



# Katz

## Katz School of Science and Health

# Ensuring Research Integrity Through Standardized Educational Modules for Researchers

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Occupational Therapy Doctorate Program

### ABSTRACT

The "Promoting Health Through Play Opportunities Program" (PHTPO) aimed to enhance development of children from underserved communities through playful interactions with parents. Fidelity, a key aspect of ensuring programs are implemented as intended, should be monitored using standardized methods, to produce evidence-based interventions. Training standardization ensures researchers execute all aspects of a program in the same manner, promoting methodological integrity. After extensive instruction, capstone students created standardized educational modules for trainees, covering procedural elements, PHTPO program delivery, scoring, and post-program interview. Trainees' competency levels were assessed using quantitative and qualitative tools. Trainees passed all content quizzes and competency checklists. Semi-structured interviews revealed that trainees found modules highly organized, helpful, and felt competent in administering the PHTPO program. OT researchers should incorporate standardization of training to promote competency delivering intervention protocols, ensuring fidelity to produce evidence-based practice.

### INTRODUCTION

- Joint play between parent/caregiver and child is crucial for both the child's overall development (Waldman-Levi et al., 2019).
- Socioeconomic status, a parent's education level, socio-cultural context, and the existence of siblings can be limiting factors in a family's support of play opportunities (Kavousipor et al., 2019).
- The PHTPO aimed to increase the ability for parents/caregivers, from underserved communities, to provide their children with appropriate play opportunities through an online group training program (Halperin et al., 2022).
- Producing evidence-based interventions requires implementation of methods that monitor fidelity, such as standardization of training which creates high levels of methodological integrity (Breitenstein et al., 2021; Mazumdar & Donovan, 2020).
- Measuring fidelity in research pertaining to early childhood development has been highlighted by many early childhood experts (Dunst et al. 2013).
- Studies that did not clearly measure fidelity faced problems including drawing incorrect conclusions and producing questionable outcomes (Taylor et al., 2015).

#### Project Aims

- To create a standardized educational module series to ensure PHTPO fidelity
- To promote facilitator competency and to create and implement competency tools (content quizzes, fidelity checklist, and semi-structured interviews)

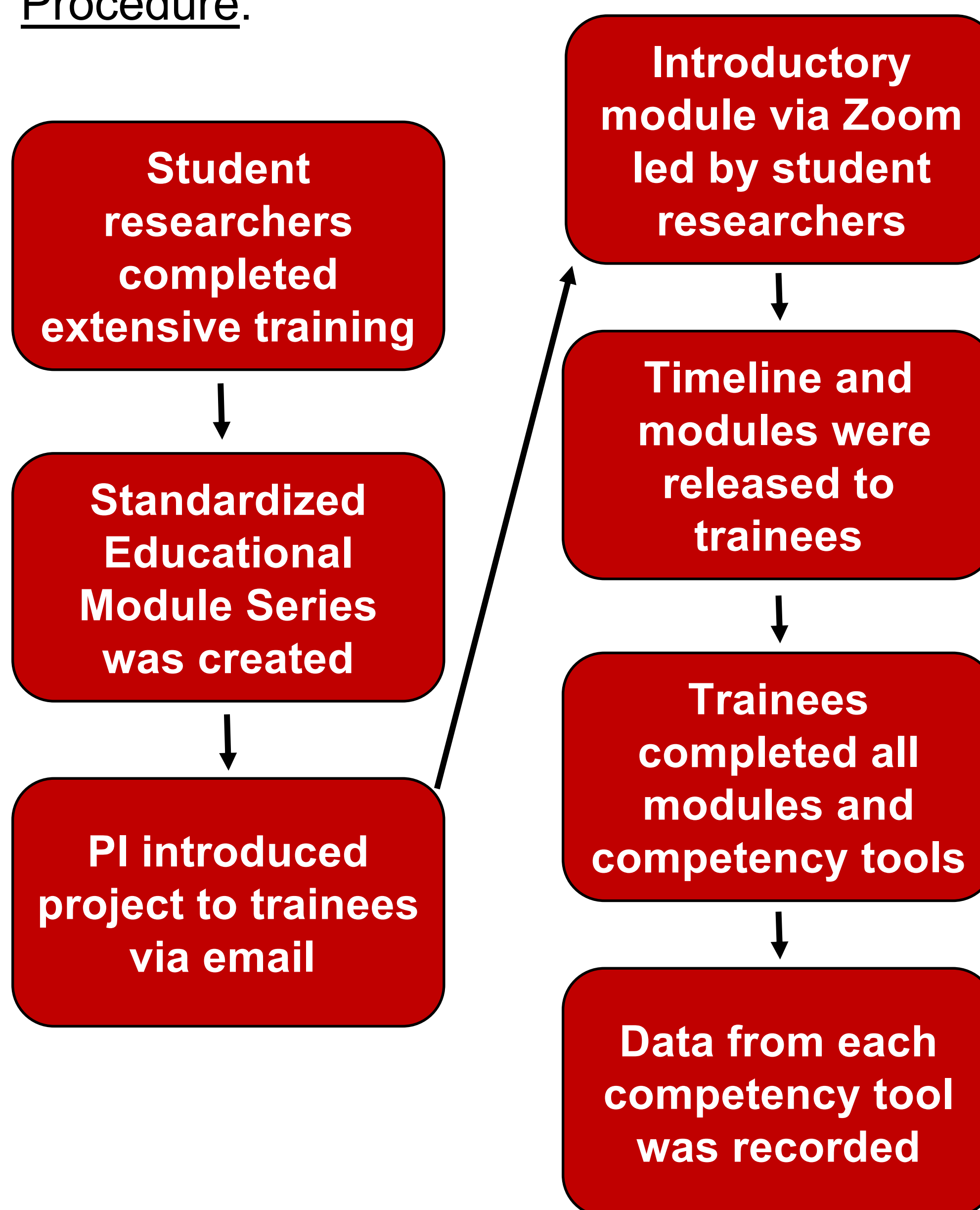
### STRATEGY

Participants: Four, sixth semester, female OTD students from YU

Competency Measures:

- Content Quizzes
- Fidelity Checklist
- Semi-structured Interviews

Procedure:



Data Analysis:

- Mean scores were taken from passing scores on content quizzes and fidelity checklists
- Common themes were identified using audio recordings and transcripts from participant interviews

### OUTCOMES

Passing Rate  
for Content  
Quizzes  
100%

Passing Rate  
for Fidelity  
Checklists  
100%

#### Competency

- "...yes, I feel competent myself, after going through all of the role-playing interviews and the scripts that were provided, as well as going through all of the videos of the mock interviews..." - Participant 4
- "I do feel that the training really help me to understand better all this information and be able to relay back to someone." - Participant 3

#### Organization

- "... feel like everything was very clear and well explained, and I feel like the PowerPoints were also like very clear to comprehend." - Participant 2
- "Within each module, everything was very clearly laid out, clearly labeled, lots of details, works perfectly for me." - Participant 1

#### Flexibility

- "...freedom to do it on our own schedule within the given time frame" - Participant 1
- "... the fact that I was able to do it at my own pace given the circumstances, was very helpful" - Participant 3

### CONCLUSION

- The standardized training module series increased competency of research trainees in the implementation of the PHTPO program.
- Limitations to this study include a small sample size and limited participants availability for training due to continued outside obligation and clinical training.
- For future OT intervention studies, it is recommended to incorporate standardization of personnel training, to promote research fidelity and personnel skills mastery.

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