

Evaluating the Efficacy of *Addy & Uno*, The First Family Musical About Disability, Friendship and Kindness: Enhancing Positive Attitudes and Intentions of Typical Children towards Children with Disabilities

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ABSTRACT

Sixty-eight students received pre and post-test behavioral intention and cognitive attitude measures both before and following *Addy & Uno, A New Puppet Musical*, which teaches about disabilities. Following the musical intervention, the participants showed significantly higher scores on behavioral intentions on the Shared Activities Questionnaire (SAQ) towards children with Autism, ADHD, visual, and physical impairment and significantly improved cognitive attitudes on the Adjective Checklist (ACL) towards children with ADHD, Autism, hearing, visual and physical impairment.

INTRODUCTION

Students with disabilities are not only a more frequent target of negative attitudes in the classroom, but are less accepted, have fewer friends, socialize less often, and report more loneliness than their typical peers. Unfortunately, simply including children with disabilities in the classroom does not ensure that typical children will increase their interest, positive attitudes, and intentions towards individuals with disabilities.

High quality interventions that effectively educate typical children about disabilities and encourage children to befriend individuals with disabilities are paramount to enhancing the cognitive attitudes, behavioral intentions and socialization of typical children towards their peers with disabilities. Conversely, if programs are not developed to promote acceptance and social integration, then children with disabilities will be less accepted by their typically developing peers in the classroom (Favazza, Phillepson, & Kumar, 2000). Aligned with the Pilot Musical and based on the *Realabilities Comic Book Series Curriculum*, *Addy & Uno, A New Puppet Musical* seeks to educate typical children about disabilities and to promote a stop bullying platform in and out of the schools.

PARTICIPANTS

Sixty-eight students (39 fourth graders [57.4%] and 29 fifth graders [42.6%]) from a Jewish Day School in Manhattan, New York participated in the *Addy & Uno, A New Puppet Musical Intervention*. In terms of age, 30 children were nine (44.1%), 34 children were ten (50.0%), and two children were eleven (2; 2.9%). With respect to gender, 34 girls (50.7%) and 33 boys (49.3%) participated in the intervention. The majority of students identified as White (66; 97.1%), one as African American (1; 1.5%), and one as Asian American (1; 1.5%).

PROCEDURE

Participants were recruited from a Jewish Day School in Manhattan, New York. The fourth and fifth grade teachers at the Jewish Day School administered Modified Pre and Post-Test Assessments of the Shared Activities Questionnaire (SAQ; Morgan et al., 1996) and Adjective Checklist (ACL; Siperstein & Bak, 1980) to 68 students three days before and the day following the viewing of *Addy & Uno, A New Puppet Musical*. The researchers conducted Paired Samples T-tests to determine whether or not the fourth and fifth grade students showed change from pre to post-testing on their knowledge, cognitive attitudes and behavioral intentions towards children with disabilities following the Puppet Musical. In addition, the researchers conducted Independent Samples T-tests to assess whether or not there were notable grade or gender differences in intentions and attitudes towards children with disabilities following the Musical.

Table 1. SAQ and ACL Paired Sample T-test Results

	SAQ Total		SAQ Academic Subtest		SAQ Social Subtest		SAQ Recreational Subtest		ACL	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Autism (mean ± SD)	19.59± 4.10	21.76 ± 3.15***	7.06 ± 1.83	7.96 ± 1.60***	7.43± 1.56	8.14± 1.21***	4.94± 1.18	5.58± .89***	7.78± 2.27	9.15± 1.48***
ADHD (mean ± SD)	20.53± 3.42	21.87± 3.31*	7.50± 1.49	7.98± 1.43*	7.79± 1.42	8.23± 1.30	5.31± 1.09	5.60± .90	7.95± 2.38	9.38± 1.61***
Blindness (mean ± SD)	19.61 ± 3.65	20.79 ± 3.65**	7.03 ± 1.78	7.59± 1.68*	7.39 ± 1.42	7.82 ± 1.63*	5.16± .99	7.82 ± 1.63***	6.85± 2.26	8.25± 1.82***
Deafness (mean ± SD)	20.34± 3.38	20.77 ± 3.46	7.25± 1.67	7.37 ± 1.69	7.63± 1.39	7.63 ± 1.39	5.42 ± .91	5.48 ± .93	7.31± 2.20	9.21± 1.90***
Paraplegia (mean ± SD)	20.00 ± 4.40	22.31 ± 2.84***	7.28 ± 8.40	8.40 ± 1.09***	7.69 ± 1.65	8.30± 1.22***	4.96 ± 1.35	5.46 ± .1.11***	7.10± 2.65	8.81± 1.91***

Asterisks indicate significance of pre- versus post-test results: * $p < .05$, ** $p < 0.01$; *** $p < 0.001$



RESULTS

With respect to principal study results, Paired Sample T-tests revealed that participants reported significantly more knowledge about visual impairment, $t(68) = -2.436, p < .05$, physical impairment, $t(59) = -2.685, p < .01$, hearing impairment, $t(60) = -3.687, p < .001$ and ADHD, $t(60) = -2.834, p < .01$ following the musical. They also showed more positive behavioral intentions (via the SAQ) toward hypothetical peers with Autism, SAQ Total, $t(62) = -4.115, p < .001$, ADHD, SAQ Total, $t(59) = -2.264, p < .05$, visual impairment, SAQ Total, $t(60) = -2.753, p < .01$, and physical impairment, SAQ Total, $t(57) = -3.880, p < .001$. Moreover, the results indicated that students improved their cognitive attitudes towards children with all five forms of disabilities, Autism, $t(67) = -4.571, p < .001$, Attention Deficit Hyperactivity Disorder (ADHD), $t(65) = -4.664, p < .001$, Visual Impairment, $t(66) = -5.264, p < .001$, Hearing Impairment, $t(15) = -6.300, p < .001$, and Physical Impairment, $t(67) = -5.288, p < .001$ after viewing *Addy & Uno, A New Puppet Musical*.

In terms of descriptive statistics, participants selected Uno (26; 43.3%), the puppet portraying Autism, Addy (10; 16.7%), the puppet portraying ADHD, RJ/Rolly (8; 13.3%), the puppet presenting with physical disability, Melody (5; 8.3%), the puppet presenting with visual disability and Seemore (2; 3.3%), the puppet portraying hearing impairment as their favorite characters in the show.

DISCUSSION

Thus, the researchers found that the 50 minute *Addy & Uno Puppet Musical* significantly enhanced typical children's knowledge and typical children's behavioral intentions towards children with Autism, ADHD, visual impairment and physical impairment. Moreover, *Addy & Uno, A New Puppet Musical* Intervention improved the cognitive attitudes of participants towards children with all five forms of disability: Autism, Attention Deficit Hyperactivity Disorder (ADHD), visual impairment, hearing impairment, and physical impairment. In terms of demographics, female participants were more likely to show more favorable behavioral intentions towards children with visual and hearing impairments than their male counterparts and fifth graders were more likely to show positive behavioral intentions towards children with visual impairment, hearing impairment, autism and physical disabilities than their fourth grade counterparts.