

The Physical, Mental, and Behavioral Health Benefits
in Adolescents of Drama Therapy in Barrington Stage Company's
Playwright Mentorship Program

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INTRODUCTION

Founded in 1999, the Playwright Mentorship Program (PMP), run through the Barrington Stage Company in the Berkshire County, MA, aims to bring together youth aged 13-19 who are survivors of trauma. It utilizes dramatic and comedic improvisation as a form of community building. It lasts 6 months, typically from late October to late April, and culminates in the participants performing a play where scenes are traumatic moments from the children's lives at most local middle and high schools to spread awareness of the issues involved and of the program. The study reveals the numerous physical and mental health benefits of the program and aims to warrant a broader implementation of drama therapy as an effective tool of medical rehabilitation for trauma.

As a peer mentor who led one group of children during 2016-2017, I observed first-hand the positive changes in the behavior and mental health of participants throughout the duration of the program. As a researcher with two current publications in the British Medical Journal that evaluate the health benefits of clinical intervention in neonates,^{1,2} I desired to quantitatively and analytically evaluate the behavioral, mental, and physical health benefits in all adolescent participants of PMP (if they existed). Program director Jane O'Leary had been implementing pre-PMP and post-PMP surveys since the program's conception, which made for easy access to comprehensive data that at least in some ways tracked changes before and after the intervention. Therefore, this project aims to elucidate the potential health benefits of the integrative drama therapy program, the Playwright Mentorship Program, as well as

to provide recommendations for the director to bolster its data collection.

METHODOLOGY

All data was obtained from the standardized surveys sent out to all participants in the Playwright Mentorship Program at the start and at the end of the program by the Barrington Stage Company. Ultimately, the data included by the study came from the following years and seasons: fall 2013, winter 2014, spring 2014, fall 2014, spring 2015, fall 2015, spring 2015, spring 2016, fall 2016, spring 2017, fall 2017, and spring 2018. Each year/season defines one cohort. All results are self-reported on behalf of the participants. Therefore, no objective measures of actual changes included in this study. On average, there were 55 questions. While each survey contained a few different questions, this report only includes the questions that remained constant across cohorts. The survey questions were designed by the program directors, Jane O'Leary and Tim Pare. An example can be found in the appendix. All statistical analysis was done in Microsoft Excel and STATA (Version 14.0.1).

DEMOGRAPHICS

Aggregated survey data is displayed in the tables below. Standard deviations are preceded by "-". All averages, standard deviations, minimum, and maximum values are calculated from the average values from each cohort.

Table 1: Cohort Statistics

Cohort (Year/Season)	Response Total
2013F	63
2013W	54
2014S	23
2014F	27
2015S	58
2016S	45
2016F	72
2017S	51
2017F	57
2018S	41
Year	Retention Rate
2013-2014	0.365079365
2014-2015	2.148148148
2016-2017	0.708333333
2017-2018	0.719298246

The 2013-2014 season started with 63 responses. The 2014-2015 season started with 27 responses but ended with 58 responses, because the survey was implemented incompletely in the fall of that year. The 2016-2017 season started with 72 responses, and the 2017-2018 season started with 57 responses (Table 1). Their respective retention rates for survey responses were 36%, 215%, 71%, and 72% (Table 1).

RESIDENCE INFORMATION

Table 2: Age of Participants

Variable	Mean	Standard Deviation	Minimum	N
Age	15.93	0.45	15.45	

On average, during fall 2013 – fall 2016, the Playwright Mentorship Program’s cohorts had an average reported age of 15.93 years. The youngest cohort had an average of 15.45 years, and the oldest cohort had an average of 16.65 years (Table 2).

Table 3: City of Residence

Pittsfield Percent	0.432
	-0.2279
North Adams Percent	0.294
	-0.1844
Homeless Percent	0
	0
Other Percent	0.2703
	-0.0808

On average, 43.3% of participants reported living in Pittsfield; 29.4% reported living in North Adams; and 27.03% of the group reported living elsewhere. None of the participants were homeless (Table 3).

Table 4: Guardians of Participant

Live With Both Parents Percent	0.3953
	-0.0543
Live With Mom Percent	0.3678
	-0.0615
Live With Dad Percent	0.0654
	-0.0245
Live With Other Relative Percent	0.0747
	-0.0347
Live With Other Percent	0.1248
	-0.0302

On average, 39.53% participants reported living with both parents. 36.78% of participants reported living with primarily their mom, while 6.5% of participants reported living with primarily their dad. 7.47% of participants reported living with primarily with some other relative. Finally, 12.48% participants reported living in some other living situation (Table 4).

Table 5: Foster Care

Lived in Foster Care Percent	0.2056
	-0.047
Not Lived in Foster Care Percent	0.7852
	-0.0452

The foster care statistics also reveal some insight into the living situation of the participants. On average, 20.56% of the participants reported living in foster care. Conversely, 78.52% reported not living in foster care (Table 5).

Table 6: CHINS or Juvenile Court System

Part of CHINS or Juvenile Court System Total	5.9
	-3.9567
Not Part of CHINS or Juvenile Court System Total	42.8
	-13.5384
Part of CHINS or Juvenile Court System No Responses Total	0.5
	-0.527

While most of the participants were reportedly not a part of CHINS or the Juvenile Court System (on average, 42.8 participants), 5.9 participants reported to be part of CHINS or the Juvenile Court System. There was also, on average, less than 1 participant who did not respond to the survey question (Table 6).

Table 7: Locked Up Facility

Lock-Up Facility Percent	0.1197
	-0.0644
Not Lock-Up Facility Percent	0.8744
	-0.0601
Lock-Up Facility No Responses Percent	0.0054
	-0.0123

Furthermore, a considerable fraction of the participants reported being locked up in a facility during their childhood. Specifically, 11.97% of participants, on average, reported that they been in a lock-up facility previously. The majority, 87.44% of the group, reported that they had never been in a lock-up facility. Most participants responded to this survey question, as only 0.5% of participants on average did not respond (Table 7).

SOCIOECONOMIC BACKGROUND

Table 8: Household Annual Income

\$0 - \$22,000 Percent	0.257
	-0.0834
\$22,000 - \$37,000 Percent	0.1876
	-0.0937
\$37,000 - \$59,000 Percent	0.2437
	-0.1548
\$59,000 - \$74,000 Percent	0.0364
	-0.0626
>\$74,000 Percent	0.0088
	-0.0102
Don't Know Percent	0.2341
	-0.33
No Response Percent	0.0092
	-0.0185

Table 8 reveals the economic background of the families of the participants by tracking their household's annual income. On average, 25.7% of participants reported coming from households that made between \$0 - \$22,000 annually. 18.8% of participants reported coming from households that made \$22,000 to \$37,000 annually. 24.4% of participants reported coming from households that earned between \$37,000 and \$59,000 annually. 3.64% of participants reported coming from households in the next economic bracket, \$59,000 to \$74,000 earned annually. Less than 1% reported coming from a household that earned greater than \$74,000 annually. A large portion of the participants, 23.41%, did not know their income status, and less than 1% of the participants did not respond to the survey question (Table 8).

Table 9: Parent’s Education Levels

Father		Mother	
Elementary School Total	0	Elementary School Total	0
	0		0
Junior High Total	1.5	Junior High Total	1.6667
	-1.6432		-1.8619
Some High School Total	11	Some High School Total	11
	-3		-3
High School Total	17.5	High School Total	15.6667
	-9.2682		-6.7429
Some College Total	8.1667	Some College Total	9
	-5.0365		-4.3359
Associates Degree Total	2.3333	Associates Degree Total	2.3333
	-2.5166		-2.5166
College Total	7.6667	College Total	11
	-5.2409		-4.5607
Advanced Education Total	2.6667	Advanced Education Total	2.5
	-2.8752		-2.881
Don't Know Total	4.1667	Don't Know Total	1.6667
	-5.1543		-2.2509
No Responses Total	1.5	No Responses Total	1.5
	-3.6742		-3.6742

The survey cataloged the highest education levels of the father and the mother of the participants. Table 9 in tandem with Table 8 reveal insights about the socioeconomic status and educational status of the participants on average. On average, 0 participants reported having fathers who’s highest education level was elementary school; 1.5 participants reported having fathers whose highest educational attainment level was junior high; 11 participants reported having fathers who only had attended some form of high school; 17.5 participants reported having fathers whose most advanced degree was a high school’s degree; 8.2 participants’ reported having fathers who had attended some form of college without graduating; 7.7 participants reported having fathers who had graduated from college; and 2.7 participants reported having fathers who had some form of an advanced education (post-college). However, 4.2 participants did not know, and 1.5 participants did not respond to the survey question (Table 9A).

On average, 1.7 participants reported having mothers whose highest education was junior high; 11 participants reported having mothers who attended some high school but did not graduate; 15.7 participants reported having mothers who graduated from high school; 9 participants reported having mothers who attended some college but did not graduate; 2.3 participants reported having mothers who obtained an associate’s degree; 11 participants reported having mothers who had graduated from college; and 2.5 participants reported having mothers who had some form of an advanced education. 1.7 participants did not know their mother’s educational status, and 1.5 participants did not respond to the survey question (Table 9B).

Table 10: Marital Status of the Household

Married Percent	0.3645
	-0.0177
Single/Never Married Percent	0.174
	-0.058
Divorced/Separated Percent	0.209
	-0.0184
Widowed Percent	0.0305
	-0.012
Domestic Partners Percent	0.1155
	-0.0247
Other Percent	0.062
	-0.0057
No Responses Percent	0.0415
	-0.0035

Table 10 reveals the marital status of the household of the participants and thus provides some insight regarding the stability of the average participants' living situations. On average, 36.45% of participants reported living with married guardians; 17.4% reported living with guardians who were single and never had married; 20.9% reported coming from a divorced/separated household; 3.05% reported living with a widow; 11.55% reported coming from households headed by domestic partners; and 6.2% reported coming from some other living situation (Table 10).

RACE, GENDER AND NATIONALITY

Table 11: Gender

Male Percent	0.282
	-0.0734
Female Percent	0.6611
	-0.0537
Transgender Percent	0.0242
	-0.0176
Other Percent	0.0239
	-0.0307
No Responses Percent	0.0076
	-0.0173

Of all participants, 28.2% on average reported being male and 66.11% reported being female. 2.42% reported being transgender, and 2.39% identified as some other gender (Table 11).

Table 12: US Birth

Born Outside the US Percent	0.051
	-0.0437
Not Born Outside the US Percent	0.9252
	-0.0624

On average, 5.1% of participants reported being born outside of the US. The majority, 92.5%, reported that they were born inside the US (Table 12).

Table 13: Race and Ethnicity

Caucasian Percent	0.7694
	-0.1256
African-American Percent	0.1186
	-0.0507
Asian Percent	0.027
	-0.0268
Latino/Hispanic Percent	0.0914
	-0.0655
Native American Percent	0.0701
	-0.0473
Mixed Percent	0.1373
	-0.1172

On average, 77% of the participants, identified as Caucasian. 11.86% identified as African-American. 9.1%, identified as Latino or Hispanic, and 7% reported being Native American. Only 2.7% identified as Asian Finally, 13.7% of all participants reported being of mixed descent. (Table 13).

EXTRACURRICULAR INVOLVEMENT

Table 14: Extracurriculars

Internship Percent	0.0493
	-0.0379
Volunteer Percent	0.226
	-0.1235
Sports Percent	0.206
	-0.1446
Job Percent	0.1639
	-0.06
None Percent	0.1136
	-0.1266

The participants were involved in a plethora of other extracurriculars. Per group, 4.93% of all participants reported involvement in internships. 22.6% reported being involved in volunteering work. 20.6% reported participating in sports. 16.39% reported having a job at the time of their involvement with Barrington Stage Company, and 11.4% reported not having other extracurricular activities they were involved in besides the Playwright Mentorship Program (Table 14).

Table 15: Past Participation

Variable	Mean	Standard Deviation	Minimum	M
Years	1.77	0.308	1.43	

On average, each group reported an average experience of 1.77 years of participation at PMP at the time of the survey's implementation. The group with the lowest average had an average of 1.43 years, and the group with the highest average had an average of 2.37 years (Table 15).

STRESS

Table 16

On a scale of 1-5, with 1 being the least stressful and 5 being the most stressful, how stressful is/are...

Question	Mean	Standard Deviation	Min	Max
your relationships with your peers?	2.9	0.19	2.71	3.09
money for you?	3.32	0.1	3.24	3.43
your relationships with your family?	3.04	0.26	2.74	3.21
your dating life?	2.7	0.17	2.51	2.85
your academic life?	3.48	0.26	3.22	3.74

On a scale of 1-5, with 1 being the least stressful and 5 being the most stressful, on average, participants per cohort responded with 2.9 (with a minimum of 2.71 and a maximum of 3.09) for their relationships with their peers; 3.32 (with a minimum of 3.24 and a maximum of 3.43) for money; 3.04 (with a minimum of 2.74 and a maximum of 3.21) for their relationships with their family; 2.7 (with a minimum of 2.51 and a maximum of 2.85) for their dating lives; and 3.48 (with a minimum of 3.22 and a maximum of 3.74) for their academic life (Table 16).

IN SUMMARY

The average participant of the program was a sixteen year old Caucasian female who was born in the United States and resided in Pittsfield or North Adams with both parents or with just their mother. She had not lived in foster care or in a lock-up facility, nor had she been part of CHINS or the Juvenile Court System. She lived in a household with an annual income of \$0-59,000 with parents who were married or divorced and who both had high school diplomas but no college education. She was moderately stressed about her relationship with her peers, her dating life, and about her relationship with her family, and she was most stressed about her academic life and her money situation. Outside of PMP, she played sports and volunteered in her free time, and she was in her second year as a participant in the program when she responded to the surveys.

RESULTS

REFLECTIONS RESULTS

Table 17: Time at PMP

Question	Never		Rarely		Sometimes		Often		Almost Always		No Responses	
I feel like I belong and am accepted by my peers in PMP.	0.0019	-0.0049	0.0213	-0.0224	0.0866	-0.0483	0.2616	-0.054	0.5739	-0.1307	0.053	-0.0759
I feel more confident in my abilities when I am at PMP.	0.008	-0.0096	0.0217	-0.0046	0.0882	-0.0854	0.2607	-0.0672	0.528	-0.1214	0.121	-0.0842
I feel good about myself when I'm at PMP.	0	0	0.0187	-0.0172	0.1607	-0.0354	0.2597	-0.0635	0.5537	-0.0761	0.0057	-0.0098
I think that the PMP staff are good role models.	0	0	0	0	0.029	-0.0228	0.181	-0.0299	0.7073	-0.0998	0.0806	-0.0745

Over half of the participants, 57.4%, stated that they felt like they belong and are accepted by their peers at PMP almost always. An additional 26.16% felt accepted and like they belong often, and 8.66% felt that way sometimes or somewhat. 2.13% of participants felt that way only rarely. Only less than 1% of all participants never felt like they belong and are accepted by peers at PMP (Table 17). Similarly, over half of the participants, 52.8%, felt more confident in their abilities while at PMP. An additional 26.07% felt confident in their abilities often, and another 8.8% felt that way occasionally. Only 2.17% felt confident rarely, and less than 1% never felt confident in their abilities when at PMP. Notably, over half of the participants, 55.37%, felt good about themselves at PMP almost always. Furthermore, 18.7% felt good rarely, 16.07% felt good occasionally, and 25.97% felt good often. None of the participants felt good about themselves never when at PMP. None of the participants never or rarely felt that the PMP staff were good role models. 2.9% felt this way occasionally and 18.1% felt this way often. However, an overwhelming 70.73% felt that the PMP staff were good role models almost always (Table 17).

Table 18: Educational Outcomes

Question	Positive Impact		No Positive Impact		No Responses	
Did PMP have a positive impact on your school attendance?	0.5829	-0.1644	0.3486	-0.1318	0.0816	-0.1031
Have you gotten in LESS trouble or been suspended FEWER TIMES from school since joining PMP?	0.5926	-0.1647	0.385	-0.108167	0.2222	(.)
Did PMP have a positive impact on your school performance this year	0.8038	-0.1421	0.1195	-0.0957	0.076	-0.0729
Has your participation in PMP had a positive impact on your decision to attend college?	0.7343	-0.2528	0.1421	-0.1395	0.1236	-0.1133
Since joining PMP have you experienced a reduced amount of school suspensions?	0.358	-0.2519	0.1067	-0.0634	0.5353	0.0271
Since joining PMP has your GPA improved?	0.5309	-0.1544	0.3963	-0.01	0.1064	-0.1174

On average, 58.29% of participants reported that PMP had a positive impact on their school performance. However, 34.86% of participants reported that the program failed to have a positive impact (Table 18). Over half of the participants, or 59.26%, reported that they were suspended less or fewer times since joining PMP, while 38.5% reported that they did not experience the same since PMP. 80.28% of participants reported that PMP had a positive impact on their school performance this year. Only 11.95% of participants reported that PMP failed to have a positive impact on their school performance. On average, 73.43% of the participants reported that participation in PMP had a positive impact on their decision to attend college, while only 14.21% reported that it did not. 35.8% of participants reported a reduced amount of school suspensions since joining PMP, and only 10.67% reported no reduction. Most participants (53.53%) did not have available responses, mostly due to them having no history of school suspensions. Since joining PMP, 53.09% reported experiencing an improved GPA, and only 39.63% reported not seeing their GPA improve (Table 18).

Table 19: Behavioral Outcomes

Question	Positive Impact		No Positive Impact		No Responses	
	Mean	SD	Mean	SD	Mean	SD
Since joining PMP have you engaged in a reduced practice of unprotected sex?	0.2908	-0.3194	0.1237	-0.0373	0.704	-0.1044
Since joining PMP have you engaged in a reduced practice of self-harm?	0.4465	-0.1028	0.1604	-0.168	0.4732	-0.1107

Since joining PMP, 29% of participants reported experiencing a reduced amount of unprotected sex. Only 12.37% did not report a reduction. A large percentage, 70.4%, did not have available responses, mostly due to them not being sexually active. Additionally, 44.65% reported experiencing a reduced amount of self-harm since joining PMP, and only 16.04% reported not experiencing a reduced amount. Many participants, 47.32%, did not have available responses, likely due to them not engaging in self-harm (Table 19).

DIFFERENCES IN PRE-PMP AND POST-PMP COHORTS

Participants in PMP were asked to answer the same survey questions at the start of the program (fall of 2013, fall of 2014, fall of 2015, fall of 2017) and at the end of the program (winter of 2013, spring of 2014, spring of 2015, spring of 2016, spring of 2017, spring of 2018). The surveys asked participants to respond to the prompts by selecting one of the following frequencies: never, rarely, occasionally, often, or always. These categories were assigned numeric values between 0 and 4 respectively. Tables 20a, 21, 22, and 23 display the means, standard deviations, minimums, and maximums of the average responses per cohort among the pre-PMP cohorts (the fall groups) and the post-PMP cohorts (the winter and spring groups). Table 20b displays the difference in the percentages of each answer between the first survey and the last survey implemented and has standard deviations displayed under the values and preceded by “-”.

Table 20a: Academic Outcomes Part I

Question	Pre				Post			
	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum
I attend class	3.05	0.2673	2.77	3.37	3.15	0.2392	2.9	3.39
I have goals and plans for the future	2.83	0.391	2.49	3.26	3.1	0.1557	2.9	3.29
I receive behavioral interventions at school	0.4	0.0758	0.34	0.48	0.4	0.1497	0.23	0.58
I get along with classmates who are NOT in my circle of friends	2.85	--	--	--	2.62	0.157	2.51	2.74
I get along with my teachers	2.85	--	--	--	2.62	0.157	2.51	2.74

The average response of all pre-PMP cohorts to the prompt, *I attend class*, was 3.05, which roughly corresponds to *occasionally*. The post-PMP cohorts averaged 3.15, which leans slightly more to a response of *often*. The average responses to the prompt, *I have goals and plans for the future*, in the pre and post cohorts were 2.83 and 3.1 respectively. There was no difference in the average responses to *I receive behavioral interventions at school*, likely since very few participants actually received behavioral interventions. Finally, the pre and post cohorts on average responded to the prompts, *I get along with classmates who are NOT in my circle of friends* and *I get along with my teachers*, with 2.85 and 2.62 respectively (Table 20a).

Table 20b: Academic Outcomes Part II

Do you plan on attending college?

	Pre	Post	Difference
Yes	0.2814	0.4193	0.1379
	-0.4226	-0.4499	-0.8725
No	0.0349	0.0701	0.0352
	-0.0533	-0.0817	-0.135

Participating in PMP increased the amount of participants who planned on attending college by 13.79%. It also increased the amount who did not plan on attending college by a very small percentage, but its relatively large standard deviation implies that the result is not significant (Table 20b).

Table 21: Behavioral Outcomes

Question	Pre				Post			
	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum
I use alcohol	0.52	0.13	0.37	0.67	0.54	0.1819	0.36	0.84
I use drugs (including marijuana)	0.76	0.2907	0.52	1.18	0.75	0.149	0.53	0.92
I smoke cigarettes	0.4415	0.22	0.15	0.67	0.44	0.23	0.19	0.74
I self injure	0.65	0.1897	0.49	0.89	0.7	0.1757	0.53	0.95
I gamble	0	--	--	--	0.11	--	--	--
I am sexually active	0.85	--	--	--	0.87	0.1117	0.79	0.95

The average responses of the cohorts to the behavioral outcomes prompt did not vary among the pre-PMP and post-PMP groups. Only one pre-PMP and post-PMP cohort responded to the prompt, *I gamble*, and only one pre-PMP cohort responded to the prompt, *I am sexually active* (Table 21).

Table 22: Conflict Resolution Skills

Question	Pre				Post			
	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum
I get into fights (physical or verbal)	0.9	0.0713	0.82	0.96	1.09	0.2075	0.82	1.33
I am able to resolve conflicts or cope with difficulties in a healthy way	1.96	0.2451	1.7	2.18	2.44	0.1427	2.24	2.57
I avoid things/situations that are dangerous or unhealthy	2.42	0.2307	2.17	2.63	2.64	0.2398	2.47	3

While the average responses per cohort to the prompt, *I get into fights (physical or verbal)*, was greater in the post-PMP than the pre-PMP group, the difference was within one standard deviation and thus was likely not significant. However, the average responses per cohort in the pre-PMP and post-PMP groups to the prompts, *I am able to resolve conflicts or cope with difficulties in a healthy way* and *I avoid things/situations that are dangerous or unhealthy*, were 1.96/2.44 and 2.42/2.64 respectively (Table 22).

Table 23: Emotional Outcomes

Question	Pre				Post			
	Mean	Standard Deviation	Minimum	Maximum	Mean	Standard Deviation	Minimum	Maximum
I feel depressed or anxious	2.3	0.1954	2.08	2.55	2.37	0.231	2.07	2.66
I feel good about myself	2.09	0.4265	1.68	2.59	2.23	0.19	1.92	2.48
I feel supported at home	2.32	0.2629	2.013	2.59	2.5	0.1824	2.24	2.68
I feel comfortable talking to my peers about my problems	1.915	--	--	--	2.25	0.4957	1.9	2.6
I have a healthy relationship with food	2.16	0.0993	2.09	2.31	2.36	0.3805	2.01	3
I feel stressed out	2.77	--	--	--	2.66	0.1025	2.59	2.73
I have a trusted adult or several trusted adults in my life with whom I can talk about my problems	2.376	--	--	--	1.75	0.6916	1.26	2.23
I feel connected to or part of a community as a result of PMP	2.2	--	--	--	2.32	0.4016	2.03	2.6
I feel good about my friends and the people I hang out with	2.58	--	--	--	2.28	0.1541	2.17	2.38

Cohort’s average responses for emotional outcomes did not vary substantially among the pre-PMP and post-PMP groups (Table 23). This may have occurred because emotional states of mind are very susceptible to short-term variation and thus may not accurately reflect overall mental health trends. Furthermore, some prompts asked participants to reflect on their relationships with others outside of the program, which may not have changed even if the participants’ emotions improved.

CONCLUSION

Ultimately, the Playwright Mentorship Program has numerous self-reported physical and mental health and career benefits.

The participants evaluated the program to be very effective. Most participants felt like they belonged and were accepted by their peers at PMP almost always or often. Most participants also reported feeling more confident in their abilities and feeling good about themselves while at PMP almost always. Most participants also evaluated the staff of PMP as good role models.

Participants also attributed a decrease in unprotected sex and in self-harm to their involvement in PMP. Regarding academic outcomes, participants reported attending class, having goals and plans for the future, and intending on attending college more often after participating in the Playwright Mentorship Program. Participants also reported experiencing a positive development of conflict resolution skills, as their reported frequencies of resolving conflicts or coping with situations in healthy ways as well as avoiding things/situations that are dangerous or unhealthy increased.

This study suggests that a program similar in spirit and in structure to the PMP may help predominantly lower-class, American-born, Caucasian female adolescents with behavioral and academic outcomes and may cultivate conflict resolution skills. Future participants may also evaluate their time spent at the program very positively. Since PMP pays participants for their time, implementing this model in other low-income areas may serve as a powerful tool for improving the health and educational prospects of adolescents, as it would incentivize families to enroll their children in it. Moreover, modelling other programs off PMP may serve pivotal in alleviating the health burdens adolescents face due to childhood trauma.

Recent literature has suggested a considerable impact of childhood trauma on long-term health. Bayview Child Health Center medical director, Nadine Burke, found that young adults who grew up in impoverished neighborhoods in San Francisco such as Bayview-Hunters Point experienced severe anxiety and related mental health ailments that induced significant and long-lasting chemical changes in both the brain and body. These changes, or “neurochemical dysregulation,” as Burke termed them, may increase the chances of contracting illness and obtaining serious medical problems in adulthood.³

CDC-Kaiser’s ACE Study, one of the largest investigations of childhood abuse and neglect and their impact on later-life health, identified the pathway with which adverse childhood experiences increase mortality and lower life expectancy. Adverse childhood experiences disrupt neurodevelopment which causes social, emotional, and cognitive impairment. This in turn leads to the adoption of health-risk behaviors and eventually to disease, disability, and social problems, which culminate in an early death. ACE concluded that higher numbers of adverse childhood experiences increased the propensity of participants to suffer from many behavioral and health-related problems, specifically “depression, illicit drug use, poor work performance, multiple sexual partners, sexually transmitted diseases, suicide attempts, early initiation of sexual activity, adolescent pregnancy, risk for sexual violence, and poor academic achievement.”⁴ Participants after PMP reported feeling accepted and positive about their experience, engaging in sexual activity significantly less, and having academic goals and aspirations more frequently. Thus, PMP and similar programs may alleviate the health impact of some of the adverse childhood events that ACE identified.

More research is needed, however, that establishes a causal link between the implementation of the Playwright Mentorship Program and its reported benefits. To this end, research must utilize objective measures of change that are not self-reported, which may require formal collaboration with local educational agencies and schools in the Berkshire County.

LIMITATIONS

One limitation of the study is that since all survey responses are reported by the participants, this report only discusses self-reported results and does not include objective measures of the topics discussed. Also, no control groups existed, and implementation of the Playwright Mentorship Program was not randomized since families enrolled the participants. There was no access to objective measures of academic or behavioral changes from institutions such as local high schools, as no collaboration between Barrington Stage Company and other institutions existed for this project. Therefore, no causation can be drawn from the results of this report. Another limitation came from the desire to preserve anonymity of the participants in their responses. Without participants’ individual responses, no paired statistical analyses were able to be performed. The only analyses performed used the mean responses per cohort; therefore, no t-tests were executed.

RECOMMENDATIONS

To improve the evaluation capability of Playwright Mentorship Program, program directors should assign each participant a random identification number that does not give away the

identity of the participant but remains constant for the entire year. The director and all mentors should remain blind to which identification numbers correspond to which participants. However, the identification numbers would allow evaluators to trace responses of the same participant at different time periods and conduct paired statistical analyses while remaining unknowledgeable of the participants' identities. Furthermore, directors should incorporate more questions in the surveys regarding academic performance to hone in on the academic benefits of the program. Finally, efforts should be made to collaborate formally with local educational agencies and schools to gain access to participant-specific data so that future research can examine objective measures of change instead of self-reported values.

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Constant Contact Survey Results

Survey Name: Copy of 2014-2015 templete PMP Questionnaire - Spring

Response Status: Partial & Completed

Filter: None

Jun 26, 2015 4:39:50 PM

1. What is your gender?

	Number of Response(s)	Response(s)
Male		
Female		
Transgender		
No Responses		
Total		

2. What is your age?

	Number of Response(s)	Response(s)
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
No Responses		
Total		

3. What is your grade in school?

	Number of Response(s)	Response(s)
8th		
9th		
10th		
11th		
12th		
College		
Graduated		
N/A		
No Responses		

Total

4. Where do you live: (choose one)

	Number of Response(s)	Response(s)
Pittsfield		
North Adams		
Adams		
Other		
No Responses		
Total		

5. Where you born outside of the USA?

	Number of Response(s)	Response(s)
Yes		
No		
No Responses		
Total		

6. What race do you consider yourself?

	Number of Response(s)	Response(s)
Caucasian		
African-American		
Asian		
Pacific Islander		
American Indian		
Other		
Total		

7. What is your PRIMARY race/ethnicity?

	Number of Response(s)	Response(s)
Caucasian/White		
African-American		
Asian		
Pacific Islander		
American Indian		
Multi-Racial		
Other		
No Responses		
Total		

8. Are you Hispanic or Latino?

	Number of Response(s)	Response(s)
Yes		
No		
No Responses		
Total		

9. I live with:

	Number of Response(s)	Response(s)
Both parents		
My mother		
My father		
Other Relative		
Other		
Total		

10. What is the marital status of the head of the household you live in?

	Number of Response(s)	Response(s)
Married		
Single/Never Married		
Divorced/Seperated		
Widowed		
Domestic Partners		
Other		
No Responses		
Total		

11. What is your best guess at the approx. income range of the household you live in?

	Number of Response(s)	Response(s)
\$0-\$10,000		
\$10,000 - \$14,999		
\$15,000 - \$24,999		
\$24,000 - \$34,999		
\$35,000 - \$49,999		
\$50,000 - \$74,999		
\$75,000 +		
I Don't Know		
No Responses		
Total		

12. To you knowledge, what is the highest level of education that has been achieved by any m ember of your household?

	Number of Response(s)	Response(s)
Elementary		
Junior High		
Some High School		
High School Graduate		

Some College
Associates Degree
College Graduate
Advanced Degree
No Responses
Total

13. Have you ever lived in foster care?

	Number of Response(s)	Response(s)
YES		
NO		
No Responses		
Total		

14. Have you ever been in a lock-up facility?

	Number of Response(s)	Response(s)
YES		
NO		
No Responses		
Total		

15. Have you been part of CHINS or the juvenile court system?

	Number of Response(s)	Response(s)
YES		
NO		
No Responses		
Total		

16. Which of the following describes your current educational situation?

	Number of Response(s)	Response(s)
Public High School/Middle School		
Private High School/Middle School		
JRC/SRC		
Therapeutic Day School		
Alternative Learning Program		
Homeschool		
Special Education Program		
GED or Certification Program		
2-Year College		
4-Year College		
Vocational/On the Job Training		
Not Currently In School		
Other		
Total		

17. Are you enrolled in an academic support program (tutoring, homework help, etc.)?

	Number of Response(s)	Response(s)
Yes		
No		
No Responses		
Total		

18. Other than PMP, what extra-curricular activities are you currently involved in?

	Number of Response(s)	Response(s)
Internship		
Sports Club or Team		
Community Service/Volunteering		
Part-Time Job		

Military/ROTC
Organized After School Activity or Club
Church/Religious Organization
Other
Total

19. Approximately how many hours per week do you spend on the above activities?

	Number of Response(s)	Response(s)
0 Hours		
1-2 Hours		
3-4 Hours		
5-6 Hours		
6-7 Hours		
8+ Hours		
No Responses		
Total		

20. Including this year, how many years have you done PMP?

	Number of Response(s)	Response(s)
1		
2		
3		
4		
5		
No Responses		
Total		

21. How would you characterize your performance in school? (circle one)

	Number of Response(s)	Response(s)
--	-----------------------	-------------

Great. Mostly A's.

Good. Mostly B's.

Fair. Mostly C's.

Poor.

No Responses

Total

22. Do you anticipate moving to the next grade level?

	Number of Response(s)	Response(s)
Yes		
No		
Graduating This Year		
Already Graduated		
No Responses		
Total		

23. Do you have plans to attend college?

	Number of Response(s)	Response(s)
YES		
NO		
In College		
No Responses		
Total		

24. Did support from PMP have a positive impact on your school performance this year?

	Number of Response(s)	Response(s)
Yes		
No		
No Responses		

Total

25. Have you missed more than 30 days of school this year?

	Number of Response(s)	Response(s)
YES		
NO		
No Responses		
Total		

26. Do you agree or disagree with the following statement(s): Since joining PMP, I am getting into less trouble at school.

	Number of Response(s)	Response(s)
Yes		
No		
No Responses		
Total		

27. Since joining PMP my GPA has improved.

	Number of Response(s)	Response(s)
YES		
NO		
No Responses		
Total		

28. Since joining PMP my school attendance improved.

	Number of Response(s)	Response(s)
YES		
NO		
No Responses		
Total		

29. I feel PMP has helped me reduce the following behaviors in my life:Self-harm

	Number of Response(s)	Response(s)
Yes		
No		
Not Applicable		
No Responses		
Total		

30. Reduce use of drugs and alcohol.

	Number of Response(s)	Response(s)
Yes		
No		
Not Applicable		
No Responses		
Total		

31. Unprotected sex

	Number of Response(s)	Response(s)
Yes		
No		
Not Applicable		

No Responses

Total

32. School Suspension

Yes

No

Not Applicable

No Responses

Total

Number of Response(s)

Response(s)

33. I feel good about myself.

Never

Rarely

Occasionally

Often

Always

No Responses

Total

Number of Response(s)

Response(s)

34. I feel depressed or anxious

Never

Rarely

Occasionally

Often

Always

No Responses

Number of Response(s)

Response(s)

Total

35. I feel supported at home.

	Number of Response(s)	Response(s)
Never		
Rarely		
Occasionally		
Often		
Daily		
No Responses		
Total		

36. I feel connected to or a part of the community where I live.

	Number of Response(s)	Response(s)
Never		
Rarely		
Occasionally		
Often		
Daily		
No Responses		
Total		

37. I have goals and plan for the future.

	Number of Response(s)	Response(s)
Never		
Rarely		
Occasionally		
Often		
Always		

No Responses

Total

38. I am able to resolve conflicts or cope with difficulties in a healthy way.

	Number of Response(s)	Response(s)
Never		
Rarely		
Occasionally		
Often		
Always		
No Responses		
Total		

39. I avoid things/situations that are dangerous or unhealthy.

	Number of Response(s)	Response(s)
Never		
Rarely		
Occasionally		
Often		
Always		
No Responses		
Total		

40. I engage in unprotected sexual activities.

	Number of Response(s)	Response(s)
Never		
Rarely		
Occasionally		
Often		

Always
No Responses
Total

41. I use alcohol

	Number of Response(s)	Response(s)
Never		
Rarely (less than one time per month)		
Occasionally (about one time per month)		
Often (one time per week)		
Always		
No Responses		
Total		

42. I use drugs (including marijuana)

	Number of Response(s)	Response(s)
Never		
Rarely (less than one time per month)		
Occasionally (about one time per month)		
Often (one time per week)		
Daily		
No Responses		
Total		

43. I smoke cigarettes

	Number of Response(s)	Response(s)
Never		
Rarely (less than one time per month)		
Occasionally (one time per month)		

Often (one time per week)

Daily

No Responses

Total

44. I receive behavioral interventions at school (suspensions, detentions, etc.)

Number of Response(s)

Response(s)

Never

Rarely

Occasionally

Often

Almost Always

No Responses

Total

45. I have a healthy relationship with food.

Number of Response(s)

Response(s)

Never

Rarely

Occasionally

Often

Almost Always

No Responses

Total

46. I get into fights (physical or verbal)

Number of Response(s)

Response(s)

Never

Rarely (less than one time per month)

Occasionally (one time per month)

Often (one time per week)

Daily

No Responses

Total

47. I self injure (cutting, burning, etc.)

Number of Response(s)

Response(s)

Never

Rarely (less than one time per month)

Occasionally (one time per month)

Often (one time per week)

Daily

No Responses

Total

48. I cut class or skip school.

Number of Response(s)

Response(s)

Never

Rarely

Occasionally

Often

Always

No Responses

Total

49. I feel comfortable talking to my PMP Mentors.

Number of Response(s)

Response(s)

Never

Rarely
Sometimes or somewhat
Often
Almost Always
Total

50. I feel like I belong and am accepted by my peers in PMP.

	Number of Response(s)	Response(s)
Never		
Rarely		
Sometimes or somewhat		
Often		
Almost Always		
No Responses		
Total		

51. I think that the PMP staff are good role models.

	Number of Response(s)	Response(s)
Never		
Rarely		
Sometimes or somewhat		
Often		
Almost Always		
No Responses		
Total		

52. I feel good about myself when I am at PMP.

	Number of Response(s)	Response(s)
Never		

Rarely
Occasionally
Often
Almost Always
No Responses
Total

53. One of my favorite moments or activities in PMP this year was... (besides snack)

43 Response(s)

54. One thing I would change about PMP is...

43 Response(s)

55. Some ideas/ activities i think would be fun for PMP gatherings like summer get-togethers or parties would be

39 Response(s)
