can kind of go down the drain.”

Impact on Children and Families

Participants also mentioned that the program positively influenced the ways they engage with the children and families they serve. One participant described, “Because when you’re stressed and you feel like everything’s falling apart in the house, it’s really hard to be pleasant and want to, you know, sit and read books and enjoy time with the kids. So I do feel like it has put me in a better frame of mind, which makes me react to the children in a much better way.” Many participants also discussed how specific program topics, such as nutrition and physical activity, influenced how they care for the children. As one participant explained, “Now since I’m eating more vegetables and stuff during the day, they’re getting healthier snacks and things too.”

Importance of Connecting with Other Providers

One final theme that was common throughout the interviews was the importance of having the opportunity to share and feel connected with other FCC providers. One participant remarked, “It let me know that I wasn’t the only one going through what I was going through and listening to the other providers, it made me feel as though, okay, I can get through this... Listening to some of the stories and everybody opening up and sharing with one another.” Similarly another participant said, “Listening to everybody’s story made me realize mine wasn’t so bad, it doesn’t seem. And that we’re all going through this together. We’re all going through something and having that group felt like, okay I can say this and I feel good about it.”

Discussion

Combining Health and Wellness Coaching practices with ECE Technical Assistance is a promising approach for engaging with the FCC community in a meaningful and impactful way. Participants reported improvements in a variety of health and wellbeing indicators both for themselves and for the children in their care. In particular, participants reported increases in social support, physical activity levels and water consumption in both surveys and interviews. Our results contrast with the lack of impact found from other worksite wellbeing programs for this population, though these other programs were narrowly focused on a sub-set of health behaviors (e.g. nutrition, physical activity) and did not include explicit focus on peer support.

Data from the first three cohorts of the program further underscored FCC providers’ need for health promotion. Providers struggle with nutrition, physical activity and stress levels that
contribute to their overall wellbeing and can influence their ability to provide high quality care. Emerging research across ECE settings suggests that poor provider wellbeing can contribute to lower classroom quality, including increased conflict and negative reactions in relationships with children, and decreased job commitment. Poor provider wellbeing may also influence children’s social-emotional development.

This study had significant strengths, including multiple cohorts over several years, connection to the evidence-base from both health coaching and early childhood and use of validated survey instruments. That said, the study had several limitations that should be considered. First, all cohorts were implemented in Delaware with licensed professionals, the majority of whom were already connected to ECE systems. Thus, our results may not translate to intervention effectiveness in unlicensed care settings or among professionals who are not connected to systems. Secondly, while the pre- and post-program survey results were triangulated with qualitative interviews, the lack of a comparison/control group limits our ability to assess causality. Future studies of Shining the Light will include more robust research designs (e.g. experimental designs) that will allow the research team to continue to develop evidence of effectiveness along with establishing mediating factors for health behavior change.

Public Health Implications

Despite widespread call for an increase in workforce wellbeing initiatives, few feasible and effective programs have been designed for this population. Thus far, The Shining the Light on You program has shown that focusing on the unique needs of FCC providers can result in the adoption of healthy lifestyle behaviors that improve their quality of life and the ways they interact with the children and families they serve. Future research is underway to further document the impact of the intervention on the health of the providers.

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References

1. van de Ven, D., Robroek, S. J. W., & Burdorf, A. (2020, September). Are workplace health promotion programmes effective for all socioeconomic groups? A systematic review. Occupational and Environmental Medicine, 77(9), 589–596. PubMed https://doi.org/10.1136/oemed-2019-106311

2. Lessard, L. M., Wilkins, K., Rose-Malm, J., & Mazzocchi, M. C. (2020, January 8). The health status of the early care and education workforce in the USA: A scoping review of the evidence and current practice. Public Health Reviews, 41, 2. PubMed https://doi.org/10.1186/s40985-019-0117-z

3. Tovar, A., Vaughn, A. E., Grummon, A., Burney, R., Erinosho, T., Østbye, T., & Ward, D. S. (2016, November 14). Family child care home providers as role models for children: Cause for concern? Preventive Medicine Reports, 5, 308–313. PubMed https://doi.org/10.1016/j.pmedr.2016.11.010

4. Neshteruk, C. D., Willis, E., Smith, F., Vaughn, A. E., Grummon, A. H., Vu, M. B., . . . Linnan, L. (2021, July 29). Implementation of a workplace physical activity intervention in child care: Process evaluation results from the Care2BWell trial. Translational Behavioral Medicine, 11(7), 1430–1440. PubMed https://doi.org/10.1093/tbmt/ibab034
5. Mofleh, D., Chuang, R. J., Ranjit, N., Cox, J. N., Anthony, C., & Sharma, S. V. (2022, June 27). A cluster-randomized controlled trial to assess the impact of a nutrition intervention on dietary behaviors among early care and education providers: The Create Healthy Futures study. *Preventive Medicine Reports, 28*, 101873. PubMed [https://doi.org/10.1016/j.pmedr.2022.101873](https://doi.org/10.1016/j.pmedr.2022.101873)

6. Hatton Bowers, H., Calvi, J., Chen, F., Foged, J., Gottschalk, J., & Werth, L. (2018). A multidimensional perspective of the effects of a mindfulness intervention on the well-being of early childhood teachers. presented at: International Society of Psychoneuroendocrinology, Irvine, CA.

7. Hurdle, D. E. (2001, May). Social support: A critical factor in women’s health and health promotion. *Health & Social Work, 26*(2), 72–79. PubMed [https://doi.org/10.1093/hsww/26.2.72](https://doi.org/10.1093/hsww/26.2.72)

8. Rojas, J. P., Nash, J. B., & Rous, B. S. (2019, March). Discovering childcare providers’ coaching needs with design thinking techniques. *Early Child Development and Care, 189*(4), 613–624. [https://doi.org/10.1080/03004430.2017.1336166](https://doi.org/10.1080/03004430.2017.1336166)

9. Hallam, R., Hooper, A., Buell, M., Zigler, M., & Han, M. (2019). Boosting family child care success in quality rating and improvement systems. *Early Childhood Research Quarterly, 47*(2), 239–247. [https://doi.org/10.1016/j.ecresq.2018.12.008](https://doi.org/10.1016/j.ecresq.2018.12.008)

10. Olsen, J. M., & Nesbitt, B. J. (2010, September-October). Health coaching to improve healthy lifestyle behaviors: An integrative review. *Am J Health Promot, 25*(1), e1–e12. PubMed [https://doi.org/10.4278/ajhp.090313-LIT-101](https://doi.org/10.4278/ajhp.090313-LIT-101)

11. Wolever, R. Q., Simmons, L. A., Sforzo, G. A., Dill, D., Kaye, M., Bechard, E. M., . . . Yang, N. (2013, July). A systematic review of the literature on health and wellness coaching: Defining a key behavioral intervention in healthcare. *Glob Adv Health Med, 2*(4), 38–57. PubMed [https://doi.org/10.7453/gahmj.2013.042](https://doi.org/10.7453/gahmj.2013.042)

12. Armstrong, C., Wolever, R. Q., Manning, L., Elam, R., III, Moore, M., Frates, E. P., . . . Lawson, K. (2013, May). Group health coaching: Strengths, challenges, and next steps. *Glob Adv Health Med, 2*(3), 95–102. PubMed [https://doi.org/10.7453/gahmj.2013.019](https://doi.org/10.7453/gahmj.2013.019)

13. Creswell, J., & Poth, C. (2018). *Qualitative inquiry and research design: Choosing among five approaches (4th edition).* SAGE Publications, Inc.

14. Cutrona, C., & Russell, D. (1987). The provisions of social relationships and adaptation to stress. *Advances in personal relationships, 1*(1), 37-67.

15. Centers for Disease Control and Prevention. (2020). Behavioral risk factor surveillance system survey questionnaire. U.S. Department of Health and Human Services.

16. Erinosho, T. O., Pinard, C. A., Nebeling, L. C., Moser, R. P., Shaikh, A. R., Resnicow, K., . . . Yaroch, A. L. (2015, February 23). Development and implementation of the National Cancer Institute’s Food Attitudes and Behaviors Survey to assess correlates of fruit and vegetable intake in adults. *PLoS One, 10*(2), e0115017. PubMed [https://doi.org/10.1371/journal.pone.0115017](https://doi.org/10.1371/journal.pone.0115017)

17. Whitaker, R. C., Deearth-Wesley, T., & Gooze, R. A. (2015). Workplace stress and the quality of teacher-child relationships in Head Start, 30, 57-69. doi:
18. Buettner, C. K., Jeon, L., Hur, E., & Garcia, R. E. (2016, October). Teachers’ social-emotional capacity: Factors associated with teachers’ responsiveness and professional commitment. Early Education and Development, 27(7), 1018–1039. https://doi.org/10.1080/10409289.2016.1168227

19. Luckey, S. W., Lang, S. N., & Jeon, L. (2021, November). Examining associations among provider-family relationships, provider coping strategies, and family child care providers’ relationships with children. European Early Childhood Education Research Journal, 29(6), 877–894. https://doi.org/10.1080/1350293X.2021.1985556

20. Roberts, A., LoCasale-Crouch, J., Hamre, B., & DeCoster, J. (2016, July). Exploring teachers’ depressive symptoms, interaction quality, and children’s social-emotional development in Head Start. Early Education and Development, 27(5), 642–654. https://doi.org/10.1080/10409289.2016.1127088

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