

Out in Left Field: Learning from Out of School Arts Experiences

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Projects

- Completed Projects
 - Crystal Bridges Museum of American Art, single visit
 - Live Theater, single visit
- Projects Underway
 - Woodruff Arts Center, multi-visit
 - Crystal Bridges, multi-visit
 - Descriptive Study of Arts Activities Over Time



Motivation

- Arts-focused field trips are in decline
 - emphasis on tested subjects
 - shift toward reward trips
- There is a growing, but small, body of rigorous research on short term effects from cultural experiences.
- Less is known about long term effects.
- If we cannot make the case for arts experiences in K-12 education with rigorous evidence, the arts are likely to suffer.



Past Research and Practice

I went to MoMA and...

I ran around
in circles until
I fell down and
threw up



Past Research – Crystal Bridges Design

- In total, 525 K-12 school groups with 38,347 students applied
- Applicants were organized into matched pairs
 - Pairs randomly assigned to treatment and control
 - Pairs randomly ranked to fill available spots
- Data collected from 10,912 students in 174 applicant groups (80 matched pairs) on average 3 weeks after tour



Past Research – Crystal Bridges Results

- Students who won the lottery and received a school tour of Crystal Bridges are significantly more likely to:
 - Recall school visit themes
 - Demonstrate stronger critical thinking skills
 - Display higher tolerance
 - Exhibit greater historical empathy
 - Develop a taste for art museums and cultural institutions
- Benefits are generally significantly larger for disadvantaged students (minority, low-income, or rural schools)

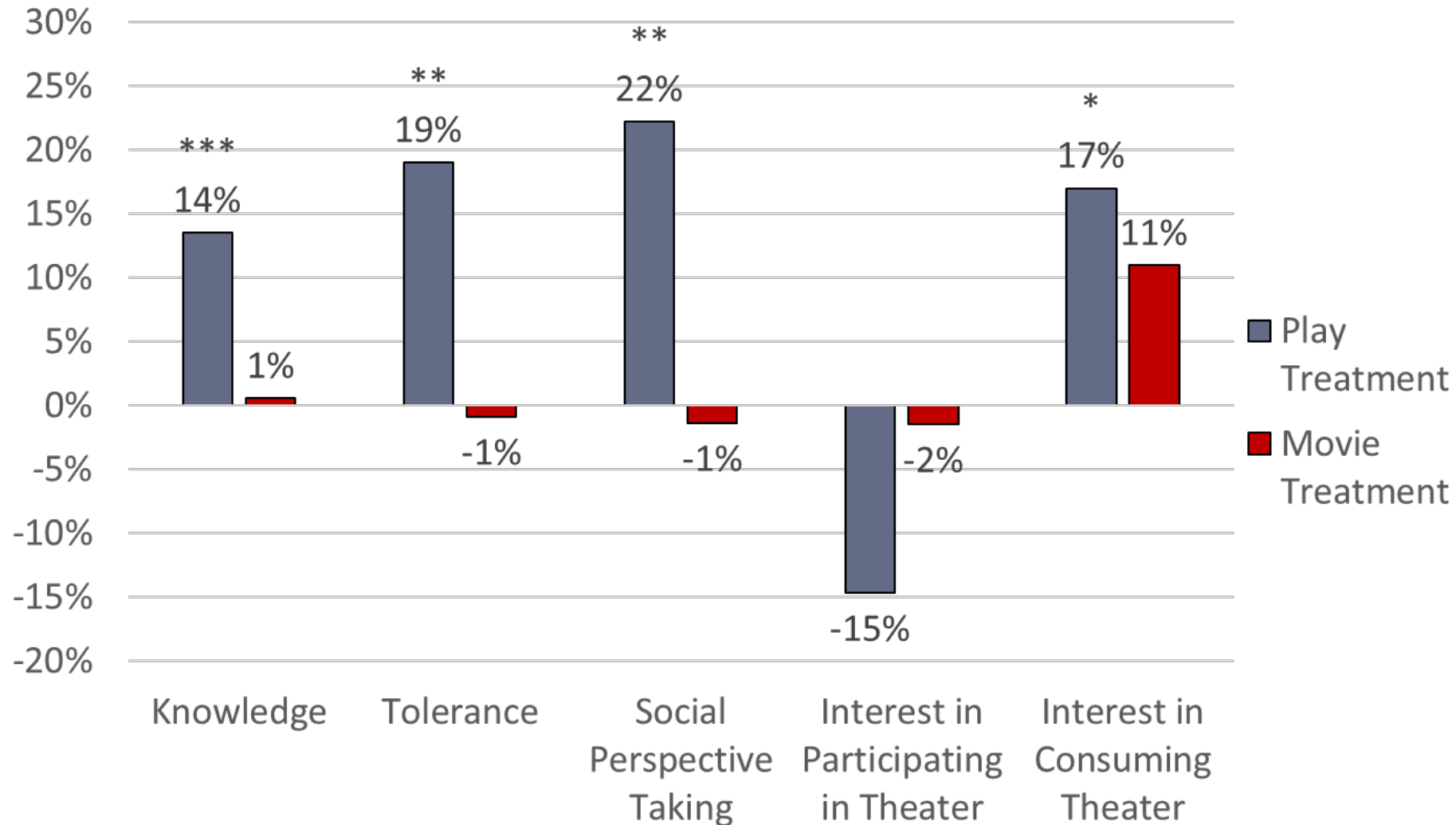


Past Research – Theater Experiments

- Free tickets were offered to see live performances of *A Christmas Carol*, *Hamlet*, *Around the World in 80 Days*, *Twelfth Night*, and *Peter and the Starcatcher* at TheatreSquared, an award-winning professional theater in Fayetteville, Arkansas and the University Theater.
- 108 school groups with 1,919 students applied
- Applicant groups were organized into 47 matched groups
- 997 students were randomly assigned to see live theater, 242 were randomly assigned to see a movie, and 680 were randomly assigned to serve as the control.
- Surveys administered in schools on average 54 days after treatment group saw play

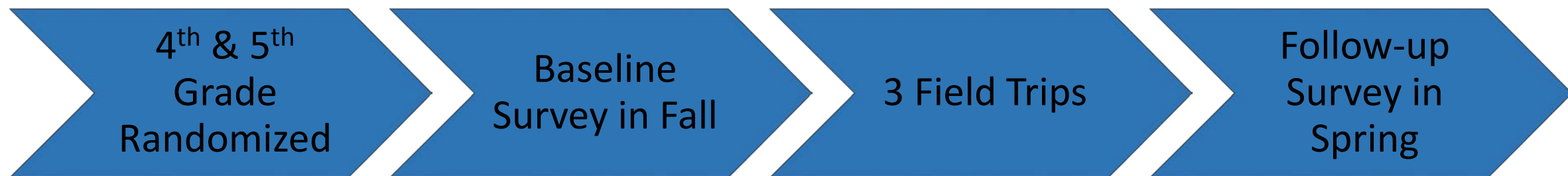


Past Research – Theater Outcomes



Current Research – Woodruff Arts

- Randomly assign 4th or 5th graders at 15 elementary schools to at least three arts-focused field trips at the Woodruff Arts Center. Some groups will receive two years of treatment.
- Treatment: Field trips to Atlanta Symphony Orchestra, Alliance Theater, and High Museum of Art
- Control: Business as usual



Treatment Effect on Student End of Year Standardized Exams



	(1)	(2)	(3)
	Composite Test Score	ELA	Math
Treatment	0.124*** (0.046)	0.123** (0.053)	0.107* (0.060)
Composite Test Scores 2016	0.841*** (0.023)	0.770*** (0.028)	0.787*** (0.033)
Female	0.022 (0.047)	0.111** (0.052)	-0.070 (0.060)
SWD 2016	-0.163* (0.093)	-0.236** (0.100)	-0.066 (0.108)
Attendance 2016	0.985* (0.550)	0.509 (0.598)	1.315* (0.675)
Constant	-1.017** (0.511)	-0.692 (0.555)	-1.191* (0.634)
Observations	441	441	441
R-squared	0.769	0.693	0.630

Fixed effects for the four participating schools are included in each model. Age is not included in these models because age could not be calculated from administrative records. Standard errors clustered at teacher level in parentheses *** p<0.01, ** p<0.05, * p<0.1



Treatment Effect on Student Effort, Cultural Consumption and Participation, and Social Perspective Taking



	(1)	(2)	(3)	(4)	(5)
	Careless Answers	Non-Response	Consumption	Participation	SPT
Treatment	-0.231*** (0.084)	-0.156* (0.077)	0.340*** (0.105)	0.084 (0.119)	0.113 (0.131)
Careless Answers 2016	0.399*** (0.054)				
Non-response 2016		0.025 (0.056)			
Cultural Consumption 2016			0.487*** (0.042)		
Cultural Participation 2016				0.551*** (0.046)	
SPT 2016					0.330*** (0.056)
Composite Test Scores 2016	-0.120*** (0.042)	-0.191*** (0.037)	-0.035 (0.050)	0.028 (0.058)	0.025 (0.046)
Observations	379	379	379	379	374
R-squared	0.225	0.082	0.316	0.384	0.131

Fixed effects for the four participating schools, student age, gender, SWD status, and prior year attendance are included in each model. Standard errors clustered at teacher level in parentheses *** p<0.01, ** p<0.05, * p<0.1



Crystal Bridges Longitudinal Study Research Design

- Enroll 18 elementary schools in study
- Collect fall and spring survey outcomes from third graders in 2017/2018 who will serve as the control cohort.
- Treatment starts for third graders in 2018/2019.
- Survey outcomes will be collected in the fall and spring from treatment third graders in 2018/2019.
- Comparisons will be made between treatment and control cohorts within the same school when students were in the same grade.
- Any differences can reasonably be attributed to treatment since only the luck of the year of their birth distinguishes them.



Crystal Bridges Longitudinal Study Outcome Measures

- Survey outcomes
 - Art Consumption
 - Art Participation
 - School Engagement
 - Empathy
 - Social Perspective Taking
 - Tolerance
- Administrative outcomes
 - Math and ELA test scores
 - Attendance and behavior
 - Arts elective course-taking
 - Educational attainment (high school graduation, college enrollment)
 - College major selection

