

Synthesized Training: Building Competence, Confidence and Socially Valid Skill Acquisition

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Introduction

The wait time to access applied behavior analysis (ABA) in the United States is estimated at 3 to 12 months, during which individuals often develop interfering behaviors. Can a diverse training package, synthesized training, facilitate earlier access to treatment by building clinician confidence in the ability to deliver effective treatment and increase parent confidence in therapeutic outcomes? A closer look at how a synthesized training package increases BCBA competence and parent confidence in ABA therapy thereby increasing access to effective ABA therapy is needed.

Methodology

Participants:

- BCBAs:** BCBA 1 and BCBA 2 have practiced in the field for 2-5 years. Neither of the clinicians had received formal training in Skills Based Treatment prior to this study.
- Clients:**
 - Client 1 is a 3-year-old whose parents originally sought out a diagnosis and treatment due to deficits in communication, socialization, and frequent intense tantrums. Parent aspirations included engaging in play by themselves and with others, communicating their needs, and tolerating unexpected changes.
 - Client 2 is a 5-year-old who engages in frequent scripting, creating problems socializing with peers and effectively communicating wants and needs. Parent aspirations include understanding their child's wants and needs and seeing their child play with siblings and peers.

Procedure:

- The clinicians were selected based on their client profile to complete training in the Practical Functional Assessment (PFA) and Skill Based Treatment (SBT) Protocol. Throughout the course of 16 weeks, synthesized training was provided in SBT implementation and systematically faded (Table 1).
- Surveys were administered to each of the participants. The BCBAs completed 5-scale surveys each week rating their self-reported competence implementing effective SBT. The clients' parents completed 5-scale surveys rating their confidence of SBT as an effective intervention for their child's challenging behavior.

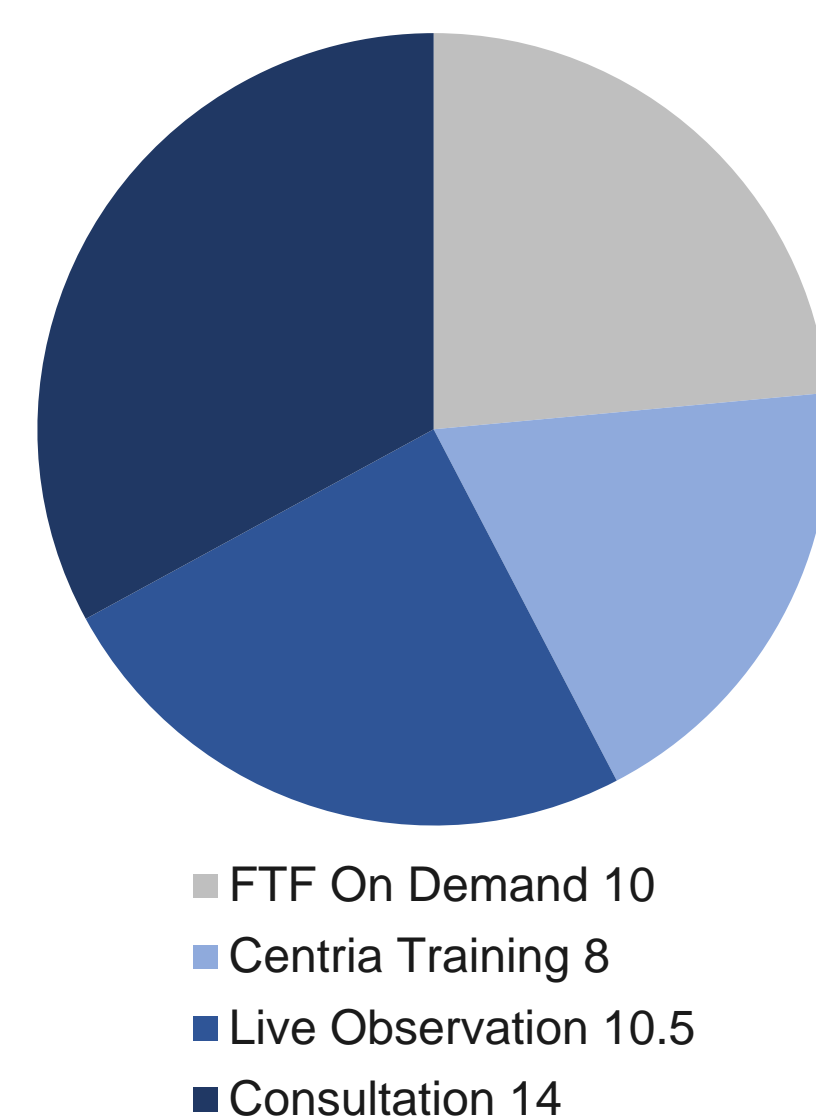
Table 1
Training modality structure and descriptions

Wk(s)	Training Modality	Duration	Description
1	FTF On Demand Course	10 hours	<ul style="list-style-type: none"> Online course presented by FTF Information PFA and SBT
1	Centria In-Person Training	16 (2x8) hours	<ul style="list-style-type: none"> Led by Centria's Vice President of Functional Assessment and Treatment Overview of PFA's and SBT processes
1-7	Centria Live Observations	2 x .5 hour / week	<ul style="list-style-type: none"> Direct supervision during the SBT sessions for each client Opportunity to discuss progression, barriers, etc.
1-16	Centria Weekly Consult	1 hour / week	<ul style="list-style-type: none"> Discussion of the SBT sessions for each client Presented videos from the previous week with fidelity checks

Note. Structure of the various types of trainings and support provided throughout the 16 weeks of treatment implementation

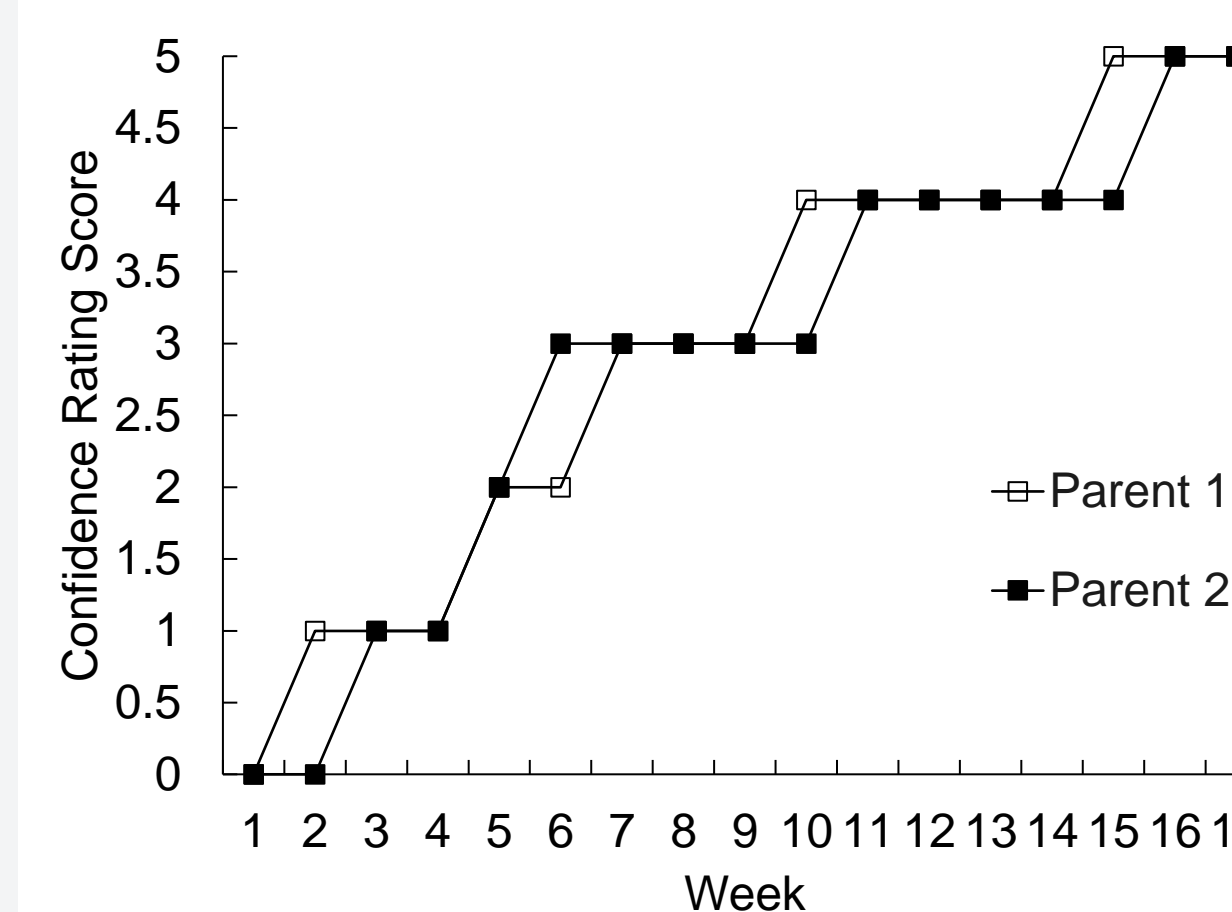
Results

Figure 1
Distribution of training hours



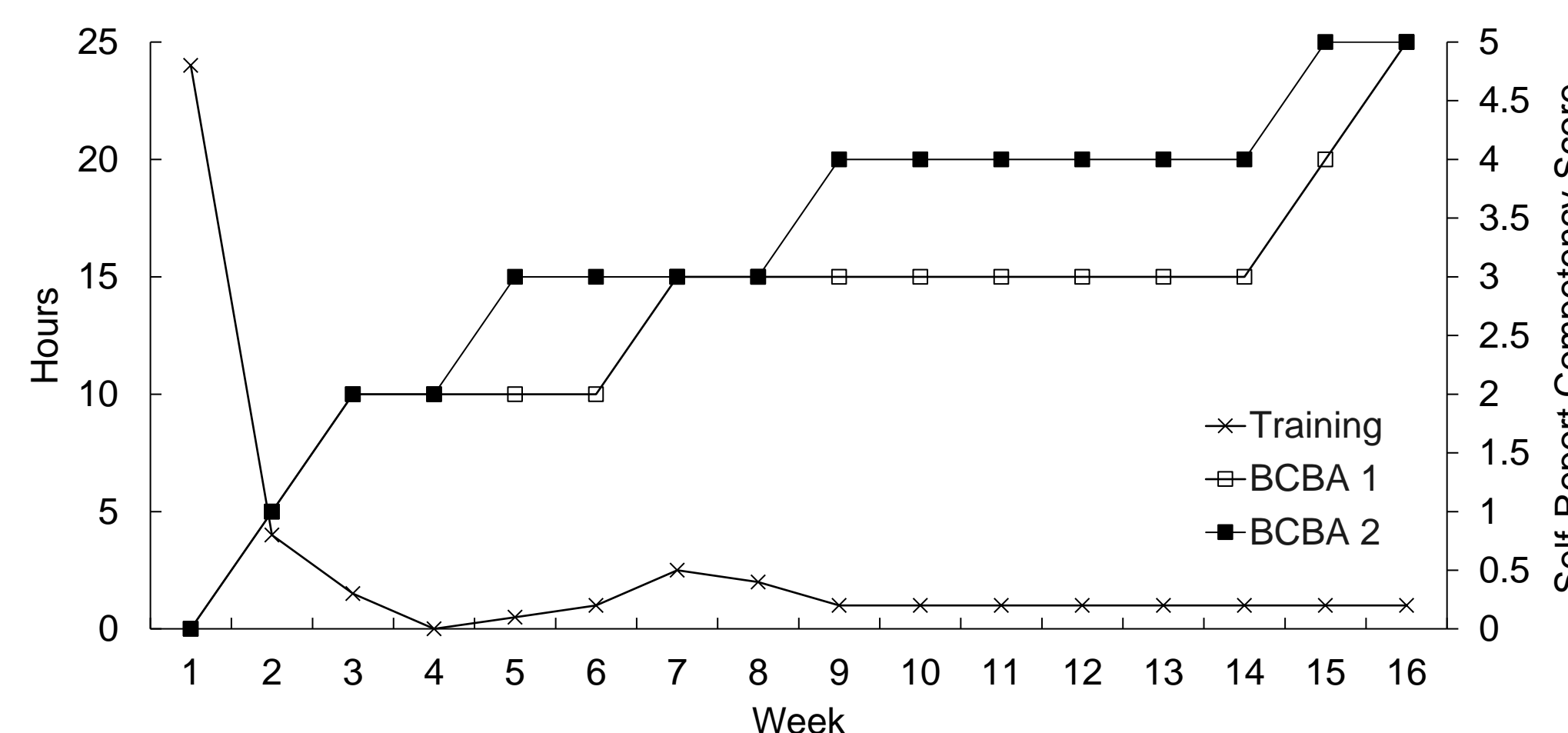
Note. Composition of synthesized training across modalities.

Figure 2
Parent Confidence across SBT Implementation



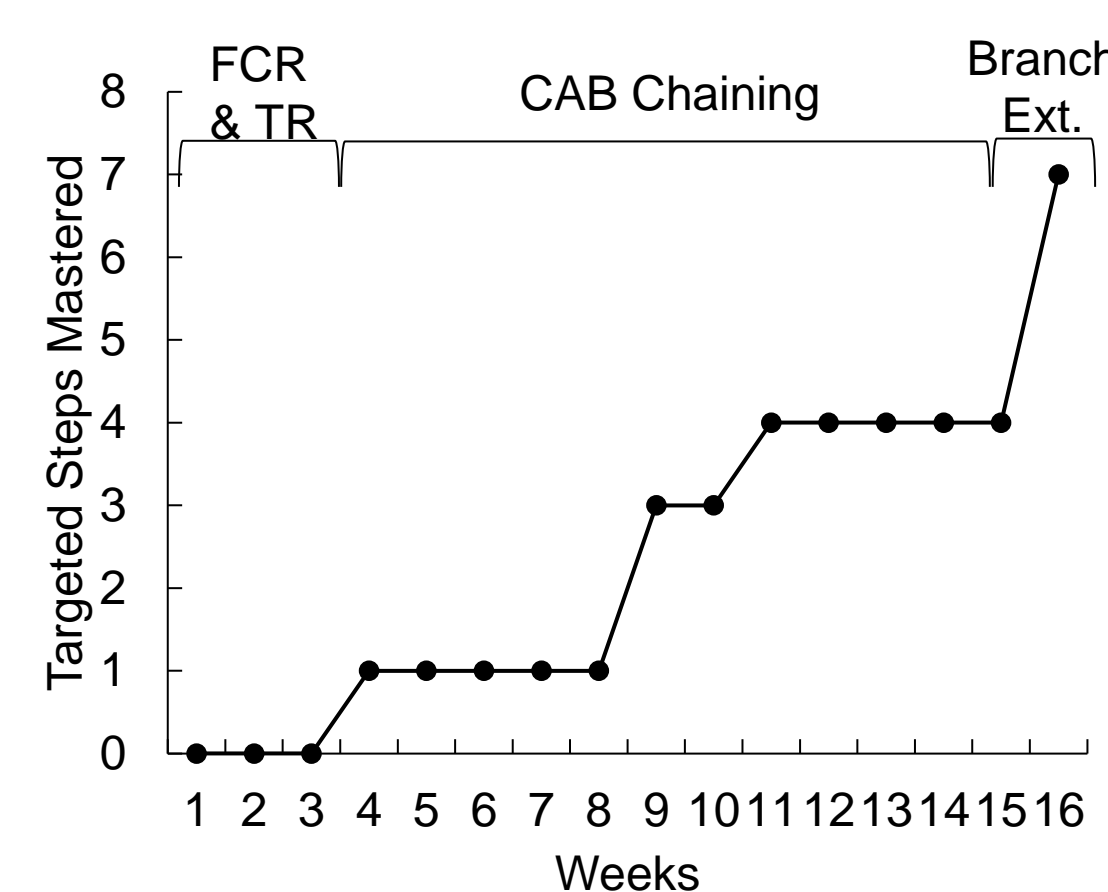
Note. Confidence scores for each parent collected every week across treatment implementation.

Figure 3
BCBA reported competence and training hours across SBT implementation



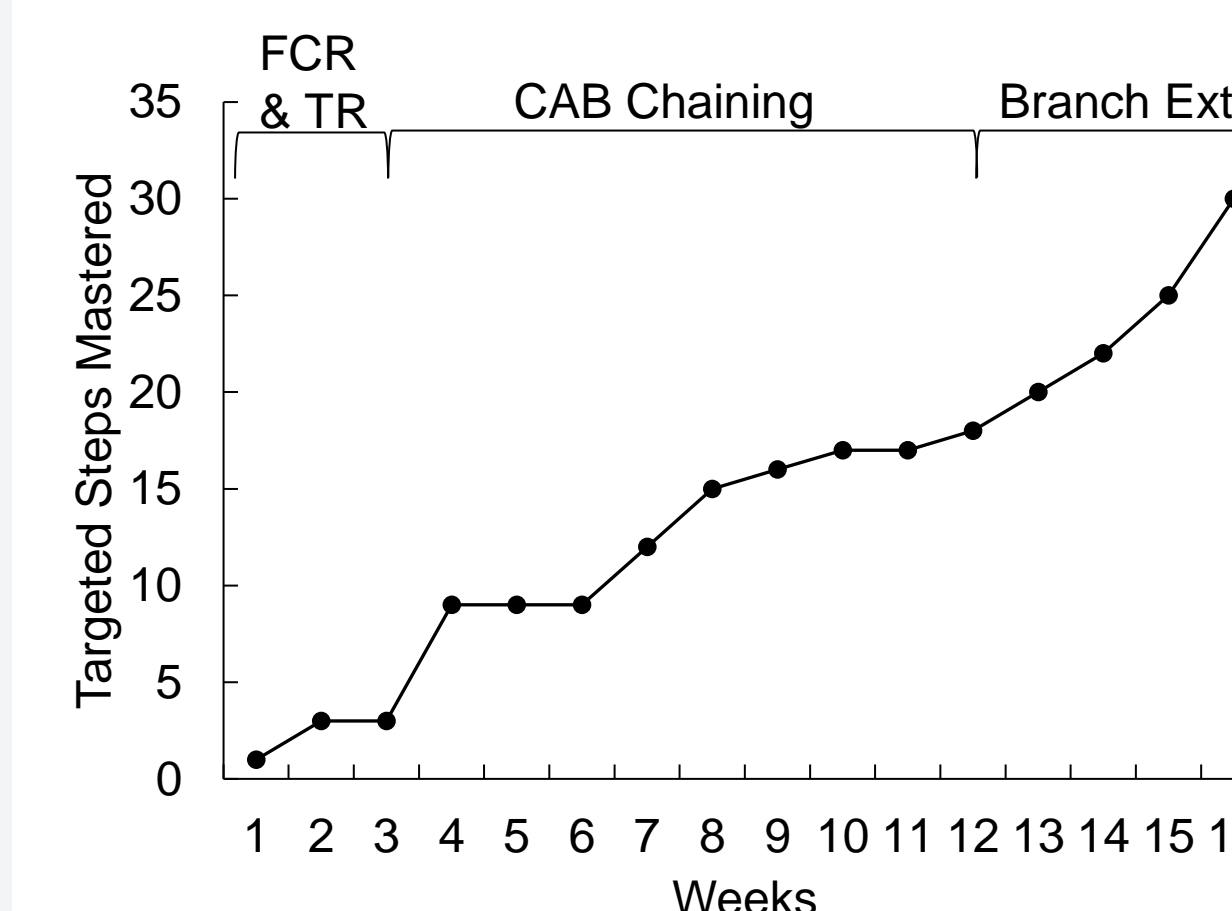
Note. Self-reported competency scores collected by each BCBA every week across treatment implementation. Distribution of synthesized training hours across treatment implementation.

Figure 4
Client 1 skill acquisition



Note. Number of cumulative mastered targets across SBT components and CAB Branches.

Figure 5
Client 2 skill acquisition



Note. Number of cumulative mastered targets across SBT components and CAB Branches.

Outcomes

- A synthesized training on the implementation of SBT occurred with two BCBAs and two clients over 16 weeks.
- Self-reported BCBA competence and parent confidence in the SBT process and SBT client target acquisition were compared.
- Competency and Confidence increased over time as training supports decreased over time. Figures 2 and 3
- Client skill acquisition increased over time. Figures 4 and 5
- Parents of both clients had low confidence in the SBT process at the start. Figure 2
- Parent confidence grew as client skill acquisition increased. Parents observed their children engaging in new skills that increased social interactions; interactions parents were not confident would ever occur.
- Providing intensive training, observation, and supervision at the beginning of treatment created a "synthesized training" allowing clinicians to deliver treatment earlier than waiting for clinicians to gain the competency to deliver treatment independently. Figure 1
- As clinician competency increased, parent confidence in treatment increased and client skill acquisition increased.
- Through SBT, clients acquired the skills targeted in each branch. Figures 4 and 5
- These skills generalized into the natural environment; social valid behavior change occurred. Figure 6

Limitations:

- There was no training held on Week 4
- Data collection for interfering behavior was not consistently collected in duration or frequency prior to SBT implementation.
- Data is self-report and observation.

Future Research:

- Can a systematic implementation of a synthesized training program for BCBAs reduce the wait time for ABA therapy?
- Does having BCBAs begin delivering SBT treatment while in a synthesized training program deliver ABA therapy that produces socially valid behavior change to clients sooner than waiting until BCBAs are ready to deliver therapy independently?

Figure 6
Outcomes associated with each targeted branch

Client 1		
Branch	Domain	Outcomes
1	Table work	<ul style="list-style-type: none"> Attending to people and objects in her environment Spontaneous labeling and requesting
2	Leisure Skills	<ul style="list-style-type: none"> Increased independent pretend play Approached and exchanged with peers in the natural environment Coping skills with wait times
Client 2		
Branch	Domain	Outcomes
1	Table work	<ul style="list-style-type: none"> Enrolled in school for the first-time 1st grade this fall New leisure activity of coloring
2	Leisure Skills	<ul style="list-style-type: none"> Attended Camp 2x this summer Reciprocal play with peers AND siblings Engaging in Socio-Dramatic play
3	Independent Life Skills	<ul style="list-style-type: none"> Using a public restroom Going out to eat Extended play dates
4	Tolerating Changes in Routines	<ul style="list-style-type: none"> Using calming techniques in new environments Maintaining access to group activities

Note. Applied and socially significant outcomes for each branch targeted in treatment for Clients 1 and 2.

Acknowledgements

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