

Special Stage: A creative arts theater program for adolescents with disabilities Allison N. Sortino, OTS; Hon K. Yuen, PhD, OTR/L

Department of Occupational Therapy | University of Alabama at Birmingham Jackee D. Key, M.Ed. | Jasper High School

Introduction

BACKGROUND

- Approximately 7 million children in the U.S. account for students in the public school system that have a diagnosed disability (Schaeffer, 2020).
- The art of theater has been utilized as an intervention to improve social participation among adolescents with disabilities (Bailey et al., 2021; Corbett et al., 2016; Zyga et al., 2018).

THEORY

- There is an innate need of all individuals to achieve connection with others and establish a sense of self-esteem through peer relations and meaningful roles in society (Maslow, 1943).
- Creative occupations allow integration of the body and mind while working that surpasses other therapeutic techniques (Leenerts et al., 2016).

CAPSTONE SITE

- There is limited access for students with disabilities to participate in forms of creative art.
- Many of these students have difficulty socially interacting with peers and have limited opportunity to do so compared to typically developing peers.

PROJECT PURPOSE

• Establish a creative arts program within a school for students with special needs that evaluates the effectiveness of the arts towards improving social participation among peers.

Methods

RECRUITMENT

- Students in Jasper High School's special education department through volunteer sampling.
- Consent to participate in the program and the surveys was obtained by all participants and their caregivers through a consent form.

INCLUSION CRITERIA FOR PARTICIPANTS

- Age 14-21
- Diagnosis of autism spectrum disorder (ASD) or another form of intellectual disability (ID)
- Primary language of English
- No exclusions based on race or gender

PARTICIPANTS

• JHS special education department students (n = 17)

PROJECT PROCEDURES

• Participants that chose to participate engaged in an 8-week, 2 hour, 3 times weekly theater program with the purpose of improving social participation abilities.

OUTCOMES MEASURED

- Data was collected via an investigator-created pretest and posttest survey.
 - Section 1 collected demographic information from the participants including age, gender, race, and diagnoses.
 - Section 2 measured verbal communication skills.
 - Section 3 measured nonverbal communication skills.
 - Sections 2 and 3 included 5-point Likert scale questions designed to assess various social participation abilities of participants.
- 17 total responses
- Survey gathered site mentor's perspective of social skills level pre intervention and post intervention.
- Participants were allowed to answer open ended narrative responses.

DATA ANALYSIS

- Participants were divided into homogeneous groups based off IQ score.
- Participants were assessed on ten verbal communication skills and ten nonverbal communication skills.
- Data was input into Qualtrics platform and analyzed for changes noted between pre/post intervention.
- Paired sample t-tests were conducted using data from baseline to post-intervention using a 95% confidence interval.

Results

PARTICIPANTS

 47% female
 47% ASD
 35% IQ below 20

 53% male
 53% ID
 35% IQ 20-40

 30% IQ 40-55
 30% IQ 40-55

<u> </u>	Sable 1. Individualized Social S	Skill Assessment Data			Table 1. Individualized Social Skill Assessment Data					
	Mean (Pre-Intervention)	Mean (Post-Intervention)	P-value	T-value	% Increase					
Verbal Communication Skills										
Responds appropriately to vocal language and facial expressions	1.76	2.41	0.00045	4.4	36.93%					
Does not have restricted or unusually narrow range of conversation	1.82	2.29	0.00167	3.771236	25.82%					
Initiates conversation with peers	2.06	2.35	0.02006	2.581989	14.08%					
Appropriately turn takes in conversation	1.94	2.29	0.00933	2.954196	18.04%					
Clearly conveys thoughts through fluid speech and expression	1.41	1.94	0.00062	4.242641	37.59%					
Uses correct speaking volume for contextual setting of conversation	1.53	2.18	0.00006	5.416026	42.48%					
Uses appropriate inflection and pacing when speaking	1.24	1.94	0.00001	6.196773	56.45%					
Is able to remain on topic in conversation	1.94	2.35	0.0041	3.34664	21.13%					
Is able to distinguish between when certain conversations are contextually appropriate	1.71	2.18	0.00167	3.771236	27.49%					
Knows how and when to appropriately end a conversation	1.71	2.0	0.02006	2.581989	16.96%					
Nonverbal Communication Skills										
Is self-confident when interacting with peers	2.06	2.59	0.00062	4.242641	25.73%					
Behaves appropriately as compared to others with similar age, gender, and diagnosis	1.65	2.12	0.00167	3.771236	28.48%					
Is coordinated in body language within social interactions	1.53	2.06	0.00298	3.496629	34.64%					
Does not avoid or have unusual eye contact	1.59	2.29	0.00014	4.950822	44.03%					
Does not intentionally avoid social interaction with others	2.24	2.41	0.08262	1.85164	7.59%					
Is not tense such as being stiff or freezing	1.65	2.29	0.00045	4.4	38.79%					
Keeps from staring/gazing off when socially participating	1.47	2.06	0.0002	4.780914	40.14%					
Is able to discriminate between emotions felt and reflect them appropriately	1.65	1.94	0.02006	2.581989	17.58%					
Recognizes and responds appropriately to social cues	1.82	2.06	0.04131	2.218801	13.19%					
Maintains appropriate body spacing and body language in conversation	1.71	2.0	0.02006	2.581989	16.96%					

Discussion

- Overall, statistics for the entire group showed improvement in an overarching social skill assessment score.
- Findings of this study add to the growing literature and support the results of previous studies.
 (Agnihotri et.al., 2013; Bailey et al., 2021; Corbett et al., 2016; Zyga et al., 2018).
- Statistical data and narrative responses yielded positive outcomes.
- Both verbal and nonverbal communication skills appeared equally improved by the program.
- All participants found the program helpful and recommended it.
- Participants reported being excited and proud of the outcome.
- Greater results of theater intervention may be seen in:
 - Females
 - Adolescents with ID
 - Participants that have an IQ between 20-55
- Most improved verbal communication skills:
 - Responding appropriately to language and facial expressions
 - Clearly conveying thoughts in a fluid manner
 - Using correct speaking volume, inflection, and pacing
- Most improved nonverbal communication skills:
 - Coordinated body language
 - Eye contact
- Students able to better communicate with peers increases the opportunities they have throughout their school for inclusion, friendship, involvement in extra curriculars, which can increase their quality of life.

Discussion continued

LIMITATIONS

- Small sample size
- Lack of variety in diagnoses
- Lack of control group
- Investigator-created survey
- Possible bias in survey responses

FUTURE RESEARCH

- Gather data from multiple sources
- Use a standardized assessment
- Administer a follow-up assessment
- Assess a variety of disabilities
- Implement theater program in variety of settings

IMPLICATIONS FOR PRACTICE

- Implementation can be widespread among a variety of career paths to achieve improvement in the social participation abilities of adolescents with disabilities.
- Interventions that incorporate role play, mini plays, or even skits could potentially reap similar benefits as the results of this study.

Conclusion

- Results of this study are consistent with previous literature and are an addition to the growing evidence that supports the use of theater to improve social skills.
- Both statistical data and narrative responses of this study display evidence for the feasibility and effectiveness of a school-based theater intervention for adolescents with ASD and intellectual disabilities to improve their verbal and nonverbal social participation skills.
- Various professionals can find ways to implement aspects of this study to create a fun, exciting, and unique way to meet goals of clients.

References

Corbett, B., Key, A., Qualls, L., Fecteau, S., Newsom, C., Coke, C., & Yoder, P. (2016). Improvement in social competence using a randomized trial of a theatre intervention for children with autism spectrum disorder. *Journal of Autism & Developmental Disorders*, 46(2), 658–672. https://doi-org.ezproxy3.lhl.uab.edu/10.1007/s10803-015-2600-9

Leenerts, E., Evetts, C., & Miller, E. (2016). Reclaiming and proclaiming the use of crafts in occupational therapy. *The Open Journal of Occupational Therapy*, 4(4). https://doi.org/10.15453/2168-6408.1194

Maslow, A. H. (1943) A theory of human motivation. *Psychological Review*, 50, 370–396. https://doi.org/10.1037/h0054346

CONTACT INFO: Allison N. Sortino: asortino@uab.edu

Schaeffer, K. (2020). As schools shift to online learning amid pandemic, here's what we know about disabled students in the U.S. *Pew Research Center*. https://www.pewresearch.org/fact-tank/2020/04/23/as-schools-shift-to-online-learning-amid-pandemic-heres-what-we-know-about-disabled-students-in-the-u-s/#:~:text=1%20The%20nearly%207%20million,for%20which%20data%20is%20available.

Zyga, O., Russ, S. W., Meeker, H., & Kirk, J. (2018). A preliminary investigation of a school-based musical theater intervention program for children with intellectual disabilities. *Journal of Intellectual Disabilities*, 22(3), 262–278. https://doi-org.ezproxy3.lhl.uab.edu/10.1177/1744629517699334

Acknowledgement & Contact Information

SPECIAL THANKS TO: K. Megan Carpenter, OTD, OTR/L, SCFES¹, Emily Delzell, Jonah Trotter, Jasper High School Faculty

