

BEPA 2.0 ONLINE TRAINING: EFFECTIVENESS AND IMPLICATIONS FOR PRACTICE

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PURPOSE

- BE Physically Active 2Day (BEPA 2.0) is a school-based physical activity (PA) program aligned to national physical education (PE) and health education standards.
- Program implementation is supported via trainings delivered through several pathways, including in-person, remote, and asynchronous online.
- Our aims were to evaluate the effectiveness of the asynchronous training approach and compare training outcomes between asynchronous and in-person delivery.

METHODS

Training Development

- The in-person BEPA 2.0 training was replicated in an online, asynchronous environment.
- Topics presented included PA intensity, school-based PA, PE, using BEPA 2.0, and inclusion strategies.
- Learning materials included lecture videos, readings, discussion activities, and self-check quizzes.
- Some in-person training activities (e.g., activity demonstration) were less transferable to the online environment.

Design

- In-person BEPA 2.0 training was provided to ~900 educators between June 2018 and February 2020.
- In-person training participants completed post-training surveys assessing their knowledge and confidence to deliver BEPA 2.0. Surveys were completed in-person on paper.
- Online, asynchronous BEPA 2.0 training was provided to 145 Oregon educators between June 2021 and March 2023.
- Asynchronous participants completed pre- and post-training surveys assessing their knowledge and confidence to deliver BEPA 2.0. Surveys were completed online via Qualtrics.

Measures

- Demographic data were collected and training outcomes were assessed via 12 questions about participants' knowledge and confidence to deliver the BEPA 2.0 program.
- Training outcomes were measured on a 5-point Likert scale, ranging from *Strongly Disagree* to *Strongly Agree*. In-person outcomes were previously measured on a 4-point scale, excluding a *Neither Agree or Disagree* option.

Table 1: Roles of asynchronous and in-person training participants

Role	In-Person N (%)	Async. N (%)	p-value
Classroom Teacher	309 (66.3%)	19 (25.0%)	< 0.001
Education Assistant	72 (15.5%)	24 (31.6%)	< 0.001
PE Teacher	16 (3.4%)	12 (15.8%)	< 0.001 ^a
Extension faculty/staff	7 (1.5%)	6 (7.9%)	0.005 ^a
Other	62 (13.3%)	15 (19.7%)	0.136

^a Fisher's exact test used due to small sample size

Figure 1: Comparison of pre- and post-asynchronous training scores (N=76)

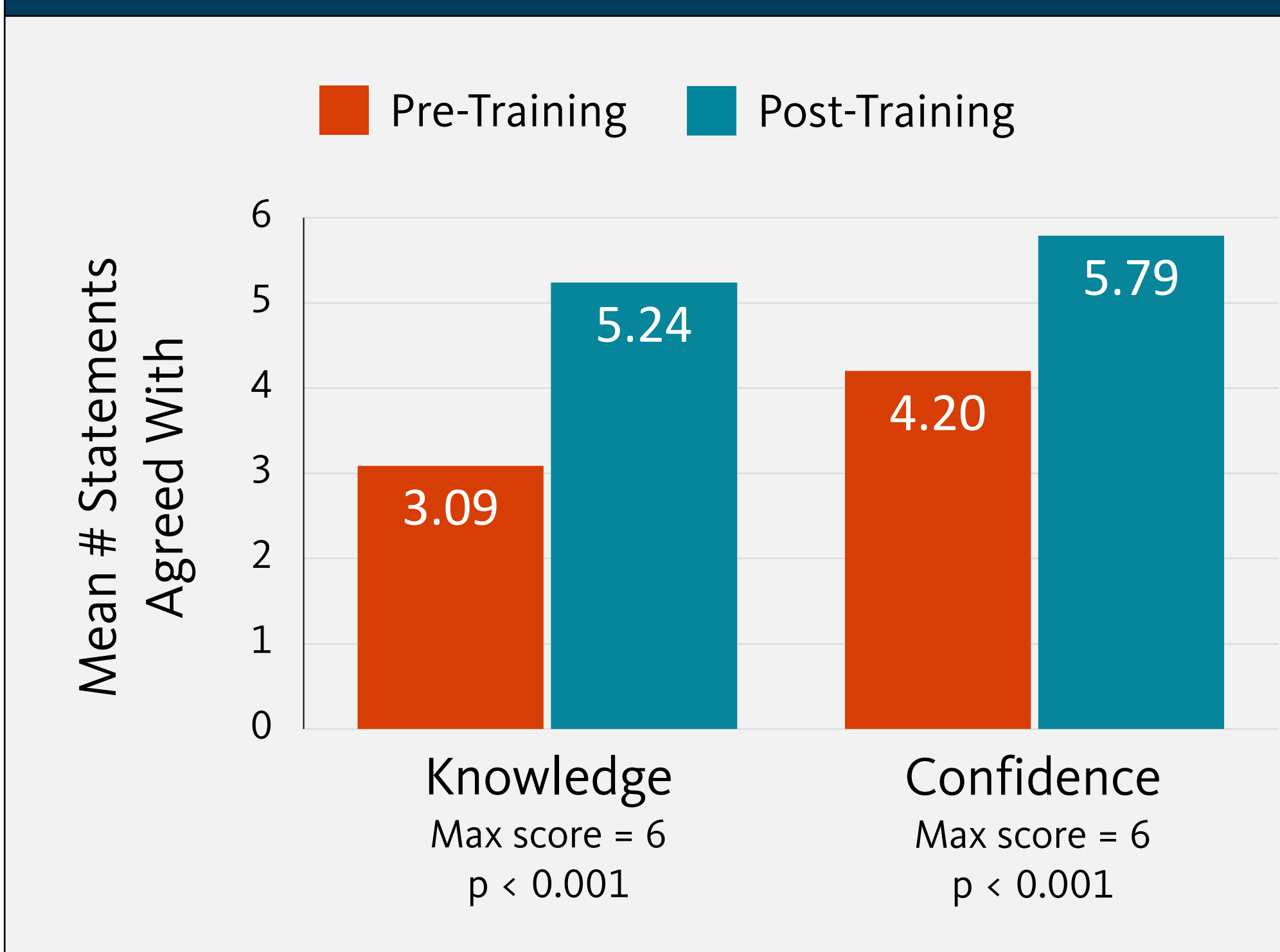
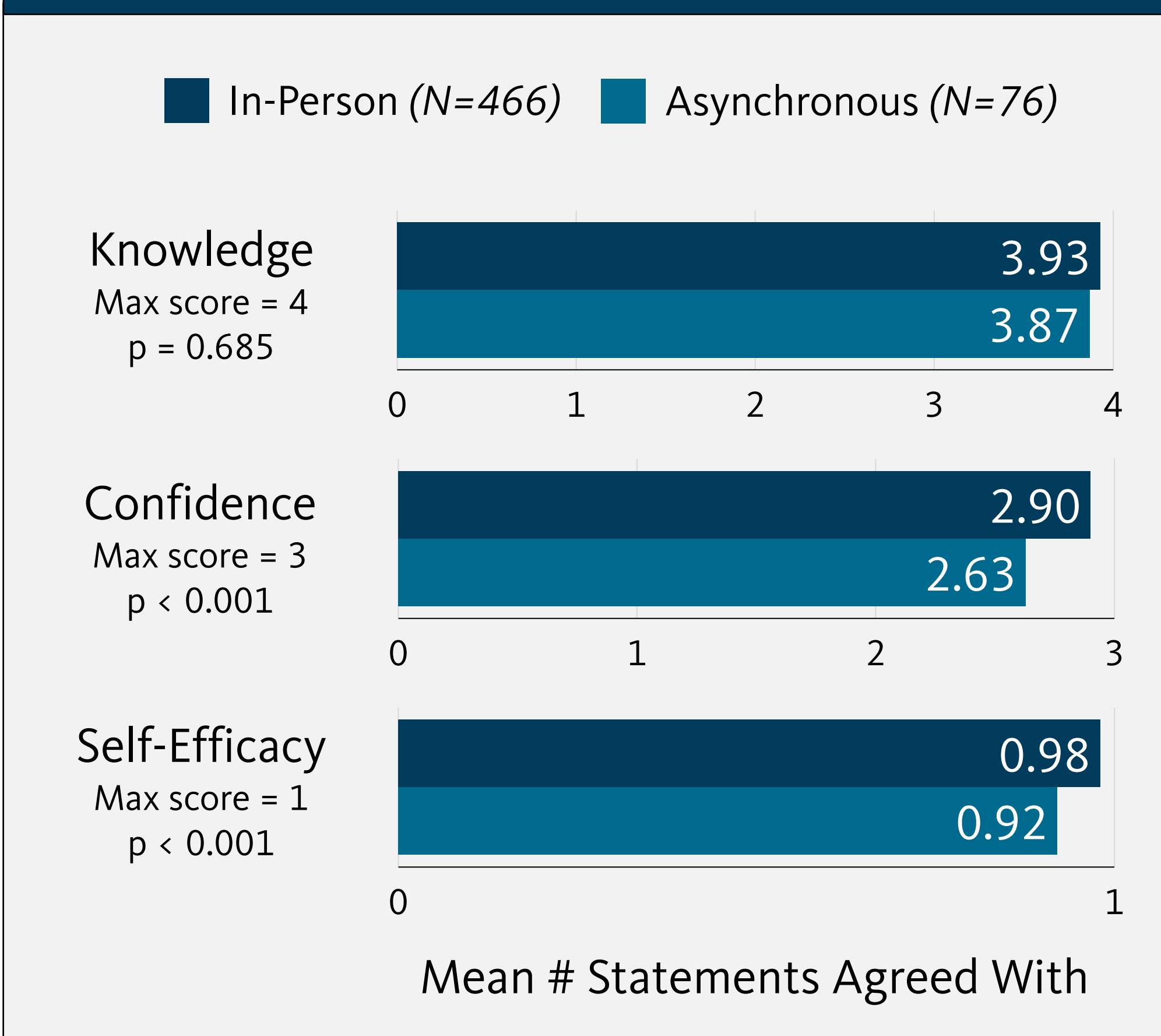


Figure 2: Comparison of post-training scores in in-person and asynchronous training participants



METHODS (CONTINUED)

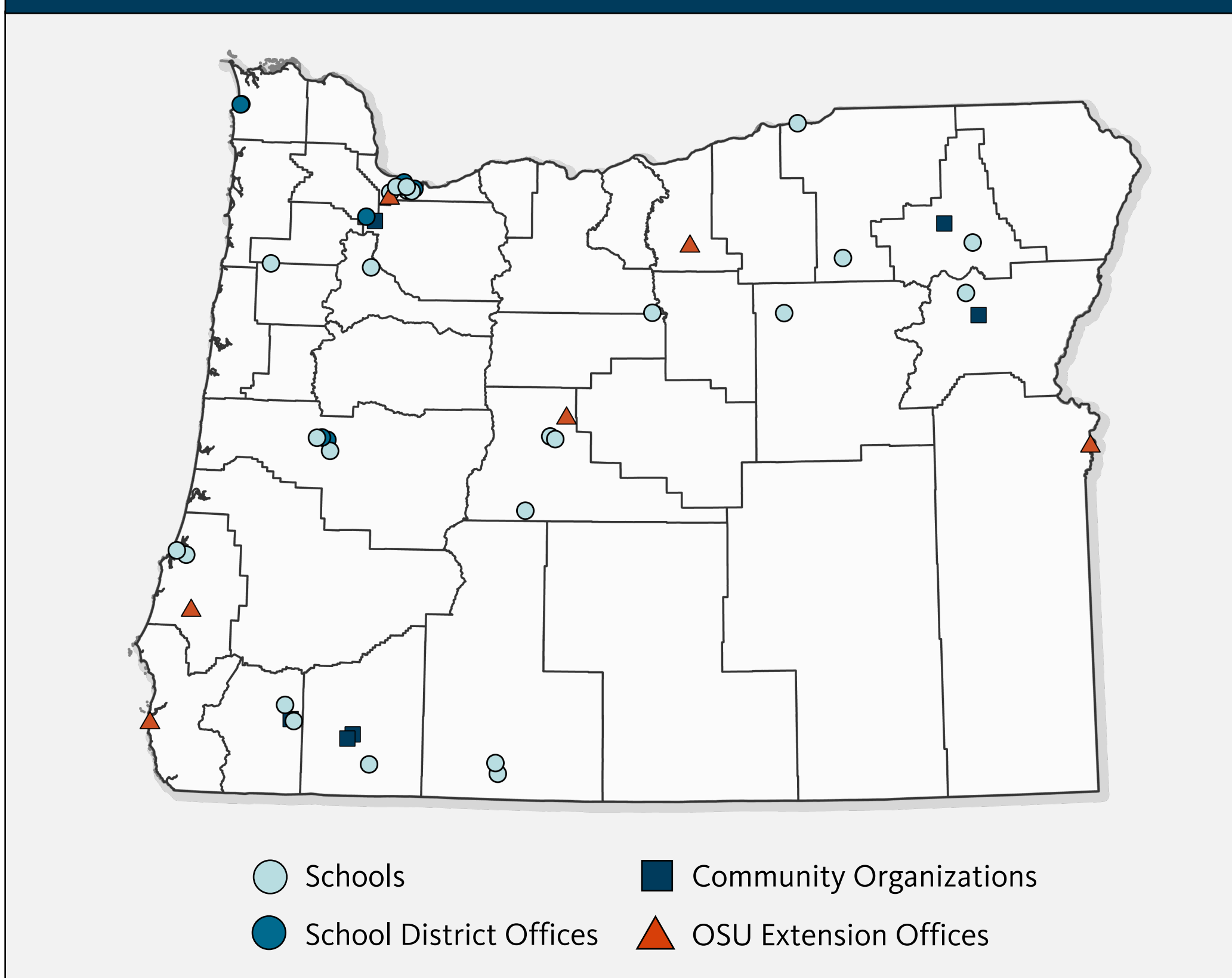
Analysis

- The Wilcoxon sign-ranked test was used to compare asynchronous pre- and post-training scores.
- The Wilcoxon-Mann-Whitney test was used to compare post-training scores between asynchronous and in-person training participants.
- Data were analyzed using R (Version 4.2.1).

RESULTS

- Pre-post asynchronous survey responses were successfully matched for **76 trainees**.
- Completed (e.g., no missing data) in-person surveys were returned by **466 trainees**.
- Population demographics varied by training modality (Table 1).
- Knowledge and confidence **increased significantly** from pre- to post-training among asynchronous training participants (Figure 1).
- Eight of twelve asynchronous evaluation questions were matched to in-person training questions for comparison.
- Confidence and self-efficacy scores among asynchronous participants were significantly lower than in-person participants, but no difference was found in scores measuring knowledge (Figure 2).

Figure 3: Distribution of asynchronous training participants across Oregon



IMPLICATIONS FOR PRACTICE

- Both in-person and asynchronous training approaches are **effective at increasing knowledge and confidence** to deliver BEPA 2.0 activities.
- Though statistically different in some categories, absolute differences in asynchronous and in-person scores were marginal.
- Lower scores observed among asynchronous training participants may be due to **lower exposure to mentored implementation** of activities and hands-on activity practice compared to the in-person training.
- **Follow-up training** may benefit asynchronous trainees to increase confidence and self-efficacy similar to the levels reported by participants in the in-person training.
- Prior research shows that **training is a critical predictor** of BEPA 2.0 implementation and that follow-up training and support are associated with a higher frequency of implementation.¹
- The asynchronous training approach **may increase program reach** by providing training to those who would not otherwise have access (Figure 3).



REFERENCES

1. Packebush, T., Winfield, T., & Gunter, K.B. (2020). Evaluating Extension-supported implementation of a classroom-based physical activity program in under-resourced schools. *Medicine @ Science in Sports @ Exercise*, 52(5 Suppl.):S780.