



The YPI Evaluation Newsletter

Central New York Rural Safe Schools/Healthy Students Initiative

Volume III, # 6 (July 2012)

A Report of the Youth Policy Institute, Inc.

Resilience Project after Three Years

The Central New York (CNY) Rural Safe Schools/Healthy Students (SS/HS) Initiative is a collaboration involving five rural school districts, the Cayuga County Department of Health & Human Services, the Cayuga County Sheriff's Department, the Cayuga-Onondaga B.O.C.E.S, and the Partnership for Results. Led by a Core Management Team convened by the Partnership, this interagency project is implementing evidence-based programs intended to promote safe, well-ordered, and drug-free school environments, and to help children and youth develop the social skills and emotional resilience necessary to avoid violent and other destructive behaviors.

The *YPI Evaluation Newsletter* is a series of reports developed by CNY Rural SS/HS Initiative's independent evaluator, the Youth Policy Institute. Each *Newsletter* is designed to help Initiative stakeholders determine:

- ★ Whether the SS/HS Initiative programs are being implemented as intended;
- ★ Whether programs and services are reaching and benefitting students and families; and
- ★ What effects project activities are having on schools and students.

About the Evaluation

The evaluation of the CNY Rural SS/HS Initiative is being conducted by the Youth Policy Institute, an independent, non-profit research and evaluation agency.

The primary data sources used in this newsletter include focus groups with Resilience Project staff and teachers, interviews with elementary school principals and support staff, and Resilience Project caseload and assessment data.

This edition of the *Newsletter* explores the Initiative's implementation of the Resilience Project from Fall 2009 through Spring 2012. Resilience Project is a targeted intervention that promotes the social and emotional well-being of elementary school students in Kindergarten through third grade and their positive adjustment to elementary school.

Overview of the Resilience Project

Resilience Project is a proven early intervention that serves children with externalizing problems, peer social problems, and/or internalizing problems. It is a second-generation program, developed at the University of Rochester Medical Center, that uses a quasi-directive approach to paraprofessional mentoring. By contrast, its predecessor intervention, Primary Project (formerly known as the Primary Mental Health Program), employed a non-directive approach to mentoring.

Resilience Project is designed to reduce risks for behavioral and emotional disorders and to enhance self-regulation skills, promoting both positive school adjustment and effective learning by young students.

Key features of the Resilience Project include:

1. *Trained Mentors.* Trained paraprofessionals (known as Mentors) provide the treatment in their assigned school. They are closely supervised by a mental health clinician (the Resilience Project Supervisor), whose supervision activities are supported by the program's developers.
2. *Screening.* Teachers in the targeted grade levels annually screen nearly all of their students using a validated screening tool, which identifies emerging behavioral and social-emotional problems.
3. *Limited Caseload.* Each Mentor works with a maximum of 15 students each semester (Fall and Spring). Mentors and school staff collaboratively select Resilience Project participants from among the students identified in the screening process as persons who may benefit from the intervention.
4. *Wait-list Design.* Once parents provide consent for participation, students are assigned in approximately equal numbers to either a treatment group or a wait-list group. The former receive project services in the Fall semester, and the latter during the Spring. This creates a quasi-experimental control group.
5. *Focused Sessions.* Mentors provide weekly one-on-one sessions using mentoring techniques that are clearly delineated in a detailed manual. The Resilience Project intervention lasts 14 sessions.
6. *School-Based Treatment.* Sessions are provided at school in a designated space equipped with age-appropriate materials.
7. *Teacher Collaboration.* Mentors work with teachers to support the integration of Resilience Project techniques in classrooms. With the assistance of teachers, students learn to generalize social and emotional skills from Resilience Project to other settings.
8. *Pre-Post Assessments.* Participating students in the treatment and wait-list groups are administered a validated assessment tool in November, February, and May to assess progress in classroom adjustment over the school year.

By providing these school-based services free of charge, the SS/HS Initiative is addressing several key impediments preventing children from accessing mental health services in rural Cayuga County, NY, including:

- ★ Lack of access to third party payers.
- ★ Limited insurance coverage for early intervention mental health services.
- ★ Shortage of community-based mental health services in rural areas.
- ★ Limited transportation options to access urban-based services.

Implementation Findings

A review of quantitative data from the Partnership for Result's program database and qualitative data collected from school administrators, teachers, Mentors, and the Resilience Supervisor indicates that in most critical areas, this preventive intervention was implemented with a high degree of fidelity to the program model.

1. *Qualified and Consistent Staffing.* During all three years of Resilience Project implementation, the administering agency, Partnership for Results, has employed Mentors and a Supervisor with appropriate experience and expertise. Staffing has been consistent at all sites but one, Cato-Meridian CSD. Services were suspended at that district's elementary school during the Fall term of the 2010-2011 school year and the Spring term of the 2011-2012 school year due to Mentor departures. This ongoing inconsistency of staffing has resulted in the Principal's decision to end Resilience Project services at the school.
2. *Target Population Served.* Screening of students has occurred in a timely and comprehensive manner. The students most eligible to benefit from the program were identified in a timely fashion and collaboratively selected for participation by Mentors, the schools' student support staff, and the Resilience Project Supervisor.
3. *Fidelity to Program Practices.* The qualitative data collected by YPI clearly indicates that Resilience Project services adhered closely to the manualized mentoring structure. Mentor-student interactions were consistently monitored and improved through review of session tapes and clinical supervision. Ongoing training and supervision, as well as the careful development and monitoring of program protocols and procedures resulted in the target population being accurately identified and, in four of the five districts, consistently served.
4. *School Awareness of Intervention.* School administrators, teachers, and support staff (such as school psychologists and social workers) across the five participating school districts had an accurate understanding of the Resilience Project's core activities, eligibility criteria, and expected outcomes.
5. *Teacher-Mentor Lessons.* During Years 2 and 3, mentors had mixed success implementing Resilience Project Teacher-Mentor lessons in most participating school classrooms. Interviews and focus groups with school staff and administrators and Resilience Project staff indicate that successful implementation of this component is attributable to a variety of factors, including: active administrator support; the degree to which Partnership staff can communicate the value of Teacher-Mentor lessons; the willingness of Mentors and instructional staff to engage in the activity; and the perceived pressures of other curricular reforms within a building.
6. *Pre-Post Assessments.* The structured pre-post assessment process was closely followed. For all participants, pre- and post-testing was implemented in a timely and thorough manner. Both the control and treatment groups were assessed using the Teacher-Child Rating Scale 2.1 (T-CRS,

discussed below) in early November of each year. Once the first round of services (for the Fall treatment group) was completed in February of each year, both groups were re-assessed using the T-CRS. Both groups were assessed a final time when the second round of services (for the wait-listed Spring group) was completed in late May of each service year.

This relatively high level of fidelity to the Resilience Project model was the product of multiple factors:

- ★ Intensive supervision and ongoing training by a well-trained, skilled, and active clinician (the Resilience Supervisor) and an experienced Resilience Project Mentor serving as a program coordinator;
- ★ Effective awareness trainings on Resilience Project activities conducted with school staff at the outset of both program years and periodically during each year; and
- ★ The specially-designed Resilience Project database, which provides the Supervisor with timely and easily accessible data about project activities such as screening scores, enrollment status, and the status of pre- and post-testing.

Participant Enrollment and Demographics

Enrollment and Assessment Rates. The three-year total of students served (387) is below the Initiative’s target number of 450 for the first three years. A significant amount of the shortfall is attributable to the disruption in staffing at Cato-Meridian Elementary School during the past two years (**Table I**). In addition, site visits and interview data indicate that referrals have declined as teachers and other school staff have become preoccupied by staff evaluation and curricular reforms and have been less interested in supporting the referral and consent process. Although some school staff have reported some reluctance on the part of parents to consent to Resilience Project services in Year 3, there is no clear indication, that this has in fact become a significant issue. Resilience Project supervisors and Mentors have been aware of this pattern of declining referrals and have responded by working assiduously with school staff to ensure that children eligible to benefit from Resilience Project services can receive them.

**Table I:
Resilience Project Participant Enrollment, Years 1-3**

	<i># of Fall Semester Participants</i>	<i># of Spring Semester Participants</i>	<i>Total # of Participants Served Annually</i>	<i>Total # of Participants With Pre-Post Assessment Data</i>	<i>Percentage of Participants With Pre-Post Assessment Data</i>
Year 1	70	71	141	138	98%
Year 2	60	67	127	124	98%
Year 3	61	58	119	114	96%
Total	191	196	387	376	97%

Over the three years of the SS/HS Initiative, project staff collected pre- and post-assessments (T-CRS) for 97% of Resilience Project participants. In other words, nearly every child who was served by the program completed these assessments.

Demographic Characteristics of the Resilience Project Participants

- ★ *Comparability of the Fall and Spring Groups:* In all three years of the Initiative, the treatment group (those served in the Fall) and the wait-list group (served in the Spring) were similar in size, had the same gender distribution, and had roughly comparable distributions by school (with the exception of Cato-Meridian). To the fullest extent possible, assignment to each of the groups was made at the classroom level, to account for the effect of teachers on student development.

**Table II:
Distribution of Resilience Project Students for First Semester Treatment and Second Semester Wait-List Control Groups by Gender, Districts, and Grades: Years 1-3¹**

	Total	Gender		School Districts					Grade			
		M	F	Cato-Meridian	Jordan-Elbridge	Moravia	Southern Cayuga	Union Springs	K	1 st	2 nd	3 rd
Fall Treatment Group	191	120	71	24	39	43	44	41	8	66	68	49
Wait-list Control Group	185	108	77	24	41	40	40	40	43	56	44	42
Total	376	228	148	48	80	83	84	81	38	86	68	77

- ★ *Grade Distribution:* There was a statistically significant difference in distribution by grade between the Fall and wait-list (Spring) groups, with a considerably younger group of students in the wait-list group. This was intentional; after the first year of program operations, both the program designers and the Supervisor considered Kindergarten students to be too young to benefit from the program during the Fall term and thus postponed their participation to the Spring term (**Table II**).
- ★ *Gender Distribution:* Of the 376 students who completed Resilience services, 61% were male students and 39% were females. This gender distribution occurred each semester of each project year. YPI interviews and focus groups at the participating elementary schools indicated that, in some schools more than others, elementary school staff concerns about behavior control issues among male Kindergarten students played an important role in the referral process during all three years of the SS/HS Initiative (**Tables II** and **III**, below). There was, moreover, some reluctance among some support and instructional staff to refer female students to Resilience Project. This may be because female students are perceived, correctly or incorrectly, to be more attentive, to have fewer behavioral control issues, and to be less at-risk academically and emotionally than males.
 - While more boys than girls participated in each of the five districts during all three years of the Initiative, the gender imbalance was particularly marked in two school districts: Jordan-Elbridge and Moravia (**Table III** below). While the source of the over-representation of young male students is not entirely clear, it is not an issue for all the participating schools and can likely be successfully addressed with targeted outreach and training.

¹ The data in Table II and all following tables include only students who completed Resilience Project services.

**Table III:
Gender Distribution of Resilience Project Participants by District: Years 1-3**

	<i>% Female</i>	<i>% Male</i>
Cato-Meridian	46%	54%
Jordan-Elbridge	31%	69%
Moravia	34%	66%
Southern-Cayuga	46%	54%
Union Springs	45%	55%

KEY FINDING: Resilience Project served more male than female students, particularly in two districts.

Project Outcomes

Comparing the Treatment and Control Groups: Fall Semesters, Years 1-3

The Teacher-Child Rating Scale 2.1 (T-CRS) is a validated instrument used by the Resilience Project to assess the classroom adjustment of students in Kindergarten through third grade throughout the intervention. Its subscales – Task Orientation, Behavior Control, Assertiveness, and Peer Sociability – are defined in **Table IV**.

**Table IV:
Definitions of Teacher-Child Rating Scale 2.1 (T-CRS) Subscales**

<u>Task Orientation</u>	Ability to focus on school-related tasks. Incorporates such items as capacity to function even with distractions, motivation to achieve, and attention span.
<u>Behavior Control</u>	Skill in adapting and tolerating limits imposed by the school environment or by the child's own limitations. An assessment of a child's frustration tolerance and acting out behaviors.
<u>Assertiveness</u>	Level of interpersonal functioning and confidence in dealing with peers. Incorporates assessments of assertive social skills and withdrawn/anxious behaviors.
<u>Peer Social Skills</u>	Likeability and popularity among peers and how well the child interacts with peers.

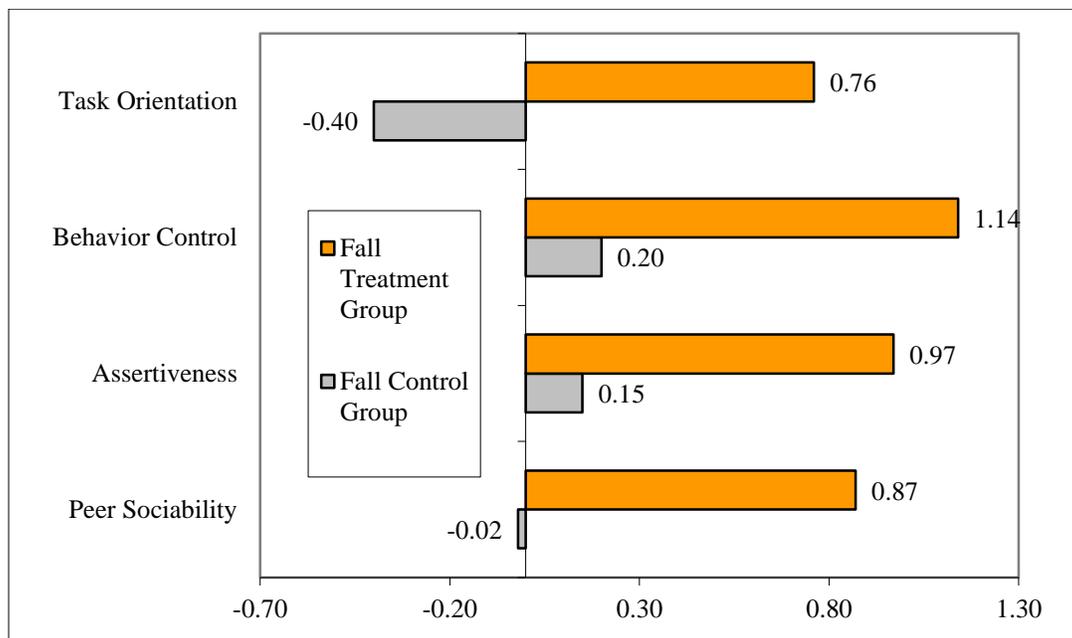
During the first semesters of all three years of Resilience Project service delivery, students in the treatment group showed considerable improvements in their capacity to self-regulate and get along with their peers. By contrast, the control group did not show any notable improvement (**Figure I**, below). This is a clear indication of the Resilience Project's effectiveness.

Comparing Change in the Treatment and Control Groups

- ★ *Fall Treatment Groups, Years 1 to 3 Combined:* The changes measured from pre- and post-tests for the Fall treatment group indicate that **there was statistically significant, positive change in the mean scores for all four subscales of the T-CRS** ($p < 0.05$): Task Orientation, Behavior Control, Assertiveness, and Peer Sociability.

- ★ *Fall Wait-List Control Groups, Years 1 to 3 Combined: For the students in the wait-list control group, the change from pre-test to post-test was slight and statistically insignificant for all four of the T-CRS subscales.* Students experienced regression on one subscale (Task Orientation), virtually no change in Peer Sociability, and marginal increases in Behavior Control and Assertiveness (Figure I and Table V).

**Figure I:
Change in Mean T-CRS Scores (Pre- & Post-) for the Fall Semester:
Resilience Project Fall Treatment Group Compared to the Wait-list Group: Years 1-3**



- ★ *Annual Differences, Fall Treatment and Wait-List Control Groups: As seen in Table V below, Resilience Project program effects for the Fall Treatment group improved dramatically from Year 1 to Year 2. Year 3 changes were similar to those of Year 2 except in one subscale, Peer Sociability.*

**Table V:
Change in Mean T-CRS Scores (Pre- & Post-) in the Resilience Project:
Fall Treatment and Wait-list Control Groups: Years 1-3**

* Indicates Statistical Significance, $p < 0.05$; ** Indicates Statistical Significance $p < 0.10$

	Task Orientation	Behavior Control	Assertiveness	Peer Sociability
<i>Treatment Group, Fall Year 1</i>	0.37	1.00*	0.60**	1.14*
<i>Control Group, Fall Year 1</i>	-0.10	0.41	0.17	0.48
<i>Treatment Group, Fall Year 2</i>	1.15*	1.38*	1.38*	1.47*
<i>Control Group, Fall Year 2</i>	-0.16	0.07	0.12	0.15
<i>Treatment Group, Fall Year 3</i>	0.82**	1.07*	1.00*	-0.03
<i>Control Group, Fall Year 3</i>	-1.05*	0.09	0.16	-0.81*
Fall Treatment Groups, Years 1-3	0.76*	1.14*	0.97*	0.87*
Fall Control Groups, Years 1-3	-0.40	0.20	0.15	-0.02

KEY FINDING: Children who received Resilience Project services in the Fall treatment group improved substantially and significantly in their capacities to adjust positively to school, while those in the control group, without these services, did not show comparable improvements.

The Impact of Resilience Project Services, Fall and Spring Treatment Groups

On average, students who received Resilience Project services in Years 1 to 3 experienced statistically significant improvements ($p < 0.05$) across all 4 subscales of the T-CRS. The most positive results were in Year 3, indicating that, on average, Resilience Project’s impact improved over time (**Table VI**).

**Table VI:
Change in Mean T-CRS Scores (Pre- & Post-) in the Resilience Project:
Fall and Spring Treatment Groups Combined, Years 1-3**

** Indicates Statistical Significance, $p < 0.05$; ** Indicates Statistical Significance $p < 0.10$*

	Task Orientation	Behavior Control	Assertiveness	Peer Sociability
<i>Fall and Spring Treatment Groups, Year 1</i>	0.54	0.60**	0.90*	0.62**
<i>Fall and Spring Treatment Groups, Year 2</i>	1.85*	0.79*	1.35*	0.73*
<i>Fall and Spring Treatment Groups, Year 3</i>	1.92*	1.96*	1.55*	0.76*
Fall and Spring Treatment Groups, Years 1-3	1.39*	1.07*	1.25*	0.70*

KEY FINDING: Resilience Project had a significant, positive impact on all students served, and this program effect became steadily stronger from Year 1 to Year 3.

Variation in Program Effect by Gender, Grade, and School District

- ★ *Variation by Gender.* On average, the impact of Resilience Project was positive and statistically significant ($p < 0.05$) for male and female students in all four T-CRS scales (**Table VII**, below). The impact of the intervention was similar, by gender, for Behavior Control. In the other three areas – Task Orientation, Assertiveness, and Peer Sociability – Resilience had a more positive effect with female students than with males.
- ★ *Variation by Grade.* There were few differences in program effect by grade. Students in Kindergarten and third grade did not benefit from Resilience Project as much as other grades in the area of Peer Sociability, and there was less effect on Behavior Control among Kindergarten students (**Table VII** below).
- ★ *Variation by School District.* With one exception, the impact of Resilience Project did not vary significantly by school district. On average, program effects were generally less positive in Cato-Meridian, which experienced staff turnover in Years 2 and 3.

**Table VII:
Change in Mean T-CRS Scores (Pre- & Post-) in the Resilience Project
by Gender, Grade, and District: Fall and Spring Treatment Groups Combined, Years 1-3**

** Indicates Statistical Significance, $p < 0.05$; ** Indicates Statistical Significance $p < 0.10$*

	Task Orientation	Behavior Control	Assertiveness	Peer Sociability
Female	1.67*	1.06*	1.80*	0.87*
Male	1.21*	1.08*	0.89*	0.59*
Kindergarten	1.20	0.47	1.35*	0.35
1 st Grade	1.19*	1.54*	1.56*	0.85*
2 nd Grade	2.11*	0.93*	1.07*	1.02*
3 rd Grade	0.88*	0.97*	0.99*	0.57
Cato-Meridian	0.50	-0.27	2.02*	0.27
Jordan-Elbridge	0.78	0.65	0.78**	0.51
Moravia	2.36*	1.40*	0.99*	1.07*
Southern-Cayuga	2.00*	1.46*	1.38*	0.81*
Union Springs	0.89**	1.56*	1.38*	0.65

KEY FINDING: Resilience Project generally had a more positive impact on female than male students and a similar effect across all grades. Program effects were similar across elementary schools, with the exception of one building that experienced staff turnover.

Conclusions and Recommendations

After three years of implementation, the SS/HS Initiative’s Resilience Project had statistically significant outcomes for participating students across all four T-CRS subscales: Task Orientation, Behavior Control, Assertiveness, and Peer Sociability. As is clear from the wait-list control group data, without this targeted intervention, students eligible for the program would not improve noticeably in their ability to function well in a classroom environment.

Resilience Project services had a substantial and statistically significant effect on both male and female students, although the effect was more positive among females. In addition, the program generally had similar and beneficial effects across grades and in the four schools that had stability of staffing. These consistent outcomes are the results of effective implementation and program monitoring by the Partnership, enthusiastic and knowledgeable participation by school staff and administrators, and a robust and effective program design.

There are two areas of concern that YPI believes should be addressed in forthcoming years of the Resilience Project.

First, it is evident that the effectiveness of Resilience Project is undermined by discontinuity in Mentor staffing.

- ★ Staff departures are a chronic problem for grant-funded initiatives, and **YPI recommends** that the Partnership develop plans for replacement hiring and training and share those plans with the participating elementary schools.

Second, in some participating schools, there is a tendency to refer more male students than female students to the intervention.

- ★ **YPI recommends** that project staff conduct awareness sessions with school staff to communicate that the Resilience Project is equally effective for male and female students and that the intervention is to help children resolve not only externalizing problems, such as aggression, but also internalizing problems, such as shyness.