

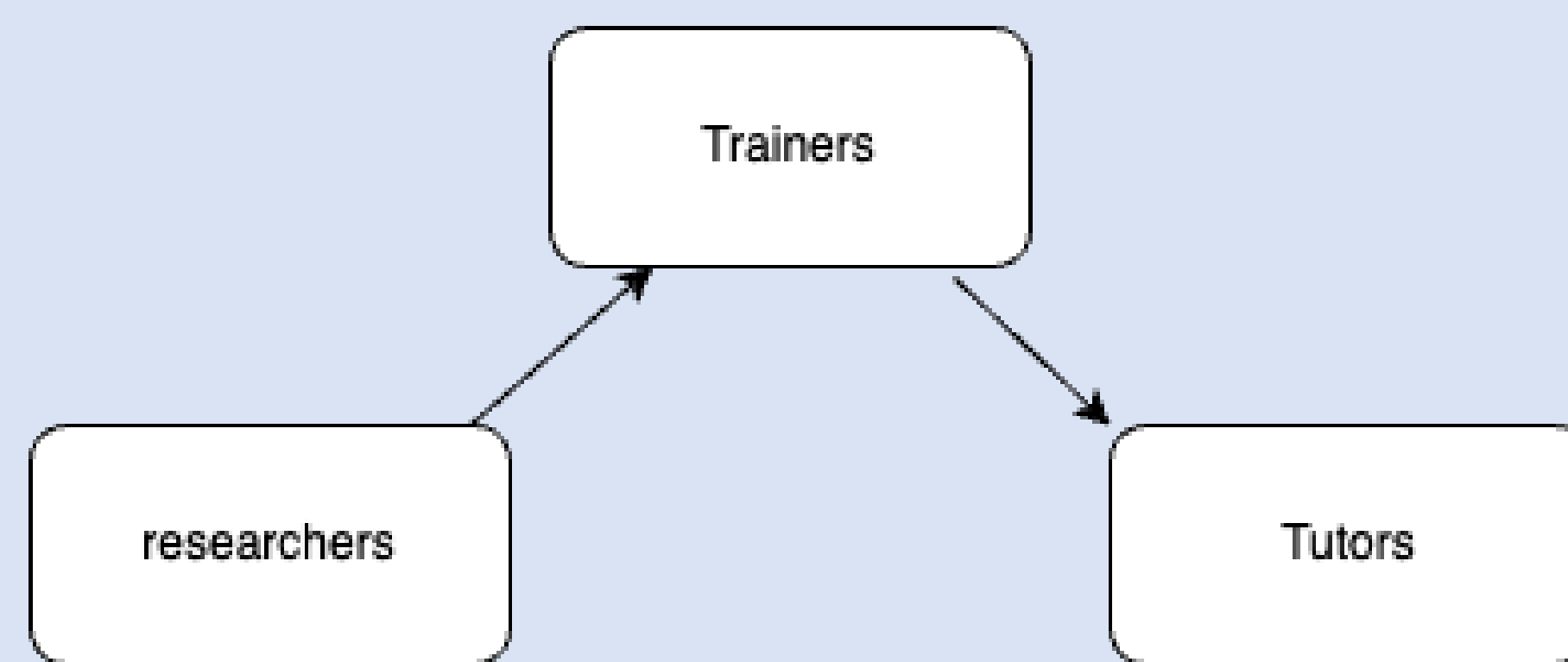
A Comparison of Self-Report and Observational Measures of State-Wide Tutoring Fidelity

Shengtian Wu, Ph.D., Jeongae Kang, Ph.D., Carrie Anna Courtad, Ph.D., & Christy Borders, Ed.D.

INTRODUCTION

- Training is a core focus of school psychologists (Merrell et al., 2011).
- Training is a way to mitigate school psychology shortage and decrease work time (NASP, 2017).
- Train-the-trainer model (Figure 1) allows delegating trainers' roles of school psychologists to other professionals.
- Direct observation delivers more reliable measurements while the indirect measurement (e.g., self-report) may tend to be inaccurate due to social desirability influence (Gresham et al., 2000; Gresham et al., 2017).
- No study has compared self-report and direct observation for implementation fidelity.

Figure 1. Train-the-Trainer Model

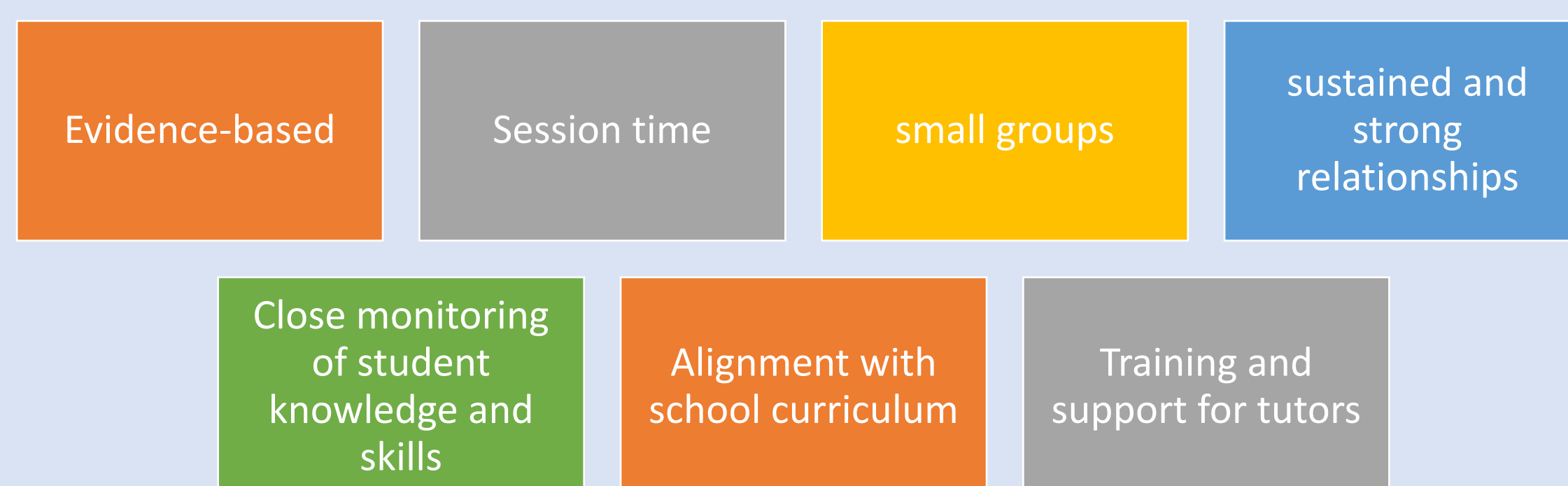


Implementation of Fidelity

- Implementation fidelity refers to the extent to which a program is implemented as designed (Kratowill et al., 2002).
- Various studies explored if implementation fidelity is high following initial training and its maintenance across time within small and medium size training (e.g., Collier-Meek et al., 2017)

High Impact Tutoring

- HIT is an evidence-based tutoring program with the purpose of providing effective supplementary academic supports (Nickow et al., 2020).
- HIT showed impacts across programs. To maintain its intended outcomes, it is important for tutors to maintain high levels of implementation fidelity.
- However, very few studies focused on using the train-the-trainer model to train tutors who provide tutoring for students.



Purpose of the Presentation

- To measure tutors' overall fidelity in implementing a high-impact tutoring program via self-report.
- To compare the self-rated fidelity of tutor implementation and the fidelity measured by direct observation of the trainers to evaluate the discrepancy.

METHOD

Participants

695 tutors and 26 supervisors for 122 schools across 69 school districts in the state of Illinois

Setting

- Tutors provided tutoring at the schools of child participants.
- The supervisors measured implementation fidelity at tutoring sessions beside the tutors.

Design: One sample t-test and paired-sample t-test

Sampling: random sampling

Dependent Variables:

- Implementation fidelity: The total number of steps followed correctly, divided by the total number of steps in high-impact tutoring, multiplied by 100.

Measurement

- Fidelity checklist
 - Each step of high impact tutoring;
 - Observation information and date;
 - Percent of steps implemented correctly

Independent variable

- Behavior Skills Training (BST)
 - Instruction
 - Modeling
 - Rehearsal
 - Performance feedback

Procedures

- Designed a fidelity checklist and training materials (videos & manual).
- Disseminated training materials to tutors and supervisors.
- Provided training
 - **Tutor training (Online)**
 - Instruction (manual) and modeling (video) shared via EdPuzzle.
 - **Supervisor training (online & in-person):**
 - In person training: half-day training that followed the framework of BST.
 - Periodic check in and in-person fidelity measurement.

Technology-mediated behavior skills training might work for a large-scale tutor training!

RESULTS

Significant difference between tutors' self-report and mastery level

Table 1. Descriptive statistics and one sample t-test for tutors' self-report

Data	N	M	SD	df	t	p	d
Self-report	14635	95.2	12.5	14634	146.95	<.001	12.49

Significant difference between supervisors' direct observation and mastery level

Table 2. Descriptive statistics and one sample t-test for direct observations of supervisors

Data	N	M	SD	df	t	p	d
Observation	303	87.3	17.5	302	7.28	<.001	17.57

Significant difference between the self-report and direct observations

Table 3 Descriptive statistics and paired sample t test for the self-report and direct observation of tutors' implementation fidelity

Data	N	M (SD)	df	t	p	d
Self-report	284	95.3 (11.6)	283	6.71	<.001	20.23
Observation	284	87.5 (17.6)				

Discussion & Implications

- Both self-report and observation outcomes passed the mastery levels.
- Telehealth training might accommodate a large number of trainees' learning.
- Self-report tends to be overestimated compared to actual performance of trainees (e.g., tutees)
- Train-the-trainer model might be able to support a large-scale training.
- Direct observations are needed to further improve training effect.

LIMITATION and FUTURE STUDY

- Need rehearsal and performance feedback for tutors.
- Need a follow-up measurement.
- Random sampling.
- More structured ongoing support.
- Only tried this model with academic tutoring.

REFERENCE: Will be provided upon request

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High Impact Tutoring Fidelity Checklist

1. The tutor engaged in relationship building with the student
 - Relationship building was *demonstrated through* (a) positive communication, (b) expressing empathy, and (c) providing honest feedback.
2. The tutor reviewed previous session.
3. The tutor introduced topic/focus and set learning goals with the student
4. The tutor used the explicit instructions.
5. The tutor used the guided practice during the session.
 - Guided practice was *demonstrated* (a) providing relevant new tasks, (b) prompting students as needed, and (c) providing explanations if students ask questions.
6. The tutor used deliberate practice during the session.
 - Deliberate practice was *demonstrated as follows:* (a) provide study materials (b) Observe the student practice, and (c) provide prompts or demonstrations as needed
7. The tutor checked for student's understanding during the session.

Percent of Integrity = (The total number components implemented/the total number of the intervention components) * 100 = ___%