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Evaluation of Coach-Based Technical Assistance: An Evolving Focus on Coachability and Goal Setting

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In 2013, the National Institute of Food and Agriculture supported the creation of a professional development and technical assistance center to promote strong implementation and evaluation of University-led, community-based projects serving low-resource populations. Within this center, a coaching cadre was established to provide proactive and responsive technical assistance. Formative evaluation involving coaches and their primary contacts was used for refinement of coaching practices. Initially, coaches were encouraged to build strong interpersonal rapport. This set the stage for trusting, reciprocal interactions, but coaches recognized a need for targeted support and more tools for quality programming, evaluation, and sustainability. Greater emphasis was placed on goal-focused collaboration. Coaches received training and resources on topics such as goal setting, program quality, reduction of barriers (e.g., participant recruitment), and sustainability strategies. To assess coaching model enhancements, a survey of projects was expanded to gauge logic model usage,

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goal setting, strength of coaching relationships, and project implementation and sustainability progress. Overall, coaching was rated more favorably and effective when contact was consistent, inclusive of face-to-face interaction, met technical needs, and involved collaborative brainstorming and planning. Findings indicate coaching relationships strengthen over time and demand a collaborative, action-orientation to set goals, reduce barriers, and drive stronger outcomes.

Keywords: evidence-informed practice, technical assistance, coaching, goal-setting, collaboration, implementation quality, CYFAR

Background

The coaching field continues to grow, especially in executive and education realms. Still, a need exists to inform coaching practices specifically targeting the implementation of community-based prevention and intervention programs. Funders now demand greater accountability for fiscal responsibility and demonstrated impact; the need for support structures bolstering program delivery and evaluation has increased. Fully identifying coaching skills, styles, and strategies to drive evidence-informed implementation success over time, especially across multiple and diverse programs serving low-resource youth and families, is imperative (Olson et al., 2018).

The Children, Youth, and Families At-Risk Professional Development and Technical Assistance Center (CYFAR PDTA Center) serves CYFAR grantees funded by the United States Department of Agriculture's (USDA) National Institute of Food and Agriculture (NIFA) for five years (Olson, Hawkey, et al., 2016; Olson, Smith, et al., 2016). Grantees develop, deliver, and evaluate chosen community-based projects within the larger ecological context of Land-grant University and Cooperative Extension System infrastructures. To provide implementation support to these grantees and promote strong program outcomes for at-risk and low-resource populations, the Center has operationalized three components: professional development, technical assistance, and evaluation. Coaching is one part of the Center's comprehensive system for promoting high-quality implementation, evaluation, and sustainability by CYFAR project teams and their community-based programs.

Well-implemented programs have the potential for stronger impacts and more positive outcomes (Catalano et al., 2004). Moreover, evidence and recommended best practices suggest higher program implementation quality and greater team functioning result from technical assistance (Chilenski et al., 2016; Durlak & DuPre, 2008; Fixsen et al., 2005; Spoth et al., 2013). Furthermore, a growing body of research indicates traditional training workshops increase knowledge, but translation into skilled implementation requires coaching that is responsive to the individual and the unique environmental influences upon program delivery contexts (Becker et al., 2013; Cappella et al., 2012; Fixsen et al., 2005; Forman et al., 2009).

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The Center's coaching practices were originally drawn from peer coaching literature and include a combination of mentoring, technical assistance, guidance, reflection, problem solving, and team building (Allen, 2013; Denton & Hasbrouk, 2009; Olson, Hawkey, et al., 2016; Olson, Smith, et al., 2016). Initially, coaches were encouraged to develop relationships that were consistent, positive, empowering, predictable, and reliable (Wasylyshyn, 2003) using the following coaching styles: problem solving, reflective-practice, team building, technical, and reform.

Data have since driven the evolution of the coaching practices within the Center. Formative evaluation showed increases in technical, reflective practice, and team building coaching in 2016 as compared to the first year of the coaching process in 2015 (Olson et al., 2018; Olson, Smith, et al., 2016). Problem solving was rated high in both years, but reform coaching was rated relatively low in both years. Given one of the primary purposes of coaching was to reform or shift CYFAR projects towards more evidence-informed programming and implementation strategies, professional development for the coaching cadre became targeted at helping coaches to engage in more reform and technical coaching. The central message was to use resources to empower grantees in setting and actualizing evidence-informed performance goals aligned with the logic model included in their grant proposal.

Chilenski et al. (2016) asserted a collaborative coaching style of teaching and problem solving can be described as goal-oriented; this coaching style involves a recurring examination of objectives to reach goals (Kilburg, 1996). A goal orientation has galvanized coaches to build upon earlier emphases (e.g., rapport-building skills, the promotion of evidence, team-building strategies). As one example, coaches historically generated buy-in for the fulfillment of reporting requirements; now, they also encourage grantees to use data for program improvement and to communicate impacts to community stakeholders as part of sustainability efforts.

Theoretical Frameworks

Three frameworks provide the basis for the Center's coaching processes and this research study assessing the evolution of coaching practices.

1) *The Evidence-based System for Innovation Support Logic Model* (Wandersman et al., 2012) delineates providing tools, training, and quality assurance and improvement support to overcome capacity limitations. The Center's collective roles (i.e., evaluation, professional development, technical assistance) enhance grantees' ability to fulfill the objectives of their funded projects. Coaches assess grantees' current levels of capacity and bridge needs with resources.

2) The *Framework for Effective Implementation* (Durlak & DuPre, 2008) asserts strong organizational capacity of a program delivery system, coupled with a supportive training and technical assistance system, can lead to effective implementation. The

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framework presents an ecological perspective; local contexts differ, and program success is dependent upon how factors interplay and contribute to implementation capacity. Herein lies the strength of the Center's coaching process: one-on-one interactions; identification of unique program, team, and community influences at each delivery site; and customized guidance throughout a grantee's implementation phases for local context and implementation barriers. Coaches address innovation characteristics (e.g., cultural relevance of curriculum), provider characteristics (e.g., facilitator's delivery skills), community-level factors (e.g., engagement strategies), and delivery system factors (e.g., capacity and organizational practices) (Durlak & DuPre, 2008). Other literature also asserts that positive impacts on program implementation and behavioral outcomes are dependent upon intensive coaching and feedback customized to needs (Dusenbury et al., 2010; Noell et al., 2005; Reinke et al., 2008). Thus, coaches identify relevant resources from program and curriculum developers, the Center's internal resources, and connections to academic institutions. They also provide direct contextual feedback (e.g., observe operations and provide improvement recommendations).

3) The *Transtheoretical Model of Change*, proposed by Prochaska and DiClemente (1982), postulates three main constructs: decisional balance, self-efficacy, and behavior. Within each of the constructs, the cognitive shift experienced by a participant is a cyclical process that takes time and investment (Zapor et al., 2018). The time construct is especially salient in the self-efficacy and behavior constructs, as newly adopted behaviors become more entrenched over time through practice (Cowan et al., 1997). The coaching practices honor this model through sustained monthly contact; this process provides for a consistent environment in which productive coaching develops (e.g., setting and tracking project goals and participant reach targets). With their coach, project leaders explore and practice new skills (e.g., recruitment strategies, survey administration skills, fundraising approaches) before they employ them with local program team members.

These three frameworks provide context for coaches to understand the importance of strategizing targeted support of grantees and identifying and using tools for quality programming, evaluation, and sustainability. All three frameworks suggest that capacity building takes time and an approach tailored to the individuals served and their local environment. The Center's coaches assess grantees' current levels of capacity, identify and provide relevant resources, and provide direct contextual feedback and improvement recommendations. They leverage consistent interactions, reciprocal rapport, and a collaborative, action-orientation towards goals to promote the exploration and practice of new strategies and skills by grantees. This coaching process is intended to reduce implementation barriers and drive stronger outcomes as a result of individualized support for each project team's community needs, relational dynamics, and program coordination and delivery.

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Shift to a Goal Orientation

Research has repeatedly demonstrated a link between goal setting and outcomes, such as productivity and profitability (Latham & Baldes, 1975; Latham & Saari, 1982; Locke & Latham, 1984; Terpstra & Rozell, 1994). Our aim was to be more purposeful in utilizing coaching strategies that foster a collaborative goal orientation to promote stronger outcomes for low-resource populations. This is accomplished in five primary ways:

1) Coaches educate grantees on best practices and how to effectively incorporate them into an existing project plan. This creates awareness of greater possibilities, and research has shown higher expectations lead to higher performance levels (Locke et al., 1986). A coach's constructive input allows project team members to self-correct; most individuals increase effort when they learn new performance strategies or realize they are below expected targets (Locke & Latham, 2002; Matsui et al., 1983).

2) Coaches help grantees consciously and consistently focus on the intended purpose of their projects by setting implementation goals for outcomes. Locke and Latham (2002) contend goal-setting theory is based on the premise that conscious goals affect action. Their findings reinforce the concept that goal specificity reduces ambiguity around what is to be achieved and reduces variations in performance (Locke et al., 1989; Locke & Latham, 2002).

3) Coaches act as project champions encouraging grantees to embrace new information to benefit their own goals and reach milestones. They help grantees form a vision for project impact and stay motivated through verbal prompts. Research on the PROSPER model, which involves university, school, and community partners in the implementation of evidence-based programming for youth and families, has shown communication of expectations and emphasis on goals and ideal timelines as imperative for strong outcomes, even more so as teams become responsible for program sustainability (Chilenski et al., 2016). Locke and Latham (2002) assert leaders who communicate an inspiring vision and behave supportively influence goal attainment.

4) Coaches promote team goal-directedness. Coaching, problem solving, and technical assistance collaboration are associated with team goal-directedness (Becker et al., 2013; Chilenski et al., 2016; Fixsen et al., 2005; Pas et al., 2014; Stormont & Reinke, 2013; Wasylyshyn, 2003). The Center's coaches help entire project teams understand and actualize their grant narratives and logic models. Confirming program and participant reach targets is foundational to helping grantees set, and keep at the forefront of their actions, goals for implementation based on their own vested commitments. Specific, challenging goals are known to lead to greater performance

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than simple encouragement or prompting individuals to do their best (Locke & Latham, 1990).

5) Coaches utilize relationship-building strategies to increase competency and confidence. Self-efficacy plays a key role in implementation success; individuals with strong self-efficacy set and commit to higher goals (Locke & Latham, 1990; Seijts & Latham, 2001). Research indicates self-efficacy can be increased through training, role models, and positive, persuasive communications (Bandura, 1997; Locke & Latham, 2002; White & Locke, 2000). Coaches assume these roles by providing reflection opportunities, praise, verbal inspiration, and knowledge of effective implementation strategies. Research has also demonstrated that individuals who formulate task strategies with others perform better and have higher self-efficacy (Latham et al., 1994). Coaches engage grantees in networking and open dialogue to raise self-awareness of effective strategies. They encourage accurate visualization of existing implementation strategies, which may not align with possibilities for high-quality programming and impacts (Bandura & Cervone, 1983; Becker, 1978; Erez, 1977; Locke & Latham, 2002; Strang et al., 1978). As grantees relate new evidence-informed principles and practices to their realities, a coach's evocation and provocation contribute perspective and energize personal and project development. Ultimately, a coach empowers by demonstrating trust and respect for a grantee's own decision-making abilities. Whitmore (2009) contends performers must recognize that success is due to effort. Awareness, self-belief, motivation, choice, clarity, commitment, responsibility, and action are all products of coaching.

Currently, the Center's strategic goals are to foster 1) high-quality program delivery, 2) collection and communication of outcomes data, and 3) project sustainability. Coaches assume an approach, as the literature suggests, that is encouraging, supportive, and collaborative to increase receptivity to coaching and the effectiveness of technical assistance (Fixsen et al., 2005; Kilburg, 1996; Stormont & Reinke, 2012; Wasylyshyn, 2003). They now also embrace a goal orientation. They are expected to be familiar with grantees' logic models. They receive training in evidence-informed practices and are armed with resources to initiate implementation, evaluation, and sustainability conversations. As a result, their technical assistance is proactive, anticipating common needs at each implementation stage, and identifying potential barriers earlier, so a more efficient, less reactive response can be given to the emergence of unexpected challenges. Coaches also motivate a sense of ownership and accountability for data collection, outcomes, and sustainability (e.g., encourage connections to be forged with Cooperative Extension System administrators, external funders, and community supports).

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Purpose and Research Objectives

As asserted in published research, there are two phases of coaching: connect and cultivate (Becker et al., 2013). The Center's coaching processes were established in 2014. In 2018, with some of the grantees now in their fourth implementation year and having received multiple years of coaching, the evolution of coaching practices could be analyzed. A study was conducted to determine the coaching skills, styles, and strategies most effective in both building a strong coaching relationship (connect) and advancing implementation, evaluation, and sustainability for community-based projects (cultivate).

As an extension of data results collected in 2015 and 2016 (Olson et al., 2018; Olson, Smith, et al., 2016), the analysis sought to explore the following hypotheses:

1) Coaching relationships will be strengthened over time.
2) Coaches will demonstrate growth in coaching skills due to professional development and coaching experience.
3) On-site visits and observations of program quality by coaches will lead to more personable, trusting, and reciprocal relationships.
4) Coaches' adoption of a goal orientation and the sharing of targeted resources will result in a proactive, outcomes-driven focus during coaching interactions and an increase in coaching effectiveness and perceived value.

Methods

Survey Process

Data collected from 2015-2017, including datasets previously reported, allowed for an analysis of change in coaching perceptions over time (Olson et al., 2018; Olson, Smith, et al., 2016). The University of Minnesota Institutional Review Board determined this study was not human research and was exempt from review. An online survey was administered to the primary coaching contact of CYFAR grants through the Qualtrics survey platform. Survey data were collected and de-identified by a third-party measurement organization to assure grantee anonymity. It took approximately 20-30 minutes to complete the survey. No participatory compensation was provided.

The survey assessed grantees' attitudes toward coaching quality and quantity and perceived progress in implementation and sustainability. Coaching had been provided by seven individuals housed at a different Land-grant Universities. Coaches were primarily female (n = 6; 85.7%); Caucasian (five Caucasian, one Latina, and one African American); and educated (three hold a Ph.D., four hold an M.S.). Over half of the coaches (n = 4) were contracted from the inception of the Center's coaching structure. Coaches resided in locations throughout the United States: Southeast (4), Midwest (1), and West (2).

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Survey Respondents

In March of 2017, invitations were sent to 77 CYFAR Principal Investigators or Project Coordinators from 45 active grants and seven completed grants. Grantees that ended within the previous year (between survey administrations) were invited to be inclusive of perceptions at the final grant stages. Project leaders were instructed to choose the contact with the most coaching interaction for survey completion. Data were collected from 43 respondents. The response rate was 82.6%. Voluntary responses were received from Principal Investigators (76%), Project Coordinators (12%), and other project staff (12%). Study respondents represent Cooperative Extension System research and teaching staff/faculty at Land-grant Universities across the United States and its territories. The funding years indicated by grantees were first year (10%), second year (15%), third year (38%), fourth year (24%), fifth year (7%), and beyond fifth year (7%). Data were removed from two respondents as the majority of items were unanswered, and an open-ended response suggested inaccurate answering.

Instruments and Measures

Coaching Assessment. The survey included a Coaching Self-Assessment that was adapted from the Coaching Manager Self-Assessment published by CompassPoint Nonprofit Services; the publishers granted permission to reframe the questions, so CYFAR survey respondents rated their coaches instead of themselves (Wilson & Gislason, 2009). Each respondent's perceptions of the extent to which his/her coach used a variety of coaching strategies was measured on a Likert scale (from 1 = *mostly not true* to 5 = *always true*). The instrument included three sections: Coaching Skills (16 items measuring communication and objectivity skills), Coaching Mindset (16 items measuring social-emotional, cultural competency, and rapport building skills), and Coaching Framework (20 items measuring facilitation and motivational skills). In 2017, four items were added to the Coaching Framework section to specifically assess the goal-orientation emphasis. In 2017, internal reliability was high for all three sections (α ranged from .96 to .98).

Coaching Effectiveness. Reliability was high ($\alpha = .91$) for this 10-item instrument. Item examples include "I am satisfied with the frequency of contact between myself, my team, and my coach." and "My coach understands the essential details of the program(s) being conducted at my site." Items were rated on a five-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

Perceived Coaching Styles. The instrument included a series of paired questions in two sections. Section one, with five items, asked respondents to indicate the degree to which their coaches engaged in technical, problem solving, reflective practice, team building, and reform coaching styles. The items used a four-point scale ranging from 1 = *very unlike my CYFAR coach* to 4 = *very much like my CYFAR coach*. Section two asked respondents to indicate the

degree to which they would like more or less of each style from their coach. These items were rated on a five-point scale (1 = *much less* to 5 = *much more*).

Individual Items. In 2017, items were added to obtain information on topics related to coaching contact and project progress (e.g., ratings of implementation barriers, success in garnering stakeholder support). This section also included three open-response format items to obtain feedback (e.g., how coaching has been beneficial).

Results

First Hypothesis: Coaching Relationships are Strengthened Over Time

Most grantees reported an increase (53.7%) in consistent monthly contact with their coach (97.6%), and the majority (89.5%) perceived their relationship had grown stronger. The Center's coaching presents a unique opportunity to build a sustained relationship over the five-year grant funding cycle. Through consistent contact, a culture develops where the grantees come to understand the parameters, purpose, and benefits of successful coaching interactions (Bawany, 2015). A trusting and collaborative relationship is tailored to individual needs, based in practical application, and is goal-oriented. The process creates space in which a grantee's own creative thinking process is facilitated, and new paths of performance are identified.

Table 1. CYFAR Grantees' Reports of Coaching Contact and Relationship Strength

Survey Item	Percentage Responding Yes
Contact has increased	53.7%
Consistent monthly contact	97.6%
Relationship has grown stronger over time	89.5%

Note: n = 43. The majority of CYFAR grantees are engaged in consistent monthly contact, and both contact and relationship strength increased from the previous year.

Second Hypothesis: Coaching Skills Grow Over Time

Coaching Skills and Strategies

Coaches participate in monthly web-based training and bi-annual in-person training and strategic planning. The content focus has included factors of high-quality implementation, sustainability strategies, goal setting, communication skills (e.g., questioning and affirmation), and low-resource population needs (e.g., Adverse Childhood Experiences). Due to training and experience, coaching competency was expected to increase. To assess growth, respondents' ratings of coaches' skills, mindset, framework, effectiveness, and style were analyzed. Table 2 highlights 2017 items with the highest means:

Coaching Skills. The composite mean was 4.57. The items for welcoming and inclusive language and listening attentively were rated highest (*M* = 4.86 and 4.77, respectively).

Mindset. The composite mean was 4.63. Overall, coaches were rated very high on all the items in this scale with patience (*M* = 4.79) and belief in people's potential, congruency between words and actions, and showing he/she cares (*M* = 4.78) scoring the highest.

Framework. The composite mean was high (*M* = 4.26). Coaches were rated highest on brainstorming and finding new options (*M* = 4.58), helping people to use information and knowledge gained (*M* = 4.54), and keeping discussions focused and on track (*M* = 4.54).

Coaching Effectiveness. The scale mean was 4.4. Mean scores were above four (agree) on all items, except for the item related to technological or logistical impediments (*M* = 2.33), which is reverse-scored (lower levels are desirable). The highest means were found for coaches' understanding of program details and grantees' comfort in contacting the coach to fulfill grant responsibilities (*M* = 4.69).

Table 2. Comparison of Survey Items with Highest 2017 Means

	2016		**2017**	
Survey Item	***M***	***SD***	***M***	***SD***
From the Coaching Skills Scale (*n* = 26)				
Uses welcoming and inclusive language	4.42	.825	4.86	.41
Listens attentively without own thoughts getting in the way	4.61	.882	4.77	.57
From the Coaching Mind-Set Scale (*n* = 33)				
Believes in people's potential	4.72	.542	4.78	.48
Words are congruent with actions	4.56	.751	4.78	.42
From the Coaching Framework Scale (*n* = 29)				
Good at brainstorming and finding new options	4.26	1.095	4.58	.77
Keeps conversations and meetings focused and on track	4.56	.577	4.54	.77
Helps people use information and knowledge gained	4.17	1.154	4.54	.69
From the Coaching Effectiveness Scale (*n* = 40)				
Satisfied with the nature of contact	4.17	1.197	4.53	.67

Note: All items were measured on a five-point scale ranging from 1= *mostly not true* or *strongly disagree* to 5 = *always true* or *strongly agree*. Comparison data for some survey questions have been excluded above, even though coaches were rated highly, due to minor wording changes to those questions in 2017 (e.g., coaches' patience, coaches' ability to show they care, coaches' project understanding, and grantees' comfort in contacting their coach for guidance).

Changes in means between the 2017 and 2016 survey responses were also explored. Some of the areas of growth included the following: attention to body language (4.76 vs. 4.50), staying objective (4.72 vs. 4.50), detachment from outcomes while helping others grow (4.53 vs. 4.14), making space for people to express themselves (4.74 vs. 4.40), helping people use gained information and knowledge (4.54 vs. 4.17), brainstorming and finding new options (4.58 vs. 4.26), and guiding people to be clear about what they are saying (4.31 vs. 4.0). In addition, survey respondents reported growth in their perceptions of the coach as an important member of the project team (4.42 vs. 3.89).

Overall, growth was evident; however, there were a few items in the coaching skills construct that showed decreased means. These items included allowing others to share their thinking before giving advice (4.48 vs. 4.72), listening before speaking (4.46 vs. 4.63), asking open-ended questions to probe thinking (4.24 vs. 4.30), and facilitating problem solving rather than taking charge of the answers (4.43 vs. 4.53). Perhaps this reflects the coaches adapting to the greater emphasis on fostering a goal orientation. They were learning how to provide more resource-driven technical assistance while trying to navigate how to do so, not as an expert but through relational coaching practices.

Coaching Style

Coaches' styles were also assessed for growth. In 2017, for the first time in the surveying cycles, no respondents indicated 'want much more' of any of the coaching styles, reflecting growth in coaching skills and appropriate use of all five taught styles.

Technical. There was a notable increase in levels of the technical style with those reporting 'like' coach and 'very much like' coach increasing from the previous year (48.1% to 78.6%). The technical style includes guidance on implementation strategies and monitoring program processes. As an example, over the previous year, coaches were equipped with handouts to prompt discussions around specific strategies (e.g., recruitment, measuring implementation quality, sustainability). They were also provided quarterly reports of grantees' data submissions for review during check-in calls.

Problem Solving. The perceived degree to which coaches engaged in the problem-solving style increased; only 23.3% reported 'very much like' my coach in 2015, and 53.7% indicated this in 2017. The majority of respondents (72.5%) indicated they want their coach to use the same amount, and none indicated 'want much more.'

Reflective. 80% of respondents reported wanting the amount of this style to stay the same. Those reporting 'very much like' his or her coach from 2015 (13.3%) to 2017 (46.3%) reflected positive change.

Team Building. Most respondents indicated their coach engaged in the team-building style of coaching (85.8%). Team building was the only style showing a slight decrease from the previous year (92% to 85.8%), but 80% of respondents indicated wanting the same amount. This change may be reflective of established teams (years three and four of grant cycles) and less in need of team-building support.

Reform. A greater percentage of respondents indicated their coaches engaged in the reform style of coaching in 2017 (71.8%) compared to 2016 (36%). Reform style includes encouraging project stakeholders to engage in innovation and adoption of new directions, especially evidence-

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informed practices (e.g., form advisory committees to plan for sustainability, more aggressively highlight accomplishments with Cooperative Extension System leadership).

Table 3. 2017 Growth in Ratings of Coaching Styles

	Combined 'Like' and 'Very Much Like' My Coach Responses		
Coaching Style	**2015**	**2016**	**2017**
Technical (*n* = 42)	35.5%	48.1%	78.6%
Problem Solving (*n* = 41)	80%	81.4%	90.3%
Reflective Practice (*n* = 41)	60%	84.6%	87.8%
Team Building (*n* = 42)	71%	92%	85.8%
Reform (*n* = 39)	34.5%	36%	71.8%

Third Hypothesis: On-site Visits Strengthen Coaching Relationships

Site visits are grounded in research on evidence-based program dissemination; scalable, sustainable programming is strengthened by a multi-faceted support system inclusive of coaching, professional development, a shared project implementation and outcomes vision, and frequent on-site interactions (Klingner et al., 2013). The Center's coaching intentionally integrates at least two site visits into the multi-year coaching plan. During the first grant year, a visit advances program and evaluation planning. During the third grant year, a visit allows for observation of program quality and support of sustainability planning. An overwhelming majority of survey respondents (96.8%) agreed site visits strengthened their coaching relationships.

Table 4. Site Visit Impact on the Strength of the Coaching Relationship

2017 Survey Item	Percentage
Had a Site Visit with a Coach	73.8%
Visit Strengthened the Coach-Grantee Relationship	96.8%

Fourth Hypothesis: A Goal Orientation Increases Coaching Effectiveness and Value

During the formative years of the coaching processes, evaluations indicated the purpose of coaching was not always clear to grantees. Coaches strived to build positive, reciprocal relationships from the start, but over time, they have come to understand the value of educating and promoting research and best practices for implementation, evaluation, and sustainability in targeted ways. This coaching shift has meant more proactive technical assistance, resource sharing, and outcomes-driven coaching. This shift toward a goal orientation was expected to increase the effectiveness of coaching and the respondents' perceived value of coaching.

Coaching Assessment. Although the current emphasis on collaborative goal setting is evident in the previously highlighted 2017 increases in coaching skills (i.e., coaches' ability to brainstorm and find new options), the added survey questions (2017) allowed for further assessment.

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Coaching strengths related to goal orientation and targeted technical assistance are reflected in these means:

- My coach understands our grant logic model (*M* = 4.4).
- My coach helps my team to define action steps to fulfill our grant logic model (*M* = 4.39).
- My coach motivates my team to fulfill its grant targets (e.g., number of programs or respondents served) (*M* = 4.38).
- My coach monitors our Common Measures and helps my team to focus efforts on evaluation and reporting (*M* = 3.95).

Coaching Style. The two styles targeted for growth saw the largest percentage changes. The reform coaching style, which was defined as encouraging project stakeholders to engage in broad-scale organizational change, innovation, and the adoption of new directions, showed scale increases in 2017 (71.8%) compared to 2016 (36%). The technical coaching style, which was defined as providing instruction to stakeholders about how to properly implement strategies for the program and monitoring of program processes, showed scale increases too with those reporting 'like' coach and 'very much' like coach growing (48.1% to 78.6%).

Coaching Effectiveness. Respondents' perceptions of coaching effectiveness were assessed with a researcher-created, 10-item instrument. Table 5 highlights the top 5 highest rated items.

Table 5. Reports of Coaching Effectiveness

2017 Survey Item	*M*	*SD*
When I need guidance to fulfill or improve upon my grant responsibilities, I am comfortable contacting my coach.	4.69	.78
My coach understands the essential details of the program(s) being conducted at my project site.	4.6	.79
I am satisfied with the nature of contact between myself and my coach.	4.53	.67
My coach offers me assistance and makes resources more readily available.	4.52	.74
I am satisfied with the frequency of contact between myself, my team, and my coach.	4.49	.77

Note: n = 40. Responses were submitted on a 5-point scale with 5 = *strongly agree*.

In addition, to determine if there were differences in perceived coaching effectiveness between coaches with high and low ratings of the coaching styles, five Mann-Whitney *U* tests were run. One item was dropped from the 10-item instrument assessing effectiveness due to low correlations with the other items and reduced reliability when included. Reliability was excellent (α = .95) for the nine remaining items in the instrument. Perceived effectiveness was non-normally distributed, with a skew of -1.11 (*SE* = .42), so a non-parametric test was used to compare mean ranks rather than a *t*-test to compare means. There was a statistically significant difference in perceived coaching effectiveness between those with high ratings of reflective

coaching and those with low ratings of reflective coaching (U = 16.5, z = -3.921, p < .001), as well as between those with high ratings of team-building coaching and those with low ratings of team-building coaching (U = 50.500, z = -2.520, p = .013), using an exact sampling distribution for U (Dinneen & Blakesley, 1973). Coaches with a high rating of reflective (also known as cognitive) coaching had significantly higher perceived effectiveness, as did coaches with a high rating of team-building coaching. These results indicate that coaches who use reflective practices (i.e., empowering stakeholders to think about the project in new and innovative ways through insightful questioning and encouragement) and team-building (i.e., creating a community of learning, trust, and mutual support among project stakeholders) are perceived as more useful to community-based programming.

Similarly, we used the non-parametric Kendall's tau test to assess the relationship between goal orientation and perceived coaching effectiveness. Goal orientation was non-normally distributed with one outlier (Z = -3.119) and a skew of -1.24 (SE = .42); Kendall's tau is an appropriate non-parametric test for variables with these distributions. There was a strong positive association between goal orientation and perceived effectiveness, which was statistically significant, τ_b = .651, p < .001.

The findings suggest that the Center's coaching relationships are now more consistent, stronger, and effective as the result of on-site visits and more targeted and outcomes-focused coaching. Other research has associated strong coaching with improved implementation quality (Becker et al., 2013). The positive impacts of the Center's enhanced coaching are reflected in the majority of grantees reporting the following: project implementation is progressing very well or beyond expectations, very low to medium number of implementation barriers, and high to very high success in building relationships and garnering stakeholder support. Qualitative data highlight the coaching support that grantees request and are most receptive to receiving:

- administrative tasks (i.e., interviewing local site staff),
- reduction of implementation barriers (e.g., participant recruitment),
- evaluation (e.g., data collection strategies and reporting),
- navigation of university policies,
- project team relations (e.g., building trust across multi-state leadership teams),
- curriculum development and review,
- sustainability planning,
- professional development,
- fulfillment of grant requirements, and
- coordination of advisory or stakeholder groups.

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Conclusions and Implications

The first study objective was to determine if coaching relationships are strengthened over time. A five-year grant funding cycle affords dedicated interaction time to building a sustained coaching relationship. Findings indicated the vast majority of CYFAR grantees perceived that their coaching relationship had grown stronger over time (89.5%). Traditional coaching relationships tend to focus on the facilitation of individual change. The duration and reciprocity of the Center's coaching relationships allow for a goal orientation and collaboration that drive broader organizational change constructs (e.g., a project team's commitment to the collection and communications of outcomes data, community ownership leading to embedding the project into existing infrastructures for long-term viability) (Stober, 2008).

An implication of the study findings is the need to foster consistency in coaching positions; however, one challenge is skilled individuals tend to pursue career advancements that may not allow for coaching continuity. Therefore, we have found that retention efforts and transition planning are necessary. Some examples of steps taken to strengthen retention include providing clear role expectations (e.g., detailed Statement of Work), involving coaches in activities that benefit their careers (e.g., manuscript writing and presenting posters at conferences), providing a summary of each coach's performance highlights to his/her university administrators, offering verbal appreciation and recognition, and strengthening the interview process to ensure fit during hiring. To address transition planning, we have formalized the onboarding process and have a two-part process for transitioning grantee assignments: 1) a transition call is conducted between the incoming and departing coaches to transfer knowledge and explain the current focus of coaching activities, and 2) the departing coach and incoming coach jointly conduct a transition call with assigned grantees to ensure a seamless and supportive changeover. Future research could further explore factors that influence the retention of coaches (e.g., percentage of paid time, sense of team unity and belonging, fit with the responsibilities, and career aspirations) and the impact of transition planning on quality coaching (e.g., adequate coach training, grantee resistance to change).

The second study objective was to demonstrate growth in coaching skills occurs with targeted professional development and experience. Findings showed increased coaching skills and effectiveness. Trainings were provided to coaches on topics such as participant recruitment and retention, program fidelity and adaptation, sustainability strategies, and factors affecting low-resource populations (e.g., opportunity gaps and Adverse Childhood Experiences). The knowledge gains, articulated during coaching contacts, were intended to drive organizational shifts for assigned grantees. Equipping coaches to share research and resources promotes awareness among grantees of new evidence-informed strategies for implementation, evaluation, and sustainability.

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Another implication is that training opportunities must be identified and coordinated with a focus on emerging research. Coaches must be engaged in identifying their own learning needs based on their field experiences. In addition, coaches' knowledge uptake can be augmented through contextual discussions across coaching team members. Findings also speak to the importance of onboarding new coaches and the potential value in mentoring by more experienced coaches. Further research could explore the core components necessary for training coaches to work effectively with programs in community-based settings (e.g., understanding logic models and familiarity with strategies for communicating outcomes).

The third study objective was to assess the impact of site visits on coaching relationships. Although much of the Center's coaching is delivered via phone or online platforms, the coaching model intentionally integrates at least two site visits into the multi-year coaching plan. This deliberate in-person interaction has resulted in an overall strengthening of the coach-grantee relationships and is the mechanism through which a collaborative goal orientation is fully actualized. Survey data indicated 96.8% of respondents agreed their site visit strengthened their coaching relationship. This aligns with both coaching and educational research related to distance and blended methodology. In a study by McLaughlin (2013), coaching through distance methods was described as creating a flexible, powerful, and effective dynamic for development. However, building a connection and responding to visual cues presents potential incongruity through distance methods alone. In addition, more poignant conclusions have been found when comparing educational outcomes through purely distance (online) offerings compared to blended learning. In a recent study (McCutcheon et al., 2018), the use of a face-to-face intervention resulted in significant improvements in motivation, attitudes, satisfaction, and subject-specific knowledge.

Thus, dedicated travel monies from technical assistance funders are warranted for face-to-face interactions. For coaches, these findings suggest strategic planning is needed to maximize on-site teaching and skill practice. The findings also support the concept that live interactions build rapport. Site visits may afford opportunities to facilitate relationships with and among not only project teams, but also community stakeholders and local funders. Further research could explore how site visits lead to greater relationship quality. For example, how do site visits increase connection, reduce intimidation, and promote recognition of a coach as a team player instead of as a monitor? How can a coach effectively use program observation to celebrate efforts, validate program quality, and provide useful objective feedback for improvements?

The last study objective assessed goal orientation as a reflection of the evolution of the coaching processes. The shift towards a greater goal orientation and proactively providing resources has endeavored to increase participant reach and impact, and position grantees for sustainability. Findings indicate coaches are recognized as more collaborative and valuable to project success when they help brainstorm options, spark new perspectives, encourage innovation, and provide guidance on using effective implementation strategies. A higher percentage of respondents

reported their coaches engaged in the reform style of coaching in 2017 (71.8%) compared to 2016 (36%). This style promotes innovation and adoption of new directions, such as researched practices and a targeted focus on outcomes.

Therefore, coaching effectiveness is dependent upon coach training and the creation and utilization of new resources that prompt enlightening conversations between a coach and the project team members that he/she is supporting. A challenge lies in the staffing needed for this, as well as coaches' commitment to sharing provided resources. Our process includes a coaching coordinator and support staff who provide coach professional development on a monthly basis and prepare resources for the coaching team and CYFAR grantees (i.e., handouts on implementation topics and a monthly newsletter). The training and resources prompt new perspectives and help to maintain a commitment to emerging research and evidence-informed practice. However, it takes dedicated time to research and develop the materials, and the value of these resources is only realized if they are used as intended by the coaches. A future direction for coaching may involve coupling the use of more online implementation resources, which can be easier to administer and monitor, with strategic coaching conversations. For example, grantee usage of videos or learning modules (e.g., participant recruitment strategies, fund development approaches) can be tracked in a learning management system. This would allow for consistency in educational content and tracking of dosage.

Summary

In 2017, a total of 43 CYFAR grant contacts completed a survey about their coaching interactions. The survey data, combined with formative evaluations, were analyzed to study four hypotheses related to the strength of coaching relationships over time, growth in coaching skills due to experience and professional development, the effect of on-site visits, and the influence of outcomes-driven coaching interactions on effectiveness and the perceived value of coaching.

Overall, survey respondents rated their coaches highly on coaching skills, coaching mindset, coaching framework, and coaching effectiveness scales. The data demonstrate coaching relationships and coaching effectiveness evolve over time. The initial phase must focus on establishing a rapport and a level of trust to set a foundation for reciprocal interaction and collaborative goal setting and barrier reduction. Consistency and face-to-face interactions strengthen the relationship. Later phases of relationship development are more effective when coaches 1) clearly define the coaching purpose, 2) work in concert with grantees to mutually agree upon and track project goals and participant reach targets, 3) offer proactive training and resources, and 4) consistently identify and address implementation needs with tailored support.

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