The Faith, Activity, and Nutrition (FAN) Dissemination and Implementation (D&I) Study: Phase 1 Adoption, Reach, Implementation, and Effectiveness

Sara Wilcox[1], Ruth P. Saunders[1], Andrew T. Kaczynski[1], Danielle Jake-Schoffman[2], Melinda Forthofer[3], Deborah Kinnard[1], Jessica Stucker[1], Cheryl Goodwin[4], Patricia A. Sharpe[1], Brent Hutto[1], Margaret Condrasky[5], Vernon Kennedy, Sr.[4], Caroline Dunn[1], John Bernhart[1]

[1]University of South Carolina, Columbia, SC [2]University of Massachusetts, Amherst, MA [3]University of North Carolina-Charlotte, Charlotte, NC
[4]Fairfield Behavioral Health Services, Winnsboro, SC   [5]Clemson University, Clemson, SC

Background

- Faith-based organizations exist within most communities & are a trusted source of information.
- Faith-based health initiatives focused on physical activity (PA) and healthy eating (HE) have shown promising results, but most focus on individual behavior change & D&I research is limited.
- This study applied the RE-AIM framework to a county-wide D&I study of the FAN intervention.
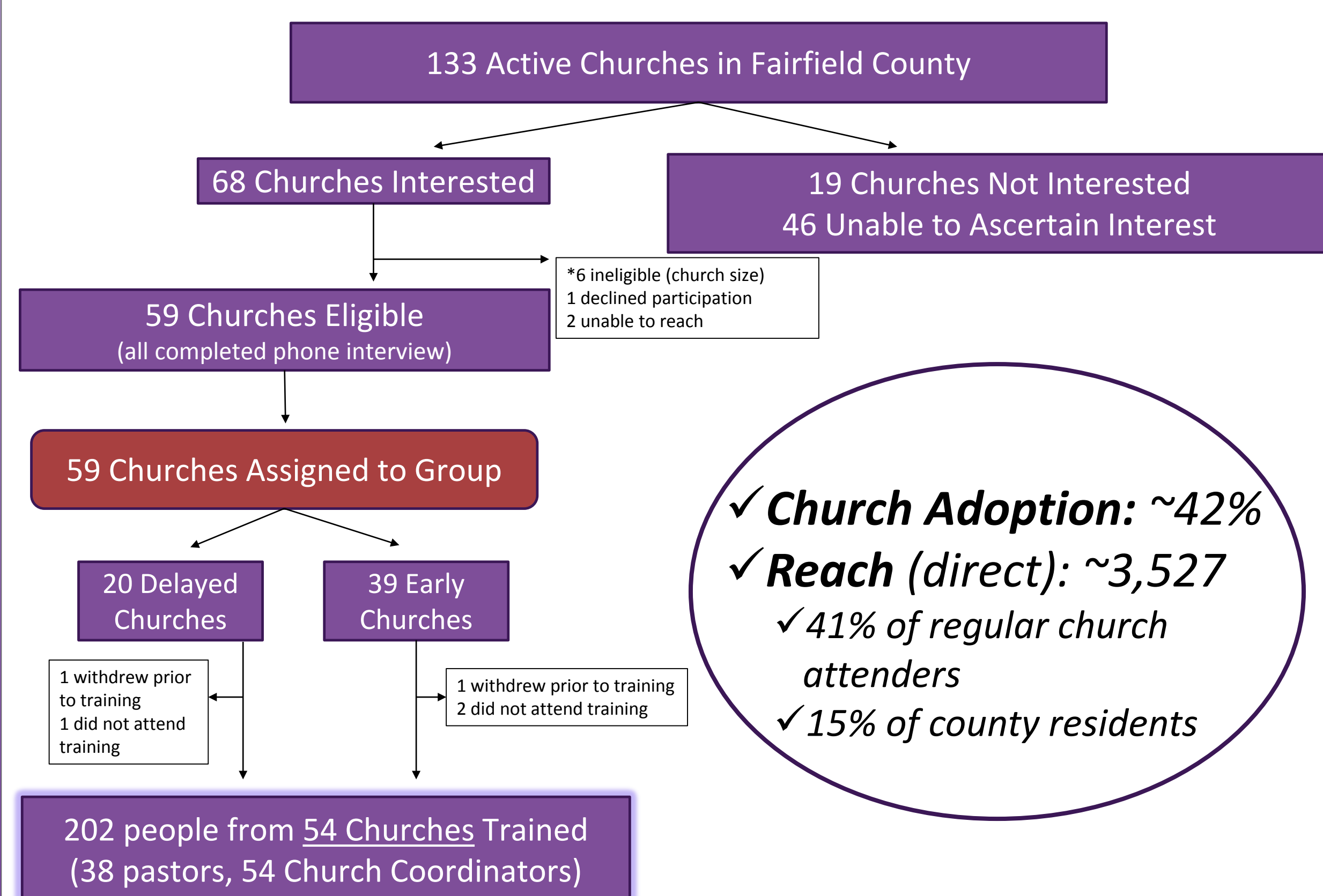- This poster reports Reach, Effectiveness, Adoption, and Implementation.

Overview of FAN

- Primary goal: Help churches create healthier church environments for PA and HE
- Study design: Churches (n=59) were randomized to be trained immediately ("early") or after a 12-month delay ("delayed").
- Partnership: Fairfield Community Coordinating Council & Fairfield Behavioral Health Services
- FAN intervention (delivered by Community Health Advisors):
  - Full-day training with church committees:
    - Assessment & planning process focused on 4 intervention strategies guided by structural model of health behavior (Cohen et al., 2000):
      1. Increase opportunities & programs
      2. Create healthy church guidelines (policies)
      3. Engage, support pastor
      4. Get the message out
    - Food demo & 3 PA breaks
    - Materials & resources
  - Submission of program plan & budget
  - 12 months of technical assistance calls
- FAN evaluation: Post-test questionnaires with church members; baseline & 12-month interviews with church coordinators

Interactive Assessment & Planning Guide and Program Plan

Adoption & Reach

- **Adoption** = Percentage of targeted churches that attended the FAN training
  - To examine representativeness, adopters were compared with non-adopters
- **Reach** = Number of people who attend worship service(s) among churches that adopt the program; and percentage of people reached as compared to the number of people in churches in the county and the county population

Flow Chart for Church Adoption & Reach of the Faith, Activity, and Nutrition Intervention

133 Active Churches in Fairfield County

68 Churches Interested

19 Churches Not Interested
46 Unable to Ascertain Interest

*6 ineligible (church size)
1 declined participation
2 unable to reach

59 Churches Eligible (all completed phone interview)

59 Churches Assigned to Group

20 Delayed Churches

39 Early Churches

1 withdrew prior to training
1 did not attend training

1 withdrew prior to training
2 did not attend training

202 people from 54 Churches Trained (38 pastors, 54 Church Coordinators)

✓ **Church Adoption: ~42%**
✓ **Reach** (direct): ~3,527
 ✓ 41% of regular church attenders
 ✓ 15% of county residents

*Training was offered to ineligible churches; 1 was trained.

Characteristics of Adopting and Non-Adopting Churches

|	Adopting (n=55)	Non-adopting (n=77)	P
Church size			.24
<25 members	12.7	23.9	
25-49 members	40.0	33.8	
50-74 members	23.6	14.1	
75+ members	23.6	28.2	
Predominant race			<.0001
Black/African American	92.7	50.7	
Caucasian	5.5	46.8	
Multi-racial	1.8	2.6	
Denomination			.07
Baptist	45.5	36.4	
Non-denom / Independent	20.0	23.4	
Presbyterian	5.5	16.7	
AME / AMEZ	14.6	3.9	
Pentecostal	7.3	7.8	
Methodist	5.5	2.6	
Episcopal	1.8	2.6	
Other	0	6.5	
Participated in earlier tobacco-free initiative	67.3	22.1	<.0001

Implementation

- Church Coordinators interviewed at baseline and 12-months later reported whether they implemented the 4 FAN activities/strategies (opportunities, messages, guidelines/policies, pastor support).
- Early churches had significantly greater implementation than delayed churches (except in FV opportunities).
  - Effect sizes comparing early and delayed churches were large.
- Results are consistent with member reports of the church environment (see below) & replicated results from the earlier effectiveness trial.

Many churches increased opportunities for HE by serving healthy snacks and sharing healthy recipes.

Churches created a FAN bulletin board to get the message out.
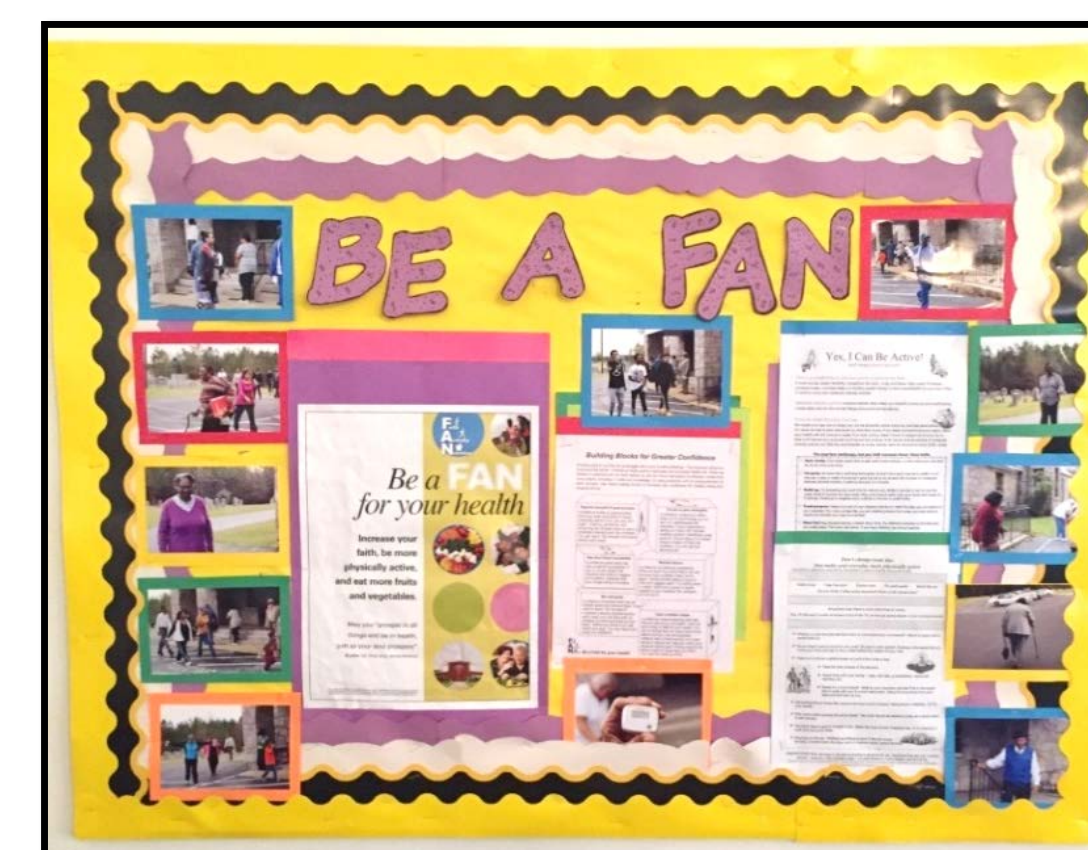
Some churches created a seasonal garden to increase opportunities for PA and HE.
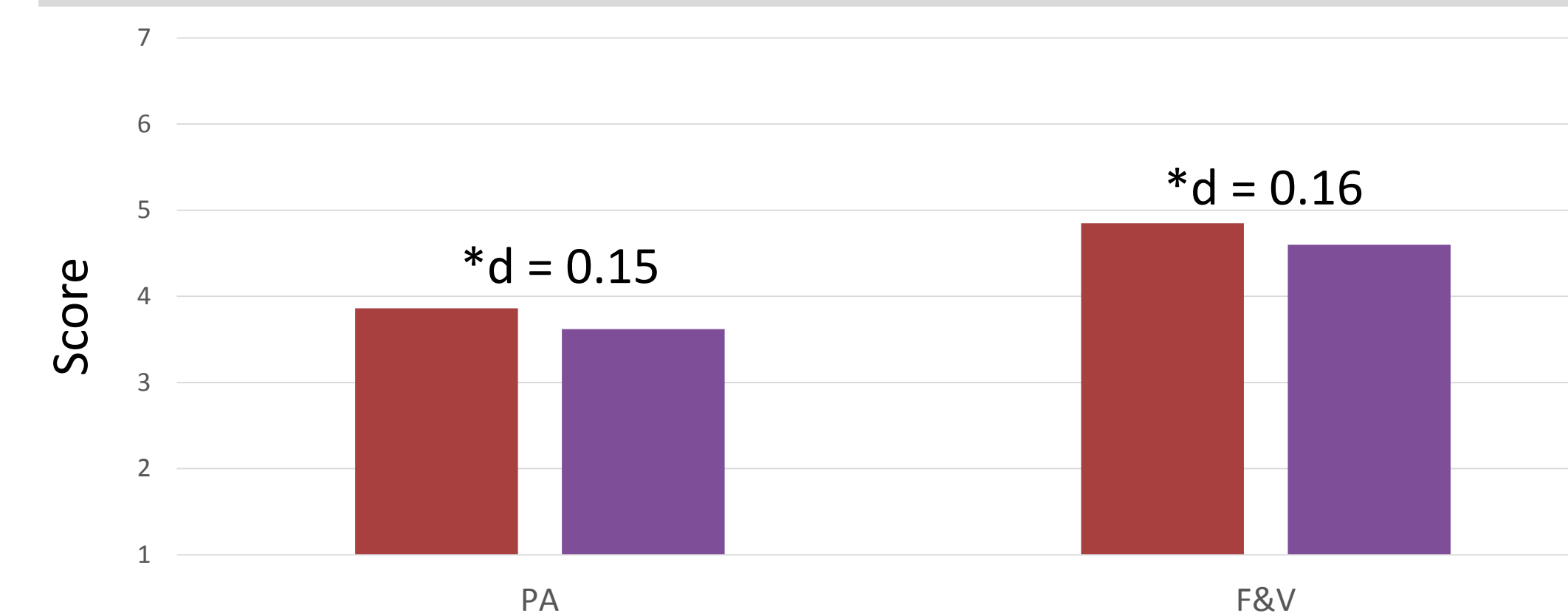
Effectiveness

- University staff administered anonymous surveys after worship service between 6/2016 and 10/2016 (8-12 months after early churches were trained; before delayed churches were trained).
  - 35 early churches (832 members)
  - 19 delayed churches (504 members)

Effectiveness: Fruit & Vegetable Intake
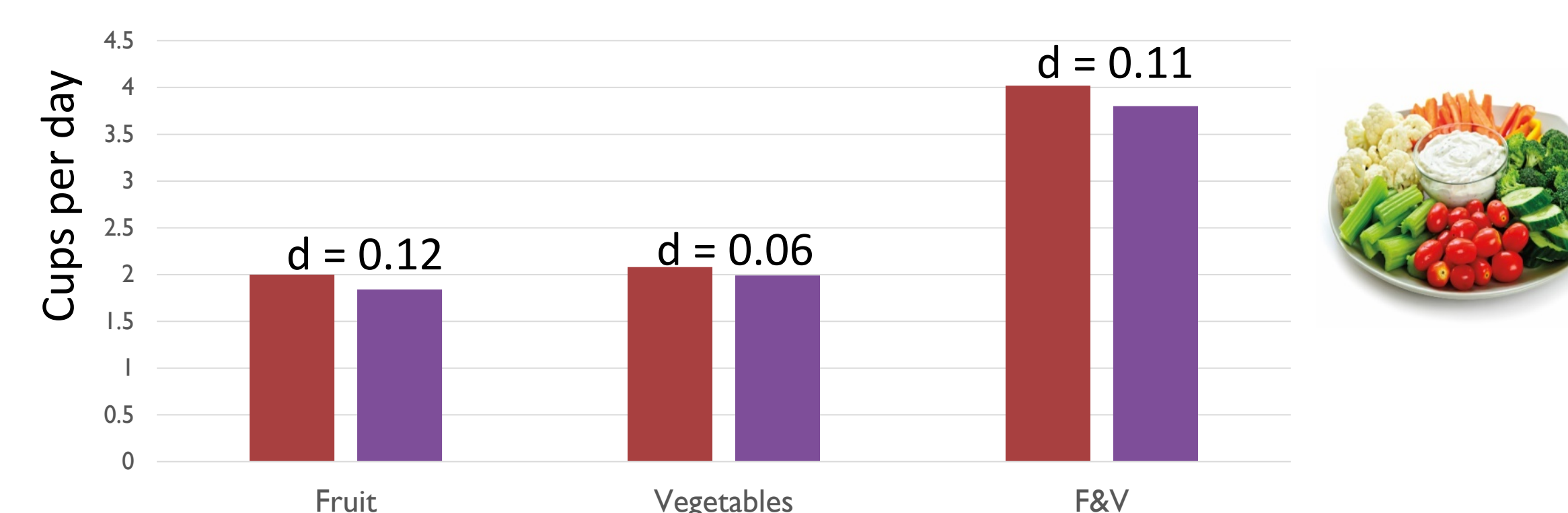
Note: Models adjusted for age, gender, education & church clustering. d = Cohen's d effect size. * indicates p < .05

Effectiveness: Physical Activity

Note: Models adjusted for age, gender, education, and church clustering. OR = Odds ratio. *indicates p < .05

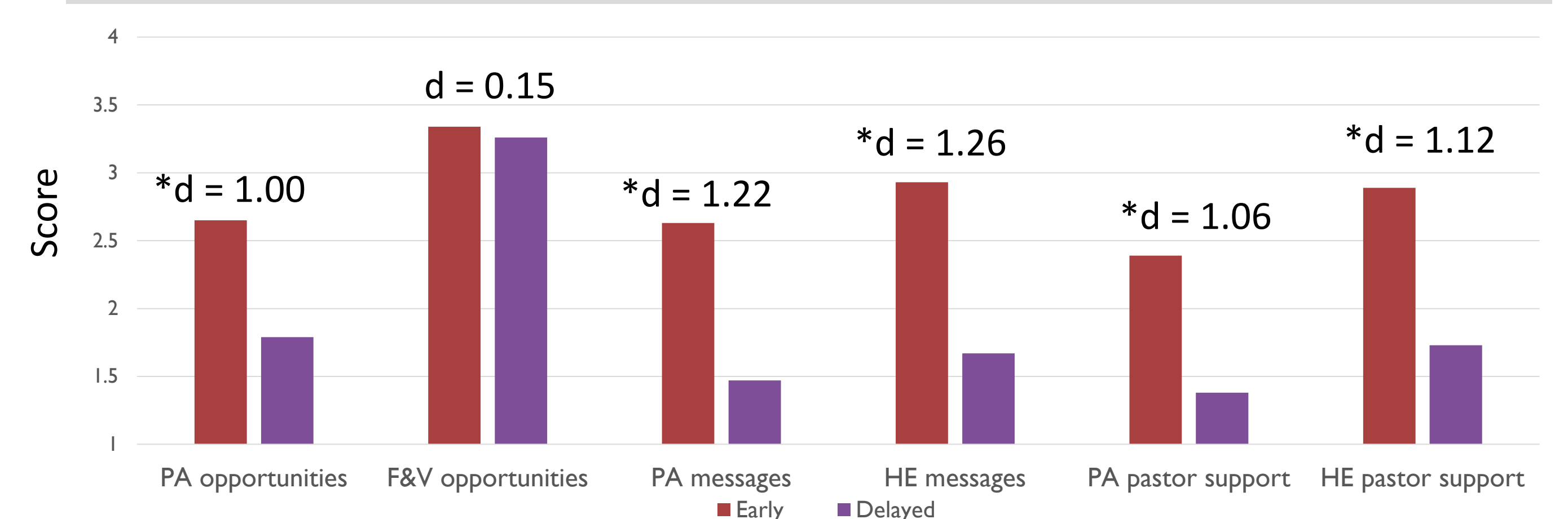### Effectiveness: Self-Efficacy (Confidence)

Note: Scale ranges from 1 to 7; higher values indicate greater confidence. Models adjusted for age, gender, education & church clustering. d = Cohen's d effect size. * indicates p < .05

Effectiveness: Church Environment

Note: Scale ranges from 1 to 4; higher values indicate more supportive environment. Models adjusted for age, gender, education & church clustering. d = Cohen's d effect size. * indicates p < .05

Conclusions & Next Steps

- Adoption, reach, and implementation were high with favorable impacts (effectiveness) on church environment and member behavior and beliefs.
- Results position FAN for broader dissemination.
- Phase 2 is a statewide D&I study with United Methodist Churches.
- Visit our website to read FAN Church Spotlights and learn more about the program & study: http://prevention.sph.sc.edu/projects/fanumc.htm

Acknowledgments