

Using a Walk Challenge to Promote Physical Activity among Preschool Head Start Staff and Parents/Caregivers

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Introduction

- Obesity prevalence in children 2-5 years of age has increased from 12.4% (1998) to 14.8% (2008), with one in seven children from low-income families being obese (*Pediatric Nutrition Surveillance -PedNSS, 2008 CDC Report*).
- Nearly 50% of preschool-age children in Head Start programs in Boston are overweight or obese (*Worthley, E. personal communication*).
- Parental participation in physical activity (PA) is positively correlated with increased PA in children (*Sallis, Prochaska, and Taylor 2000*). Young children learn new behaviors by modeling those of their parents/caregivers (*Golan & Crow, 2004*).
- The **purpose** of this study was to determine whether a 6-week spring Walk Challenge would result in increased PA (≥ 60 minutes per day) and reduced TV viewing time (number of hours) among parents/caregivers and Head Start staff of preschool-age children.

Study Design

- Healthy Kids, Healthy Futures (HKHF) is a multi-level initiative that aims to prevent childhood obesity by supporting health promoting environments where preschool age children live (home), learn (childcare) and play (community).
- HKHF partners with the Action for Boston Community Development Inc. (ABCD) Head Start, the City of Boston's, Boston Centers for Youth & Families (BCYF), and the Boston Public Health Commission (BPHC) to provide programming, education and training in childcare, home and community settings.
- HKHF works with four Head Start programs in Boston, MA.
- HKHF consists of two main programmatic components:
 - Community-Based Physical Activity Promotion for Children and Families.
 - Nutrition and Physical Activity Promotion in Home and Childcare.
 - As part of this component the Walk Challenge was developed and evaluated as described below.

Methods

- A 6-week spring Walk Challenge was run for caregivers (n=31) and staff (n=40) at the HKHF Head Start sites (HKHF Group).
- Participants walked in teams of two to complete a distance of 210 miles.
- All participants received a walking kit with information on reducing screen time, a pedometer and a water bottle.
- A non-HKHF site was used as the Comparison Group (n=31).
- All participants completed a pre/post survey to determine changes in physical activity and screen time.
- Participants completing the Walk Challenge received a certificate of participation and farmer's market coupons and were entered into a raffle to win various prize items.

Results

Spring Walk Challenge Participants

	Parents/Caregivers		Staff		Total
	N	%	N	%	
HKHF Group	31	44	40	56	71
Comparison Group	15	48	16	52	31
Total	102				

There were no pre-Walk Challenge, differences between parents/caregivers in the two groups and Head Start staff members in the two groups.

Spring Walk Challenge Effects on Physical Activity and TV Viewing Time among Parents/Caregivers and Head Start Staff

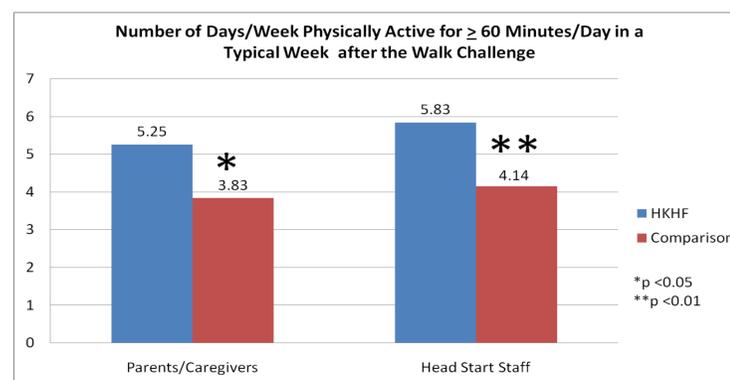


FIGURE 1 Parents/caregivers and Head Start staff in the HKHF Group were significantly more physically active for at least 60 minutes per day in a typical week than their counterparts in the Comparison Group after the 6-week spring Walk Challenge.

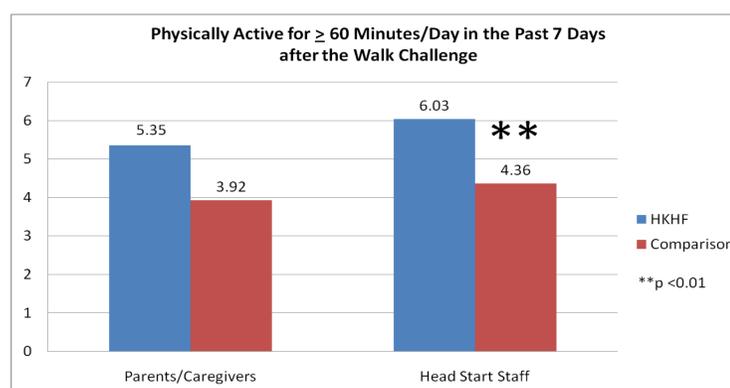


FIGURE 2 Head Start staff in the HKHF Group were significantly more physically active in the past seven days compared with Head Start staff in the Comparison Group after the 6-week Walk Challenge.

Results

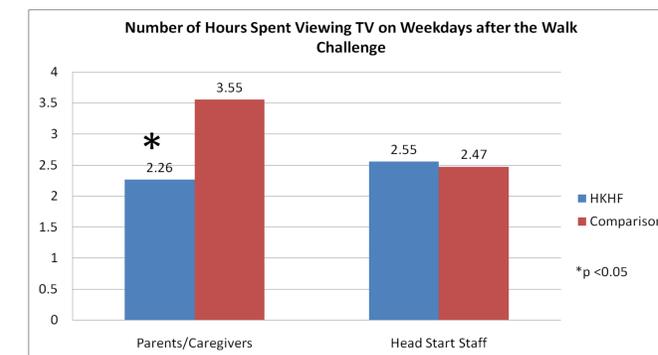


FIGURE 3. Parents/caregivers in the HKHF Group spent significantly fewer hours on weekdays viewing TV than those in the Comparison Group after the 6-week spring Walk Challenge. There were no differences for either group with regard to viewing TV on weekends.

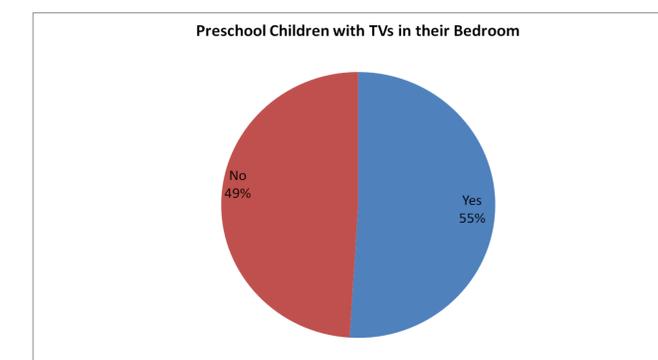


FIGURE 4. Percentage of parents/caregivers with preschool age children having a TV in their bedroom.

Summary and Conclusions

- Caregivers who participated in the Walk Challenge were more physically active (≥ 60 min/d) in a typical week and spent fewer hours on weekdays viewing TV than the Comparison Group.
- Similarly Head Start staff who participated in the Walk Challenge were more physically active in the past 7 days than the Comparison Group.
- The number of weeks Head Start staff participated in the Walk Challenge was associated with the number of days they reported being physically active in the past 7 days ($r=0.37$; $p<0.01$).
- To our knowledge, HKHF is the only obesity prevention initiative targeting preschool age children and their caregivers in the City of Boston.
- HKHF's Walk Challenge improved PA and reduced screen time among Head Start staff and parents/caregivers of preschool-age children.
- More research is needed to determine how PA promotion with caregivers influences children's behavior and health outcomes.

Acknowledgments

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