

# Effectiveness of an Online Education Program to Improve Knowledge and Attitudes about Mandatory Reporting for Early Childhood Care and Education Providers

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Early experiences of adversity such as abuse are associated with serious short- and long-term negative consequences (Anda et al., 2006; Fantuzzo et al., 2011; Manly et al., 2001; Pears et al., 2008).

Though 0–5 year olds account for 46% of the >680,000 children identified annually as victims of maltreatment (U.S. DHHS, 2017), early care and education (ECE) providers report just 0.6% of these.

To the extent this inactivity indicates underreporting, it emphasizes ECE providers' crucial role for protecting young children from abuse.

Among the barriers to reporting suspected abuse (Alvarez et al., 2004; Dinehart & Kenny, 2015), one key obstacle is the lack of evidence-based training. A recent IOM report (2014) specifically identified the need to examine the efficacy of mandated reporter education programs.

Two small studies looked at in-person training for ECE providers (McGrath et al., 1987; Khan et al., 2005), and one evaluated an online curriculum (Kenny, 2007); but none evaluated scalable interventions.

The present study examined the efficacy of a scaled online educational program previously shown in a randomized controlled trial (n=741) to improve knowledge and attitudes about reporting suspected abuse (Mathews et al., 2017).

## Methods

The present study employed a single group pretest-posttest design to measure changes among 5379 participants from Pennsylvania (see Table 1) regarding *knowledge* about ECE providers' responsibilities to report suspected abuse (23 items, correct/incorrect), and *attitudes* toward reporting suspected abuse (13 items, 7-point Likert scale).

Created specifically for ECE providers, the *iLookOut* online learning program employs an interactive, video-based storyline where learners take the role of an ECE provider faced with decision points on how to respond to indicators of potential abuse.

**Table 1**

Demographics for the study sample (n=5379)

	%
<b>Ethnicity</b>	
Black/African-American	19.5
White	71.4
Hispanic	5.2
Asian	1.6
Native Hawaiian/Pacific	.1
Islander	
American Indian/Alaska Native	.4
Other	1.8
<b>Parent/guardian</b>	
Yes	60.2
<b>Prior mandated reporter training</b>	
Yes	74.4
<b>Work setting</b>	
Rural	17.9
Suburban	45.2
Urban	36.9
<b>Education level</b>	
Below High School	.7
High School or GED	31.9
Child Development Associate (CDA)	10
Associate's Degree	14.8
Bachelor's Degree	31.6
Masters or Doctoral	11
<b>Gender</b>	
Female	90.5
<b>Age</b>	
18 - 29	39.4
30 - 44	28.8
>44	31.8
<b>Primary job responsibilities</b>	
Teacher/caregiving staff	64.2
Early intervention specialist	1.4
Support staff	4.8
Director/Assistant Director	10
Other	19.7

Resource files provide information about child abuse, and guidance about when to report. For this Phase 2 open enrollment trial, ECE providers could access the *iLookOut* learning program through publicly available websites, but participants were not actively recruited. Participants provided informed consent prior to the registration/pre-test, and earned 3 hours of professional development credit by completing the learning program, post-test, and evaluation. No other incentives or remuneration were provided.

## Results

One-way repeated measures ANOVA were conducted to compare the effects of *iLookOut* participation on pretest and posttest measures of knowledge and attitude.

Testing for main effects only yielded significant results for knowledge: Wilks'  $\lambda = 0.508$ ,  $F(1,5433) = 5256.964$ ,  $p < 0.001$ ; partial  $\eta^2 = 0.492$  and attitude: Wilks'  $\lambda = 0.576$ ,  $F(1,5432) = 4000.369$ ,  $p < 0.001$ ; partial  $\eta^2 = 0.424$  (see Fig. 1).

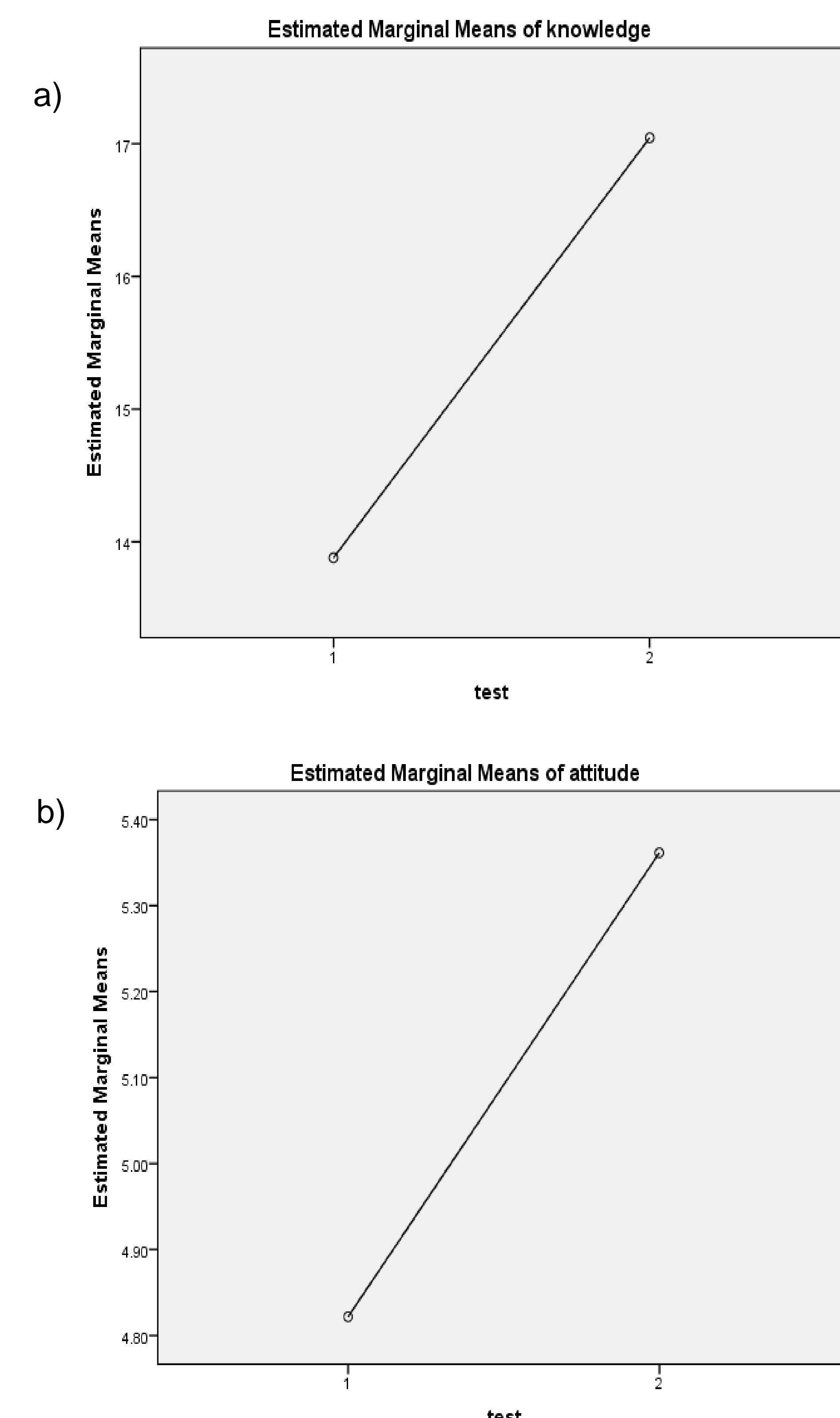


Figure 1. Mean difference between pre- and post-test on knowledge (a) and attitude (b) items. Significant at  $p < 0.001$ .

There was a significant interaction effect for knowledge and prior training on mandated reporting: Wilks'  $\lambda = 0.995$ ,  $F(1,5375) = 27.603$ ,  $p < 0.001$ ; partial  $\eta^2 = 0.005$  (see Fig. 2). Main effects of the online training on knowledge performance were still significant: Wilks'  $\lambda = 0.554$ ,  $F(1,5375) = 4335.154$ ,  $p < 0.001$ ; partial  $\eta^2 = 0.446$ . This highlights gains on posttest performance even though participants had prior training in mandated reporter

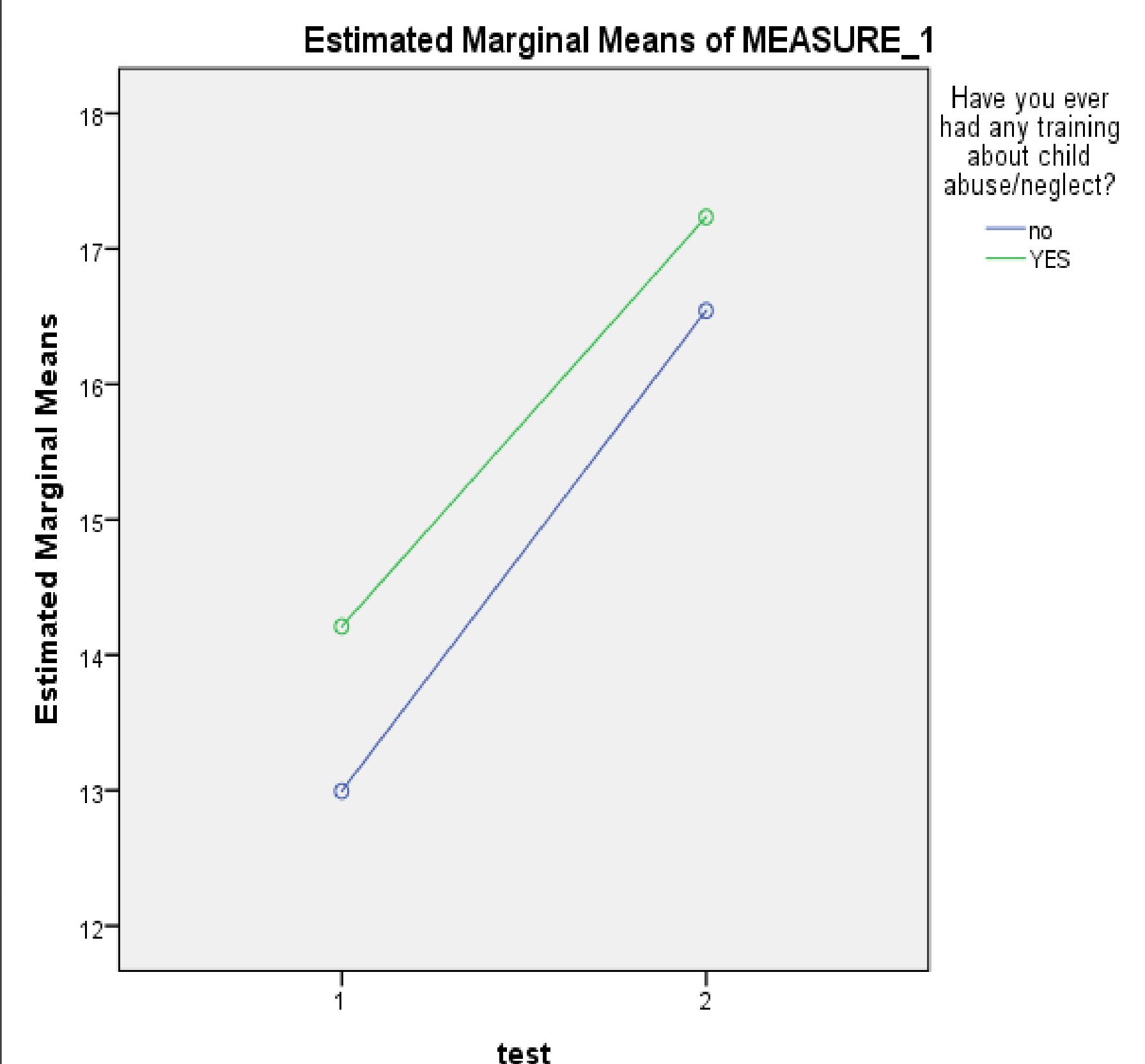


Figure 2. Mean difference between pre- and post-test on knowledge for participants with and without prior training

## Discussion

Results from this study yielded the similar efficacy and effect sizes as did the initial randomized controlled trial of *iLookOut*.

They also demonstrate the feasibility of scaling an evidence-based, online mandated reporter training. Providing ECE providers open access to such training could help identify and prevent maltreatment of young children.

A 5-year randomized controlled trial is currently underway (1-R01-HD088448-02) to evaluate the impact of *iLookOut* on actual reporting practices of ECE providers.