

# RESEARCH BRIEF

An update on HDI's research in the field of developmental disabilities

## Healthier Together! A Dyad Approach to Inclusive Health & Wellness Programming

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### Background

For people with disabilities, maintaining health and wellness is essential to self-sufficiency, becoming or staying independent, actively participating in the community, and preventing the onset of secondary health conditions. However, people with disabilities typically have poorer health than the general population and have drastically higher rates of obesity and related conditions (Centers for Disease Control and Prevention, 2010). 2014 Kentucky National Core Indicators data indicate that Kentuckians with intellectual or developmental disabilities (IDD) are at extreme disadvantage related to health and wellness outcomes. Over 70% of surveyed Kentuckians with IDD were overweight or obese, with only 19% engaging in at least 30 minutes of moderate physical activity for at least three days a week (Human Services Research Institute & NASDDDS, 2015). It is clear that improved health and wellness programming efforts aimed at improving health outcomes for individuals with disabilities are greatly needed. However, when it comes to health disparity interventions and research, there is a lack of accessibility for diverse learners. Employing universal design for learning (UDL) principles would mean that these critical health programs would more fully engage the target population of adults with IDD. This gap in research and practice calls for further examination of health and wellness programs that incorporate principles of UDL in both its delivery and development (Perlow, 2011).

This research brief highlights the pilot efforts of the Health Partners project that works to incorporate a dyad social structure with inclusive UDL strategies for health and wellness programming geared towards individuals with IDD and a partner of their choice.

### Program Overview

In order to address the issue of accessible health promotion programming for this underserved population, the Health Partners project utilizes Healthy Lifestyles for People with Disabilities curriculum, which embodies a holistic approach to health with a focus on self-determination. This curriculum is designed for individuals with disabilities.

Healthy Lifestyles for People with Disabilities was developed based on the input of individuals with a disability who were contacted to participate in focus groups to discuss the current issues related to living healthy lifestyles. There have been two studies that examine the effectiveness of the curriculum conducted by Abdullah et al. (2004) and Horner, Johnson, Drum, & Abdullah (2011). Both studies utilized a delayed intervention methodology to compare pre and post-test scores on the Health Promoting Lifestyle Profile II (HPLP-II). This instrument measures health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management on a 4-point scale which indicates how often an individual engages in a behavior or feels a specific way. Both studies found statistically significant increases in scores on the HPLP-II after engaging in the program. Additionally, these increases were maintained three, six, and nine months after the original workshop (Abdullah et al., 2004; Horner, Johnson, Drum, & Abdullah, 2011). While the curriculum resulted in improvement in health and wellness behaviors for individuals with IDD, increasing the accessibility to the curriculum will also promote its usage across a wider variety of inclusive settings and varying abilities.

In order to offer this curriculum in the most effective and inclusive settings, an expert panel provided review and made recommendations for curriculum updates. UDL principles were incorporated and the curriculum adapted to be most appropriate for a wider participant range and for differing levels of abilities or learning styles. The UDL approach to training ensures that various learning styles are accommodated by guaranteeing that the materials are presented in multiple ways, by allowing multiple means of engaging the learners, and by allowing the learners to express their understanding in a variety of ways. Additionally, the curriculum was adapted for use with a dyadic approach in which the person with a developmental disability selects a health partner with whom he or she completes the self-directed health promotion activities. Each dyad member is able to choose a health goal that may be different from his or her partner's goal. The benefits of a dyadic approach to health promotion programming goes beyond increased positive health outcomes for all participants, including those with and without developmental disabilities (Reed, Butler, & Kenny, 2013). Other benefits to successful healthy behavior change and sustainability include having someone to encourage, motivate, and hold the other dyad member accountable. Additionally, positive outcomes can be achieved in the areas of loneliness and relationship building as a result of a community approach to programming; this also includes employment and other quality of life factors (Fitzpatrick, 2009).

Participants self-determine the health component that is of most interest to them and work toward positive changes in that specific area. The Health Partners project provides participants the necessary tools to evaluate their current lifestyle and support their progress in implementing healthy behaviors in an inclusive and community focused environment.

## Method and Research Questions

The updated curriculum was piloted with a group of six dyads comprising of six individuals with disabilities paired with six caregivers consisting of five natural supports and one paid support worker. The pilot population was divided into two groups to accommodate schedule availability. Pilot Group A met during the day and Pilot Group B met in the evenings. Programming totaled 12 hours of initial workshop instruction to be delivered within a 2 week period at a community inclusive location. Consecutive 2 hour follow-up meetings were conducted once a month for the following 6 months, however Pilot Group A elected to wait one month post the initial workshop programming due to scheduling conflicts over the holiday season and began their six follow-up sessions at the start of the new year. Having monthly support groups for a minimum of 6 months after the workshop is important to the overall success of each participant as the support groups

provide participants with educational opportunities, a forum to discuss their goals, and a chance to meet with the friends they made during the workshop.

In addition to evaluation materials from the Healthy Lifestyles for People with Disabilities curriculum, a form was created specifically asking about dyad interaction on health behaviors and participation outcomes. All instruments were administered in a paper format.

The evaluation breakdown is represented in the table below:

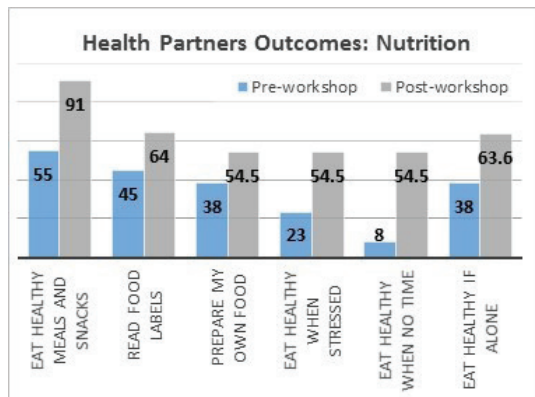
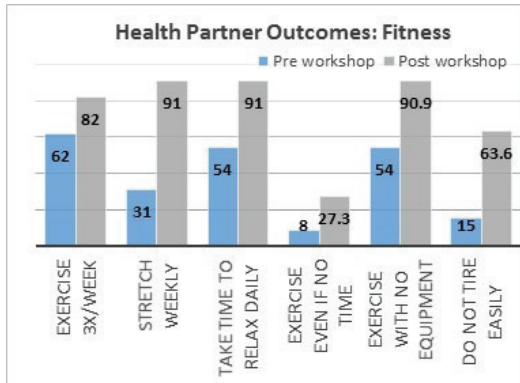
Instrument	Description	Baseline	After 12hr Workshop	Monthly	3 Month Follow-up	6 Month Follow-up
Participant Information	Demographic Information	√				
Pre-Workshop Questionnaire	Ratings of preexisting knowledge on components of health	√				
Post-Workshop Questionnaire	Ratings of knowledge on components of health after workshop		√			
Health Behaviors	Completion of specific health behaviors	√			√	√
Health Care Utilization	Access to health care and communication with doctors	√				√
'Your Health' Evaluation	Ratings of general health, emotional health, and health conditions	√			√	√
Self-Efficacy Questionnaire	Feelings of self efficacy in regard to performance on health variables	√				√
Goal Tracking Form	Progress on goals and barriers to success			√	√	√
Dyad Evaluation	Evaluation of the partner relationship		√			√

## Results

Overall, positive changes were seen across each of the 12 participant responses. Figures 1 - 5 demonstrate the most notable positive changes reported by participants between baseline and at the 6 month follow up meeting.

Figure 1 highlights some of the positive changes seen over time related to physical activity. Overall, participants reporting engaging in physical activity at least three times per week increased by 20%, and a 60% increase was seen in weekly stretching. Participants reported a 37% increase in taking the time to relax which is important for overall wellness. Exercising in spite of limited time increased a total of 19.3% while exercising without equipment showed an increase of 36.9% demonstrating successful health promotion strategies in programming that supports individuals to overcome certain barriers to exercising such as time and equipment availability. Also within the data for physical responses, only 15% of participants reported that they did not tire easily. This number increased to 63.6% at the conclusion of the program.

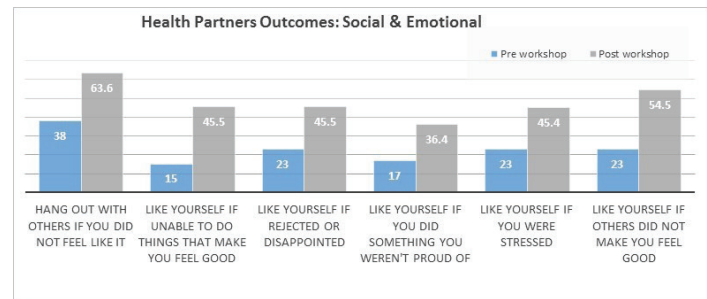
**Figs. 1 & 2: Health Partner Outcomes: Physical Activity and Nutrition**



Healthy nutrition is commonly a topic of focus for many individuals looking to improve their health and wellbeing. Figure 2 demonstrates where participant responses for the nutrition-based evaluators showed improvements in eating healthy meals and snacks (36%), reading food labels (19%), and self-preparing food (16.5%). These results demonstrate the effectiveness of healthy nutrition education providing participants with the resources and tools to feel successful in knowing how to engage in a healthy diet. Additionally participants reported being able to eat more healthy on a consistent basis, with increases in eating healthy while stressed (31.5%), when alone (25.6%), and the most impressive positive increase being to eat healthy with limited time (46.8%).

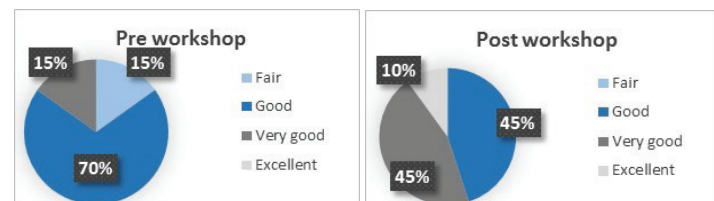
As seen in Figure 3, participants also experienced positive increases in social and emotional outcomes. The likelihood of hanging out with friends and family even when the individual did not feel like it increased 25.6% showing that the interaction of social supports had positive impact on participant wellness. Positive results were reflected in participant responses for liking themselves in spite of negative barriers such as if they were stressed (22.4%), did something they weren't proud of (19.4%), were rejected or disappointed (22.5%), were not able to do things that made them feel good about themselves (30.5%), and if the people around them did not make them feel good about themselves (31.5%).

**Fig. 3: Health Partner Outcomes: Social and Emotional**



Lastly, Figures 4 and 5 show the difference in how participants reported their general health at baseline and at the 6 month follow-up. Initially, no participants rated their health as 'Excellent'. After programming, 10% of participants reported 'Excellent' health with an increase of 30% for reporting 'Very Good Health' and a drop to 0 for 'Fair' health. These improvements exhibit how programming improved individual's self-view of their health status, reflecting the positive changes participants experienced in feeling better and healthier and making successful and supported healthier choices. Additionally, although not included in data charts, there was a 17% increase in overall life satisfaction amongst participants following programming.

**Figs. 4 & 5: Pre-workshop and Post-workshop**



## Conclusion

The overwhelmingly positive outcomes for participants post-programming demonstrates the effectiveness of the Health Partners Project in providing successful self-determined health promotion programming. Within the dyads, both partners experienced positive outcomes as a result of programming across all areas of health and evaluation.

One limitation of this pilot study is the small sample size. Additionally, there was attrition at the 6-month follow up of one individual due to personal circumstances. As a result of this small sample size, the outcomes may be sensitive to small changes in the data indicating that the findings should be interpreted with that in mind. Based on the promising findings, a larger scale study is being implemented in order to expand the current research and practices on inclusive health and wellness curricula.

## References

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## About HDI Research Briefs

**HDI Research Briefs** were initiated to highlight the research activities at HDI. Projects at HDI focus on individuals with disabilities and include projects with emphases in early childhood, school age persons, adults, and issues across the lifespan. Many of these projects have significant research components and involve HDI staff, students in graduate programs, and other faculty at UK. With each issue of **HDI Research Briefs**, we will try to provide a cross-section of HDI's research activities. The brief reports are typically "mini" versions of more involved studies. The brief reports are intended to give an overview of the research project and emphasize the implications of the studies.

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