

Abstract

Do theater arts improve social emotional skills in ASD? A growing body of work suggests that they might. We assessed 76 children's social, emotional, and motor imitation skills before and after participation in an already existing school-based theatre arts program. Standard scores on Imitating Hand Position significantly increased from Time 1 to Time 2, indicating improvement in core motor imitation skills. Overall time in the program, including the study year impacted social-emotional skills and theory of mind. These gains in imitation are encouraging as imitation is a foundational skill for more complex social skills (Ingersoll, 2008). Findings provide additional evidence for how theatrical activities can impact skills and abilities.

Introduction

- Arts programs are often claimed to help children, with varied levels of evidentiary support.
- Previous work has found theatre programs for children with ASD improve social behavior (Lerner 2011), emotional recognition (Lerner & Mikami, 2012), peer interaction (Guli et al., 2013; Corbett et al., 2015), and theory of mind (Corbett et al., 2013)
- These are often studies of **specialized** programs, specifically developed for change. What would happen when programs are available to wider community, and developed by practitioners and artists (rather than clinicians) in schools?
- We focused on a well-received, in musical theatre program for children with Autism Spectrum Disorders in public school in NYC.

Aims:

- Do children's social, emotional, and motor imitation skills improve as a result of participation in an already existing school-based theatre arts program?
- Does improvement match outcomes proposed by program's stakeholders?

Participants

- 76 children aged 5-18 (74% male) from a public school for children with special needs in NYC.
- Enrolled in a school-based musical theatre program.

	SRS (T Score)	SCQ (Total)
Mean (SD)	72.83 (10.9)	21.43 (6.29)

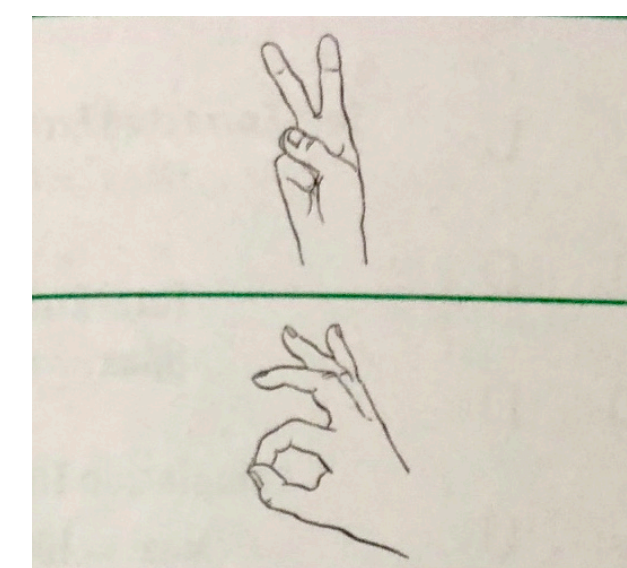
Methods

Procedure

Measures were chosen based on input from stakeholder adults working with the students (Goldstein et al., 2017).

Battery included:

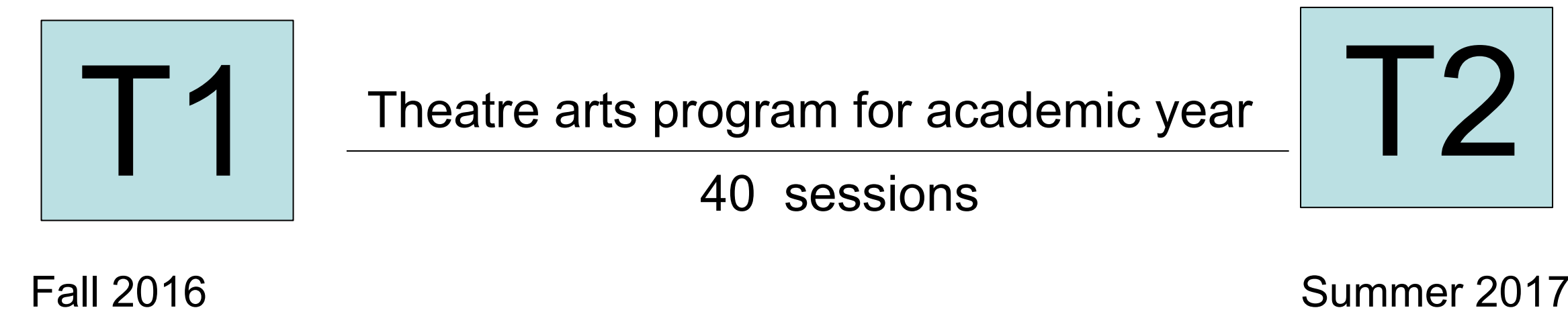
- Imitating Hand Position from NEPSY, Rogers Imitation Battery



- Social-Emotional functioning (SEL-Web): Standard score, Emotion Recognition, Social Perspective Taking (TOM), Social Problem Solving, Self Control.



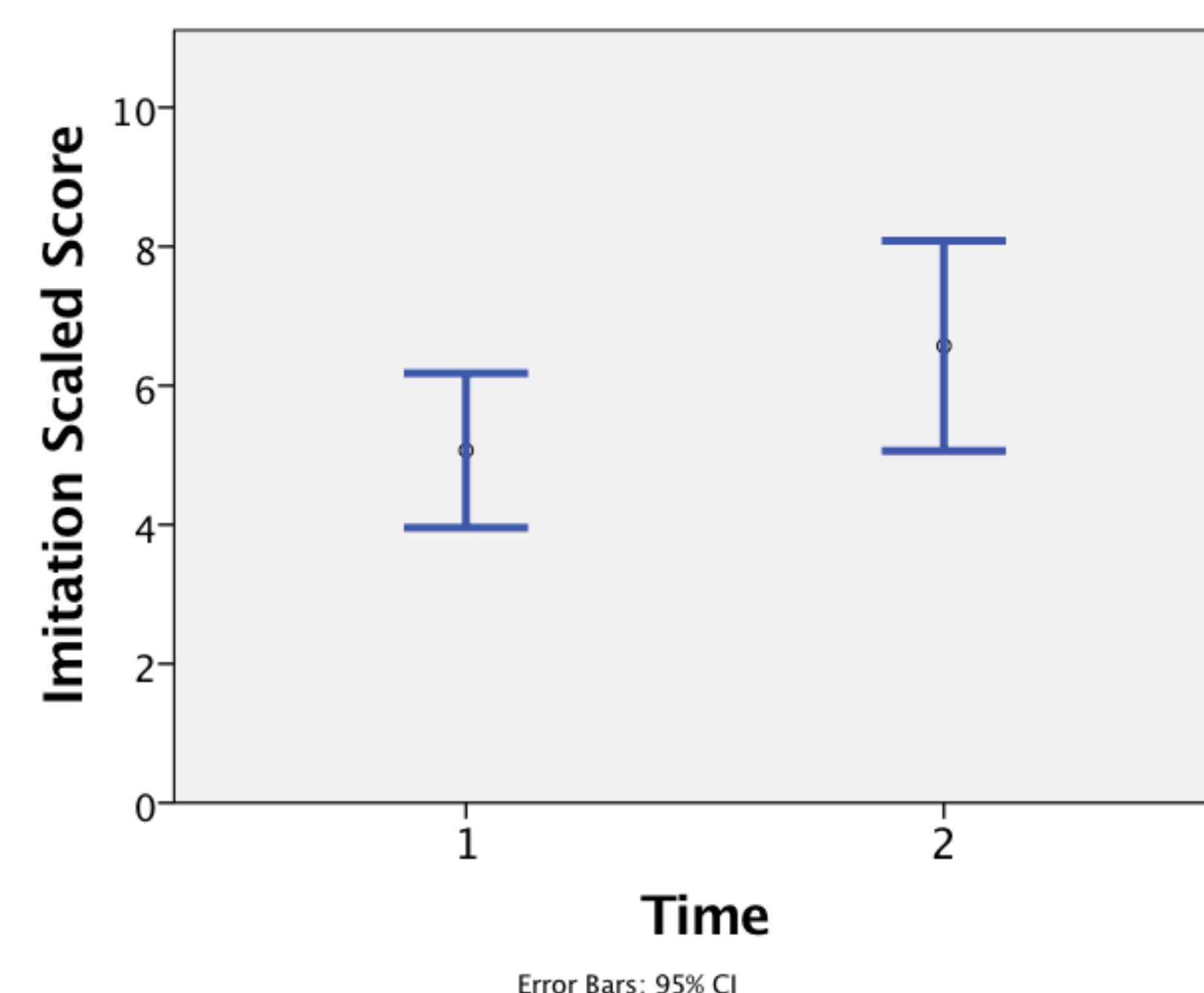
Timeline



Results

Motor imitation skills improved over the year

Standard scores on NEPSY imitating hand position improved from beginning to end of year (T1 to T2). $T(29) = -2.34, p = .026$.



Time in the program before testing period impacted social-emotional skills and theory of mind

Number of years in the program (1-5 years) was correlated with:

Overall social-emotional functioning (SEL-WEB SS)

T1: $r(27) = .37, p = .05$

T2: $r(20) = .67, p < .01$

(Partial correlations controlling for age)

Theory of Mind (SEL-WEB TOM)

T1: $r(26) = .42, p = .03$

T2: $r(20) = .88, p < .01$

(Partial correlations controlling for age)



Conclusions

- This nonselective theatre arts program impacts children's skills.
- Imitation of hand position improved** over the course of the school year.
- Children who had **been in the program longer had better theory of mind** and overall social emotional skills.
- Imitation is a foundational skill for more complex social skills (Ingersoll, 2008; McDuffie et al., 2007).
- Imitation was a skill endorsed by stakeholders** in the first part of our study, so our results reflected their intuitions.
- Further work will examine video data collected during theatre arts classes to investigate what teachers and children are doing.
- This was a pilot study. Future studies will include a control group not in the arts program, to enable us to rule out effects of other interventions.
- This adds evidence that theatrical activities can improve functioning and skills in real world settings.

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