



## Introduction

When working with children with autism, it is essential to teach the daily living skills necessary to help them achieve independence (Pierce & Schreibman, 1994). The "Big 6+6" are "basic fine motor movements that all individuals must have at regular performance rates if they are to be proficient at... self-help skills," (Desjardins, 1980, p2). Additionally, generalization provides natural maintaining contingencies for fine motor programs, though also requires active programming and effective techniques (Stokes and Baer, 1977). Considering this research, do fine motor skills learned via precision teaching spontaneously generalize into adaptive living skills?

## Method

The present study aimed to develop fine motor skills using precision teaching of the "Big 6+6" (Desjardins, 1980) topics, specifically:

Push  
Squeeze  
Grasp and Release

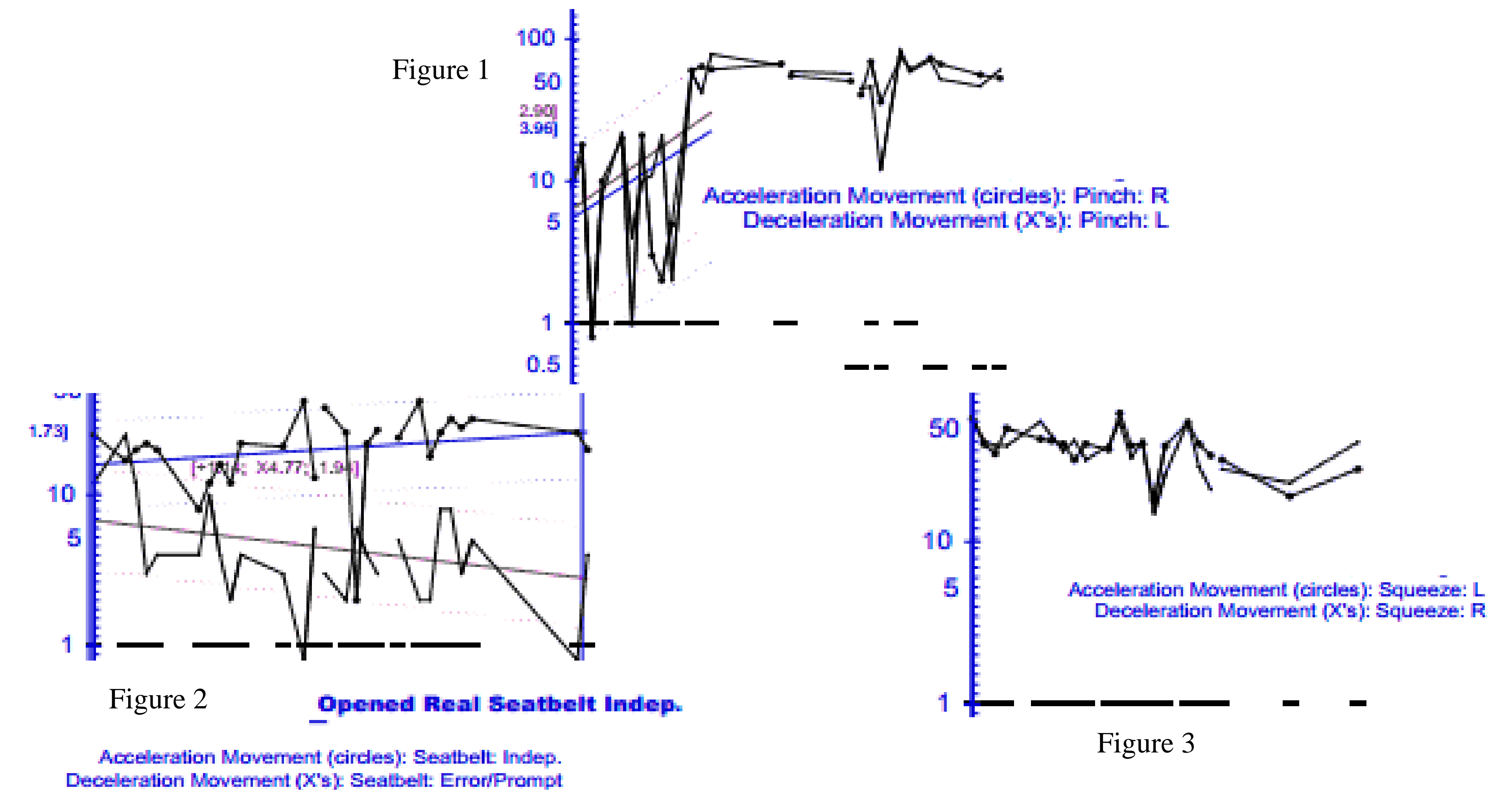
The participant was an eight-year-old boy with autism receiving 40-hours per week of ABA services, split between his home and an autism center. ABA therapists were undergraduate and graduate students with training and coursework in ABA. Data were charted on the Standard Celeration Chart.

The child was given the appropriate tool (Play-Doh® or clip magnet) with the verbal instruction to "Push," or "Squeeze," or "Pinch". The correct response initially required a full physical prompt, which was faded accordingly as independent responses increased. The programs were practiced individually, in one-minute increments, once per day. After two weeks of increasing independent responses, Silly Putty® replaced Play-Doh® in the squeeze program to provide more resistance. Upon acceleration and then leveling off of the data on the SCC in each program, the child was presented with new tools with the intent of generalizing these results into independent adaptive skills.

## Results

The child's fine motor skills improved significantly over the course of these programs. In the first two weeks, the pinch program had an acceleration of X2.03 (figure 1), the push program X1.03 (figure 2), and the squeeze program X1.6 (figure 3). After two weeks, of the pinch and squeeze programs steadily accelerating, he was able independently squeeze toothpaste onto his toothbrush, as well as firmly grasp a pencil. The push program continued to accelerate for six weeks, at which point he spontaneously, independently unbuckled his seat belt.

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## Discussion

This study aimed to use precision teaching to develop and later convert fine motor skills into independent adaptive skills. Measuring data both pre- and post-intervention, it is apparent that the study produced desired results. The child increased his frequency and efficiency in each target fine motor skill, demonstrating that precise, repetitive practice to fluency paired with opportunities for generalization offer an effective method for helping children develop independent adaptive skills.

By using simple tools such as Play-Doh® and plastic clips in a therapeutic environment, the child attained fluency in each skill in isolation, at which point they spontaneously generalized into these independent adaptive skills:

Buckling a seat belt  
Squeezing toothpaste from a tube  
Firmly grasping a pencil

Although this study reflects only a single subject and only baseline and intervention data is a weakness, that isolated Big 6+6 practice resulted in spontaneous generalization to functional daily living skills across three separate fine motor domains is a strength.

### References

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