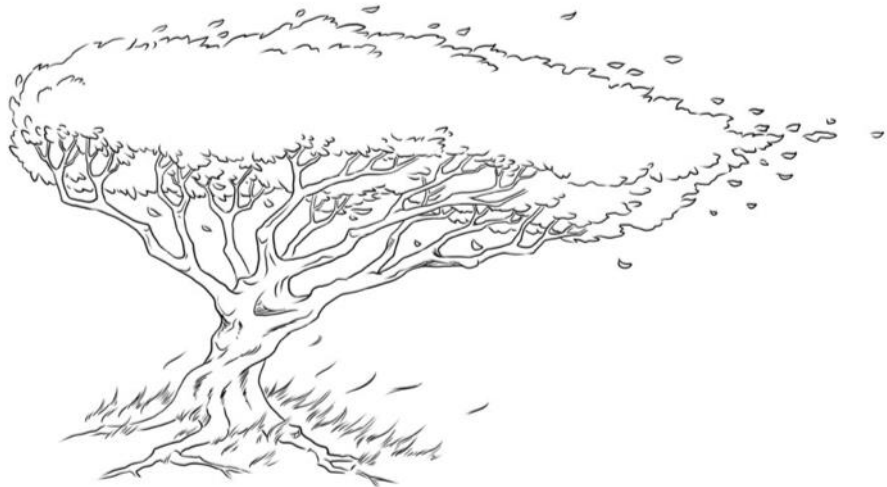


2019

PROMOTING  
YOUTH  
RESILIENCE  
AND A  
CULTURE OF  
HEALTH AT  
EAST



Promoting Youth Resiliency and a Culture of Health at East (PYRCH)

2019

The PYRCH project is a collaborative effort between University of Rochester Clinicians and East Lower and Upper School Faculty and Administration. The three year project is supported through funding from the Greater Rochester Health Foundation and the University of Rochester. The project has three primary goals:

- ❖ Increase youths' emotional resiliency by utilizing in-school group therapy for scholars with multiple adverse childhood experiences.
- ❖ Increase screening for sexually transmitted infections by utilizing a universal screening protocol.
- ❖ Increase consumption of a nutritious breakfast for lower school scholars by initiating a Breakfast-in-the-Classroom program.

As of the end of the 2018-2019 school year, the PYRCH project had met or exceeded outcome goals in all project domains. The following report explores those outcomes and the processes used to achieve improvements for scholars and staff at East.

**Activity / Goal 1:** Group therapy for East scholars with adverse childhood experiences and teacher training re: trauma-informed approaches—to improve scholar resiliency & outcomes.

## BACKGROUND

It is well established that children’s physiological functioning can be altered by chronic or severe adverse childhood experiences (ACEs), which include conditions associated with extreme poverty: maltreatment, family dysfunction, and environmental trauma.

In the short-term, ACEs damage children’s developing immunologic, neurologic, emotional, and cognitive systems. Long-term effects in adulthood are severe: adults with multiple ACEs have higher rates of alcohol and substance abuse, depression, lung cancer, ischemic heart disease, suicide attempts, and early death. In adolescents with multiple ACEs, negative health behaviors and poor health outcomes have been shown.

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*“ACEs damage children’s developing immunologic, neurologic, emotional, and cognitive systems.”*

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Specifically, youth who grow up with a prevalence of ACEs are more likely to be sexually active at a younger age, have multiple sexual partners, have an increased likelihood for teenage pregnancy, and are more likely to have sexually transmitted diseases.

### **ACE Sample Questions**

*Did you often feel that ...*

*- You didn’t have enough to eat, had to wear dirty clothes, and had no one to protect you?*

*- You lived with someone who had a problem with drinking or using drugs?*

*- Did a parent or other adult in the household often ... Swear at you, insult you, put you down, or humiliate you? or Act in a way that made you afraid that you might be physically hurt?*

## ASSESSMENTS

Scholars in East Lower School completed project screening across three school years from 2016 through 2019, as follows: a) In *year one* (2016-17) grades 6 and 7; b) in *year two* (2017-18) grades 7 and 8; c) in *year three* (2018-19) grades 6, 7, and 8. Resiliency screening (Child and Youth Resilience Measure- Short Form) was completed by scholars at the beginning and end of each school year to identify overall changes in youth resiliency. At the beginning of each school year, scholars also completed adverse childhood experiences (ACEs) screening to identify risk. Using the ACE-Q, scholars identified the presence of 10 ACEs in their lives which include 5 types of maltreatment (physical, sexual, and verbal abuse and emotional and physical neglect), 5 types of family dysfunction (criminal behavior in the home, parental separation, substance abuse or mental illness, and domestic violence), and other traumatic experiences (poverty, neighborhood violence and peer violence). Those at highest risk (reporting 3 or more ACEs in years one and two and 4 or more ACEs in year three) met with the project group therapist to discuss interest in our small group mindfulness-based cognitive behavior therapy (MB-CBT) program. This approximately 20-week program integrated a modified adolescent dialectical behavior therapy curriculum into the school day, once weekly. Data was collected on the number of scholars who were eligible, participated, and completed the curriculum. Scholars who participated in MB-CBT completed extended resiliency (Child and Youth Resilience Measure-Full Form) at the beginning and end of the program.

## RESULTS

### East Scholars Number of ACEs

	2016-2017 Grades 6 - 7	2017-2018 Grades 7 - 8	2018-2019 Grades 6 - 8
# of Adverse Childhood Experiences (ACE)	N (%) with ACE Total N = 158	N (%) with ACE Total N = 227	N (%) with ACE Total N = 355
0	N=28 (18%)	N=31 (12%)	N=71 (20%)
1	N=52 (33%)	N=46 (20%)	N=116 (33%)
2	N=25 (16%)	N=44 (19%)	N=42 (12%)
3	N=13 (8%)	N=33 (15%)	N=45 (13%)
4 or more	N=40 (25%)	N=74 (33%)	N=81 (22%)

“(Trauma group) helps because we’re the same age and if we can relate in our struggles we can be stronger in our community, we give and get advice.” (Female, 8<sup>th</sup> grade)

## East Scholars Types of ACEs

	2016-2017 Grades 6 - 7	2017-2018 Grades 7 - 8	2018-2019 Grades 6 - 8
<b>Adverse Childhood Experience (ACE)</b>	<b>N (%) with ACE type Total N =158</b>	<b>N (%) with ACE type Total N =227</b>	<b>N (%) with ACE Total N = 355</b>
Verbal abuse	28%	29%	18%
Physical abuse	20%	28%	19%
Sexual abuse	1%	6%	6%
Physical neglect (unstable food/housing)	10%	6%	6%
Emotional neglect (felt unloved/unsafe)	16%	26%	15%
Family interpersonal violence	15%	18%	18%
Household substance abuse	18%	31%	19%
Family mental illness	14%	19%	18%
Criminal behavior in home	33%	45%	37%
Parental separation	62%	67%	60%

“I’ve learned that physically hurting myself doesn’t solve my problems”. (7<sup>th</sup> grade)

“I learned how to advocate for myself and me being able to express myself to others”. (8<sup>th</sup> grade)

“Drama isn’t always the answer”.

## ASSESSMENT HIGHLIGHTS

- ❖ **Almost all ( $\geq 80\%$ ) 6-8<sup>th</sup> grade scholars have at least one ACE**
- ❖ **About half of 6-8<sup>th</sup> grade scholars have multiple ACEs**

### RESILIENCY GROUPS

In the first year of the program (2016-2017 school year), treatment was targeted at 6-7<sup>th</sup> grade scholars only. We made many cultural and “trauma-informed” adaptations to the intervention over the first year of treatment implementation, and found scholars required additional time to process the trauma they have or continued to experience. Because of this, scholars completed about half of the content in this current school year. We also found that 6th graders had difficulty understanding the cognitive-based components and demonstrated less attention and tolerance for these hour long “talk therapy” sessions. As a result, in the following school year (2017-2018) our small group therapy was provided to 7th and 8th grade scholars.

“It provided a space to learn about my own background and be able to hear others share their background, I could give advice.” (Male, 8<sup>th</sup> grade)

With this, scholars received half the treatment in 7th grade, and complete the second half in 8th grade. For the third year of our project (2018-2019) we made final adjustments by providing 6<sup>th</sup> graders with an abbreviated 6-week group treatment that focused on basic mindfulness and acclimating them to being in a group with honing in on group cohesion, emotion awareness and empathy,

interpersonal/communication supporting them for more intense groups starting the following year. In addition, 8<sup>th</sup> grade groups included a focus on more in-depth dialogue on current adversities and utilizing the strategies and skills learned as these scholars would no longer receive this intensive

### Sample Resiliency Statements

I have people I look up to.

Getting an education is important to me.

I feel I belong at my school.

My family stands by me during difficult times.

I am treated fairly in my community.

I have opportunities to develop useful life skills.

group support in high school.

### RESILIENCY GROUP RESULTS

Across all three years, a total of 398 scholars were eligible to attend small group treatment. All scholars agreed to attend; 79 scholars withdrew from the group at some point in treatment for various reasons, including: conflict with alternate class times, leaving the school or district, and inappropriateness for the group setting, and other scholars were not able to participate in group because of excessive absences.

In total, we provided 81 separate groups that ran throughout the school year (10 in year one, 24 in year two and 32 in year three) and 9 separate six-week groups to 6<sup>th</sup> graders in year three. As each of the school year-long groups met on a different day of the revolving schedule, the total number of sessions each group was provided varied depending on where holidays and exams fell. The total number of sessions provided for these groups ranged from 14 to 24 with an average of 20. Overall scholar attendance at these school year-long groups was high. Including those who withdrew, on average, scholars completed 75% of sessions. The average scholar attended 18 group sessions.

Of those scholars who completed treatment, each year we found changes in their individual level resilience (measured from the beginning of the year to the end). We also found consistently each year that, when comparing their resilience to that of other scholars in 6<sup>th</sup> and 7<sup>th</sup> grade (those with lower ACE scores), scholars attending treatment had lower overall resiliency at the beginning of the school year, but by the end of the school year these differences no longer existed. Thus, not only did scholars attending group treatment improve in their individual resiliency, they improved enough to function at similar levels to their lower risk peers.

### FOCUS GROUPS

At the end of each year, we met with separate groups of male and female scholars attending treatment to obtain perspectives on whether this treatment has been effective and why. Overall, we conducted 9 focus groups. Themes that emerged from focus groups revealed very similar results across gender and year of group participation. These scholars felt very strongly that the treatment has helped them, and indicated having a safe place to discuss their feelings and identify with others who have similar experiences were key. Regarding the specific skills learned in group, scholars told us:

“I can express myself without getting pick on or talked about”.  
(7<sup>th</sup> grade)

“It helps me get through my day”.  
(7<sup>th</sup> grade)

“I have learned skills to get me through mental pain such as music, breathing techniques”.

“Validating; I would understand (family members) situations and that I could make their life easier depending on how I react to them. Our situation changed and we don’t argue as much.” (Male, 7<sup>th</sup> grade)

“I learned how to keep myself under control; take deep breaths.” (Female, 7<sup>th</sup> grade)

“Breathing, I had a test and I was nervous but it calmed me down and I got a good grade.” (Female, 7<sup>th</sup> grade)

“Built more confidence; it’s ok to be myself. Just being around others (who have experienced trauma) gave me confidence.” (Male, 8<sup>th</sup> grade)

“Instead of getting angry, we use our words” (Male, 7<sup>th</sup> grade)

Reflecting on suggestions from the first year, some scholars suggested that their teachers should have group to learn to “clear their thoughts, take deep breaths, and stay calm” (female, 7<sup>th</sup> grade). Given this information, and feedback we received from teachers that first year, we implemented an intensive support group for teachers, as a way to address vicarious trauma and build teachers ability to serve as a resource for these high risk scholars. These mindfulness-based groups provided similar content to what scholars learned as a resiliency building strategy. In total, 29 teachers completed supportive skill-building groups. These teachers completed measures of perceived stress and perceived efficacy in building relationships with traumatized scholars both before and after the program, which revealed a trend toward reduced teacher stress and improved self-efficacy in relationship building.

## LESSONS LEARNED

Over the course of this project we learned several valuable lessons.

- The importance of working with administrators to identify the best class to pull from and organize group schedule accordingly.
- The value of having direct discussions with scholars and teachers about missing a class for group (what the impact is on self and group).
- The importance of flexibility and being able to adjust as needed if interrupted by school events.
- Therapists directly retrieving scholars for group time decreases the need to call multiple classes or administration to look for scholars that did not arrive.
- Extending groups through June allows for a more in depth termination process.
- It is best not to hold groups during 1<sup>st</sup> period, during lunch and gym classes.
- The value in maintaining ongoing collaborative team meetings with school team.



- Quality of the physical group room space matters and impacts the group therapists and scholars level of ability to maintain in the present moment, ability to focus and level of irritability (such as room temperature).
- Through trial and error, we found a group of 8 scholars with one therapist is ideal. Larger group sizes with two therapists co-leading groups may also be beneficial and practical.
- Ensure that groups are consistently held weekly to decrease the number of weeks without groups based on school schedule and uncontrollable school closings.

*“What was the most useful skill or skills you learned in group this year and why?”*

“Mindfulness, think before you act. Thinking about the outcome is hard to do because in the moment you want to leap.” (Male, 8<sup>th</sup> grade)

**Activity / Goal 2:**

Universal chlamydia screening in the East School-Based Health Center (SBHC)—to improve screening and treatment rates

**BACKGROUND**

Teens are at high risk for STIs, including chlamydia, with increased sexual activity. Nationally, chlamydia is the most frequently reported infectious disease and adolescents have the highest prevalence for this STI of any other age group. These risks are exacerbated when teens lack access to medical care. Many teens do not receive these screenings in their Primary Care Offices due to confidentiality concerns.

**UNIVERSAL SCREENING PROTOCOL**

Starting September 2016, all scholars, ages 13 and older, were asked to submit a urine sample or vaginal swab for possible testing for sexually transmitted infections (STIs), including chlamydia, at visits to the SBHC, regardless of chief complaint. As per routine, scholars were asked about their sexual history by the SBHC provider during the course of their visits and self-reported sexual activity was documented in the patient's electronic medical record. Scholars with multiple visits were rescreened every 2-3 months or whenever they presented with symptoms of a possible STI. Additionally, 121 scholars were asked to complete a two question, post-visit questionnaire to evaluate patient acceptability of this universal STI screening protocol. Data on the number of scholars who were seen in the health center, completed a screening form, and the results of screening and treatment, were de-identified and entered into the project database (Redcap) for quality assurance.

“Communication and trust are critical. When young people are assured that health care providers will respect their right to confidentiality, they are more likely to seek reproductive and sexual health care.”

REFERENCE CARD: MINORS' RIGHTS TO CONFIDENTIAL REPRODUCTIVE AND SEXUAL HEALTH CARE IN NEW YORK (2013) NYCLU

## RESULTS

In the academic year prior to initiating the new procedure, 136 STI screens were performed for 112 individual scholars, representing only 23% of the sexually active SBHC population. Over the 3-year intervention, 704 individual scholars, representing 86% of the sexually active SBHC population were screened with a total of 1137 unique tests. 94 cases of chlamydia (8% positive tests) and 18 cases of gonorrhea (2% positive tests) were diagnosed and treated in the SBHC.

All students received appropriate antibiotic treatment, condoms and reproductive health counseling. The SBHC staff developed a clinical protocol and managed the extra work-load of processing and following up on the increased number of lab tests without hiring additional staff. 94% of students reported high acceptance of the universal screening procedure and 87% reported they did not feel pressured to provide a urine sample for testing.

The protocol for universal STI screening for all patients 13 years of age and older has improved screening rates by a factor of 4. The rate of positive chlamydia infections declined from a high of 10% to the current 4% with 100% of those infections being treated by the School-Based Health Center.

The table below illustrates the numbers of patients reporting sexual activity and the percent receiving STI screening and treatment for positive results. Data is presented for our baseline year, the 2015-2016 school year, as well as results for year 1, 2 and 3 of our intervention.

STI Data Name	2015-2016- prior to universal screening	2016-2017- Year 1	2017-2018- Year 2	2018-2019 Year 3
Total enrolled in SBHC	1250	1127	912	864
Total reporting sexual activity	574	568	419	342
Total screenings for STIs	136	459	413	564
Unique # screened	112 (20% of sexually active)	383 (67% of sexually active)	340 (81% of sexually active)	414 (87% of sexually active)
Total testing positive for STI	8 (7%)	38 (10%)	34 (10%)	18 (4%)
Total treated in SBHC	8 (100%)	38 (100%)	34 (100%)	18 (100%)

*"I don't mind getting tested because I know it's just a regular part of my healthcare."*

**Activity / Goal 3:**

Implementation of a classroom-based First Class Breakfast Program—to improve participation in the School Breakfast Program / assure healthy breakfast for more scholars

**BACKGROUND**

Poor nutrition and food insecurity associated with conditions of poverty inhibit learning and development. The literature attests to the critical importance of a high-quality breakfast to children's ability to participate and to learn, as well as to their performance on tests, and their likelihood of attending school and meeting behavior standards. Low income children with hunger are more likely to have repeated a grade, received special education services, or received mental health counseling, than low-income children who do not experience hunger. Those who eat a meal before school do better on math exercises get higher scores on standardized tests, and have better attendance, punctuality, and behavior. Studies have shown that they have improved concentration, alertness, comprehension, memory and learning. Moreover, scholars who increase their consumption of school breakfasts show improvements in depression, anxiety and hyperactivity.

**METHODS**

Throughout the three year grant, we continually assessed the Breakfast program to ensure it was meeting the needs of the scholars based on participation rates and feedback from scholars. The first year launch of the First Class Breakfast program was successful. The scholars were excited about the new program which was evident in the increased participation rates. There were some operational issues with the classroom delivery system which we addressed in the second year of the program. We did observe a slight decline in the participation rates in the 2<sup>nd</sup> year of the First Class Breakfast Implementation. During this time, a new Grab and Go breakfast program was offered towards the end of the 2<sup>nd</sup> year to high school scholars who arrived late to school. This new breakfast program appeared to be very popular among all the scholars at East based on verbal feedback so we decided to evaluate our current First Class Breakfast program to determine if we could better meet the needs of the scholars with other available breakfast program models. We decided to distribute an additional survey to scholars which would rate the various types of a breakfast programs that could be offered at East. We wanted to determine which breakfast program would best meet the needs of the scholars in the lower school. In addition to evaluating the current breakfast program, we continued to focus on menu development and marketing strategies throughout the year. This was accomplished by adding three new items the menu and phasing out the least popular menu items. We continued to increase marketing efforts with several promotional events using a variety of social media platforms, as well as parent engagement through hosting family breakfasts.

The Breakfast Program survey results indicated that the majority of the scholars (55%) preferred to maintain more hot items in the breakfast menu item. In addition, a significant portion (31%) of the scholars indicated they would prefer an alternate choice at breakfast even if it was a cold item such as cereal. Based on the survey, the team decided that as of the start of the 2018-2019 school year, the

lower school would change from a First Class Breakfast program to a Grab and Go breakfast program. It was decided that both the lower and upper school would participate in the same breakfast program with an improved menu, which would also streamline the menu planning and delivery process. The Grab and Go program was fully implemented in the third year and was successful in increasing satisfaction and participation rates. Many new items were added to the menu throughout the year and the menu was the same for both lower and upper schools. The delivery process was also changed due to the lower school classrooms being relocated on the third floor as a result of school renovations. Cambros were stationed near the main entrance on the first floor where scholars picked up a bagged breakfast to carry to their classrooms. This change addressed the operational issues from the previous year. Marketing efforts continued to become more robust in the third year with many promotional events, the initiation of a Scholar Breakfast Committee and nutrition education addressing many issues including food waste.

Scholar Satisfaction Surveys were distributed at the beginning and end of each academic year. We compared the results of the surveys over the three year grant period. Results of this three year summary showed that the number of scholars who don't eat breakfast declined and the satisfaction rates in terms of the taste and variety of food increased. In addition, scholar participation in the breakfast program increased to 71% in the third year, which exceeded the 65% grant goal.

#### **RESULTS – Breakfast Participation Rates**

<b>Type of Breakfast Program</b>	<b>Participation Rates</b>
2015/2016= Cafeteria	29%
2016/2017 = First Class Breakfast	66%
2017/2018= First Class Breakfast	60%
2018/2019= Grab and Go	71%

#### ***Average Participating rates for 2018-2019 school year = 71%***

*In the final year of the grant, we worked with staff to develop a plan for the sustainability of a successful Breakfast Program in the lower school. The key areas that we provided support in which contributed to the success of this program, included communication, menu development, marketing, evaluation and nutrition education. We recommended that select management staff from East School and the Rochester City School District Food Service Department continue to meet on a regular basis throughout the year to address any issues and assess the current program. We identified staff members that could continue the marketing, menu development, evaluation and education efforts.*

## **FUTURE PLANNING**

Over the three years of the project, we have been able to implement sustainable procedures for both the Grab and Go Breakfast and the Universal STI screening protocol. These programs are both well-functioning and will be able to continue on without further grant support. The three years spent developing operations and standards, measuring outcomes, eliciting feedback and fine tuning processes has developed a solid foundation for continued growth. Further improvements will be led by Food Service, School and SBHC staff.

The resiliency-building interventions have taken more time to develop and implement. Over the past three years we have modified our processes for delivering and preparing scholars to fully participate in the intervention, as well as adapted the intervention to best meet the needs of scholars at East. Thus, these three years have allowed us to develop a *first-of-its-kind school-based, resilience-focused (Promoting Youth Resilience; PYR) group intervention for children with high levels of trauma.*

The PYR group model is now finalized and we are ready to focus, over the next two years, on sustainability of this program at East. In addition, we will continue knowledge development and culture-building among East staff, leaders, scholars and families. Our primary goal for this next phase of the project is to develop a transportable / sustainable platform for maintaining the PYR model and resilience-building groups well into the future. At the termination of this transition project in June of 2021, the PYR program will be fully integrated into the school operations at East.