**Background Research**

Positive effects of extracurricular participation

* higher reading scores
* higher teacher evaluation of math skills
* higher educational attainment
* decreased behavior issues increased interpersonal competence
* higher ratings of life satisfaction
* increase in social interest, or the idea of putting a group’s needs before one’s own
* increased satisfaction in relationships with family and friends
* However children with ASD much less likely to participate in activities

Positive effects of drama activities

* building social skills, such as empathy
* communicate and practice social skills within a safe, welcoming environment
* increased theory of mind and facial identification skills
* increased interactions with peers, significant improvement in social cognition, significant improvements in adaptive functioning, significant reduction in parental stress, and significant reduction of cortisol levels-stress hormone
* In preschool population specifically, higher rates social interaction and decreased behaviors

**Methodology**

* 21 question online survey, short answer, multiple choice, select all that apply
* Distributed to parents of preschoolers who participated in drama and through other organizations
* ChildServe, Collaborative Autism Team Forum attendees, local chapter of the Autism Society of Iowa
* Parents encouraged to pass survey along to others
* Areas of responses: demographic information, extracurricular participation, barriers to participation, Spectrum Theatre Preschool Drama play dates, additional comments

**Results-Extracurricular Participation**

* 5 boys, age 4-5, live in Black Hawk county, diagnosed with ASD
* All in preschool, 3 receive services in school, 3 outside of school, 1 attends daycare
* Rate of participation in past year: 2-4 activities (3), 1 activity (2)

Participation:

* Drama program (3)
* physical activities not including team sports (3)
* learning-based activities (1)
* team sports (1)
* music (1)
* library events (1)
* play dates (1)

Benefits of Participation

* Positive effect: yes (4), unsure (1)
* Program that had biggest impact: drama (3), UNI swim lessons for kids on the spectrum (1)
* Parent reported positive effects of participation:
	+ Increased peer interaction
	+ Increased positive social behaviors such as: sitting in one spot, sitting in a circle, Working as a group, taking turns (2), listening/following directions
	+ More outgoing
	+ “It was the only activity available to my preschooler. Most activities would not accept him due to the level of disability and the required supervision.”

Barriers to Participation

* 4 of 5 parents considered an activity but chose to not have their child participate
* Not the right fit for my child, Concerns about my child’s ability in the activity, Concerns about my child fitting in, Concerns about my child’s interaction with other children, Concern’s about my child’s interaction with the adults leading the activity, Concern’s about my child’s behaviors, Concern’s about my child’s language or communication
* Factors not chosen: Time, Cost, Distance

Barriers to Participation (Single biggest factor that prevented participation)

* concerns about my child’s ability (1)
* concerns about my child’s behavior (1)
* concerns about my child’s interaction with adults leading the activity (1)
* concerns about my child’s language/communication (1)

**Drama Program**

* Offered during Spring 2014, Fall 2014 & Spring 2015
* Early Childhood (Ages 3-Kindergarten/1st grade)
* Primarily children on the Autism Spectrum
* Drama led by Theatre Professor, Theatre Student or Communication Sciences & Disorder (CSD) Student
* Each child with college student (Theatre or CSD)

Skills Targeted:

Non-verbal communication (Imitation or spontaneous production): feelings, gestures, signs

Verbal Communication

Augmentative & Alternative Communication (AAC)

Turn-taking, Pretend Play, Peer Interaction

Lessons (Predictable format each time)

* Welcome/Greeting
* Two to four activities: Target communication skills, Teach concepts for “skit”, Repetition with variety
* Skit/Play: Talked through by leader, Talked through with children involved, Children trying various roles, Final performance for parents
* Closing

**Website**

http://dramaforautism.weebly.com/

**Results-Drama Play Dates**

2 past or current participants, 1 has heard of it and chose not to participate, 1 may or may not have heard of it

Of the 2 participants, rating scale 1-7 (7=highly satisfied, would return/recommend), 1 said 6, 1 said 7

Benefits of Drama

* positive changes as result of program:
* Increased stamina for open-ended tasks, talking and turn taking
* What did you like most about this program compared to others your child may have participated in?
* “I appreciate that all of the kids have some sort of disability, but not all ASD. It makes it easier for parents to be there because there is a common understanding for good days and tough days.”
* “Had a one on one student with him.”

Drama Suggestions, Comments

* suggestions for improvement:
* incorporating typical siblings if close in age
* longer program
* additional comments:
* “Love that you provide them”
* “There are very few activities available to a preschooler on the Autism Spectrum. Most regular activities will not include [my child] as he requires special care, guidance and supervision. There are little to no Autism specific activities available to him...it is very frustrating and I would welcome any additions. I marked having participated in the Spectrum Playdates because I think this may be a small preschool drama program he has attended in the past but I may be incorrect. I will be investigating Spectrum Playdates further.”
* “Sports teams for kids on spectrum and with other special needs would be a great thing in this community.”

**Discussion**

Study comparison to literature

Extracurricular participation:

* our rates were high compared to literature of different age groups of children with ASD
* social interactions/behaviors as positive impacts

Drama feedback:

* social interaction/behavior outcomes
* Concerns about parent that indicated their child was not eligible to participate in activities

How can extracurricular programs promote inclusion?

IDEA and ADA include extracurricular activities

Consider:

Accessibility

Equipment

professional development: making accommodations, managing behavior, etc.

Open conversations with parents

**Limitations of Research**

small sample size, Parents of children who do not participate in extracurricular activities may not have responded to the survey although encouraged to, Child may not be diagnosed at preschool age, Although ASD can be diagnosed much earlier, most children are not diagnosed until age 4 or later, Parents of preschool-age children with ASD may not yet be connected with the organizations we contacted

**Future Directions**

Provide resources to help parents know what is available, Send out survey again following completion of current drama program sessions for possible additional results, Send out survey to parents of school-age children with ASD diagnoses, ask them to reflect on their child’s participation as a preschooler, May provide information on children who had not yet been diagnosed as preschoolers, Would be interested in knowing why child who had heard of drama program chose not to participate, Concerns of parents who have children that are less verbal believing drama may not be appropriate for them so they do not participate

**Conclusions**

Extracurricular participation has benefits for preschool age children

Drama program has positive effects for participants

Despite rights, children with ASD may still not feel welcome in activities

Provide appropriate supports and professional development

Questions/Comments/Notes

**References**

Centers for Disease Control and Prevention. (2014). *Autism spectrum disorder (ASD): Data & statistics*.

Retrieved from http://www.cdc.gov/ncbddd/autism/data.html.

Corbett, B. A., Gunther, J. R., Comins, D., Price, J., Ryan, N., Simon, D.,...Rios, T. (2011). Brief report:

Theatre as therapy for children with autism spectrum disorder. *Journal of Autism and Developmental Disorders, 41*(4), 505-511. doi: 10.1007/s10803-010-1064-1

Corbett, B. A., Swain, D. M., Coke, C., Simon, D., Newsom, C., Houchins-Juarez, N.,...Song, Y. (2013).

Improvement in social deficits in autism spectrum disorders using a theatre-based, peer-mediated intervention. *Autism Research 7*(1), 4–16. doi: 10.1002/aur.1341

Dow, A., Leong, D., Anderson, A., Wenzel, R., & Team, V.C.U.T.-M. (2007). Using theatre to teach clinical

empathy: A pilot study. *Journal of General Internal Medicine, 22*, 1114–1118. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2305755/.

Dumais, S. D. (2006). Elementary school students’ extracurricular activities: The effects of participation

on achievement and teachers’ evaluations. *Sociological Spectrum, 26*(2), 117-147. doi: 10.1080/02732170500444593

Gilman, R. (2001). The relationship between life satisfaction, social interest, and frequency of

extracurricular activities among adolescent students. *Journal of Youth and Adolescence, 30*(6), 749-767. doi: 10.1023/A:1012285729701

Goldstein, H., & Cisar, C.L. (1992). Promoting interaction during sociodramatic play: Teaching scripts to

typical preschoolers and classmates with disabilities. *Journal of Applied Behavior Analysis, 25*, 265–280. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1279709/pdf/jaba00016-0031.pdf.

Kempe, A., & Tissot, C. (2012). The use of drama to teach social skills in a special school setting for

students with autism. *Support for Learning, 27*(3), 97-102. doi: 10.1111/j.1467-9604.2012.01526.x

Mahoney, J. L., Cairns, B. D., & Farmer, T. W. (2003). Promoting interpersonal competence and success

through extracurricular activity participation. *Journal of Educational Psychology, 95*(2), 409-418. doi: 10.1037/0022-0663.95.2.409

Shattuck, P. T., Orsmond, G.I., Wagner, M., & Cooper, B.P. (2011). Participation in social activities among

adolescents with an autism spectrum disorder. *PLoS ONE, 6*(11), 1-9. doi:10.1371/journal.pone.0027176.t001.

Simoncini, K., & Caltabiono, N. (2012). Young school-aged children’s behaviour and their participation in

extracurricular activities. *Australasian Journal of Early Childhood, 37*(3), 35-42. Retrieved from http://eds.b.ebscohost.com.proxy.lib.uni.edu/.

Solish, A., Perry, A., & Minnes, P. (2009). Participation of children with and without disabilities in social,

recreational and leisure activities. *Journal of Applied Research in Intellectual Disabilities, 23*(3), 226–236. doi: 10.1111/j.1468-3148.2009.00525.x

U.S. Department of Education. (2011). *Creating equal opportunities for children and youth with*

*disabilities to participate in physical education and extracurricular athletics*. Retrieved from https://www2.ed.gov/policy/speced/guid/idea/equal-pe.pdf