
Journal of Urban Health: Bulletin of the New York Academy of Medicine Vol. 81, No. 1, March 2004

Short-Term Impact of Experience Corps® Participation on Children and Schools: Results From a Pilot Randomized Trial

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ABSTRACT *This article reports on the short-term impact of a school-based program using older adult volunteers and aimed at improved academic achievement and reduced disruptive classroom behavior in urban elementary school students. The Experience Corps® Baltimore (Maryland) program places a critical mass of older adult volunteers, serving 15 hours or more per week, in public schools to perform meaningful and important roles to improve the educational outcomes of children and the health and well-being of the volunteers. This article reports on the preliminary impact of the program on children in grades K–3. A total of 1,194 children in grades K–3 from six urban elementary schools participated in this pilot trial. At follow-up, third grade children whose schools were randomly selected for the program had significantly higher scores on a standardized reading test than children in the control schools, and there was a nonsignificant trend for improvement in alphabet recognition and vocabulary ability among kindergarten children in the program. Office referrals for classroom misbehavior decreased by about half in the Experience Corps schools, but remained the same in the control schools. Teachers had somewhat more favorable attitudes toward senior volunteers as a result of having older volunteers in the classroom, although the difference between the intervention and control schools was not statistically significant. In this pilot trial, the Experience Corps program led to selective improvements in student reading/academic achievement and classroom behavior while not burdening the school staff.*

KEYWORDS *Academic achievement, Classroom behavior, Childhood education, Literacy development*

INTRODUCTION

Poor academic achievement and violent, antisocial behavior are two of the most common and serious problems facing teachers and schools in the United States today. Although many approaches to dealing with these problems have been proposed, the consensus among educational professionals, and likely the general population, is

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to seek effective programs that do not overburden the already limited resources of the school system. In this article, we report preliminary data on the impact of the first year of the Experience Corps program in Baltimore, Maryland (see Fried et al.[1]), which places a critical mass of older adult volunteers in public elementary schools, with each adult serving 15 or more hours per week for the full school year, and was aimed at the primary targets of poor academic achievement, disruptive classroom behavior, and lack of learning readiness on children's literacy and behavior.

The Experience Corps program in Baltimore was designed to support the needs of children in grades K–3 in public schools while simultaneously promoting the health and well-being of the older volunteers. Although relatively little research has focused on the impact of older adults on the well-being of young children, there is some evidence that cross-age interaction can produce positive outcomes. For example, there is a growing body of literature on the psychological and behavioral benefits that result from grandparents living in the same household (co-residing) with their grandchildren.[2,3] There is also increasing evidence on the positive benefit of intergenerational programs designed to bring unrelated old and young together.[4] Because of their lifetime experience and accumulated knowledge, older adults can serve as a major source of transmission of information to younger members of society.[2]

Reading ability, a major focus of the Baltimore program, is critical for success in school[5] as it opens other learning opportunities and generalizes to academic success for children and youths. Child educators have long been interested in the role that reading and related activities among children in kindergarten through third-grade classrooms play in children's early literacy development.[6–11] There is growing research evidence supporting the effects of interactive reading activities on language and literacy development, especially among young, disadvantaged children.[12]

For example, Wasik and Bond[13] evaluated the effects of a technique called interactive book reading on literacy of 4-year-olds from low-income families. Teachers read books aloud to the children and reinforced vocabulary by presenting concrete objects that represented the words and by providing children with multiple opportunities to use words. The teachers were also trained to ask open-ended questions and to engage children in conversations about the book and activities. Children who participated in this interactive book-reading intervention group scored significantly better than children in a comparison group on the Peabody Picture Vocabulary Test, Third Edition (PPVT-III) and other measures of receptive and expressive language. Other studies on early reading instruction similarly suggested that such instruction can be instrumental in fostering early literacy development.[14–17]

Research data identified a particularly high-risk period, the achievement of children up through the third grade, as a major predictor of their subsequent educational and occupational outcomes. Children who do not learn to read by third grade are at risk for failure in school.[18–21] Indeed, a major goal of the No Child Left Behind Act of 2001 [Pub L No. 107–110 (HR1)] is to ensure that all children are reading on grade level by third grade.

The Experience Corps program in Baltimore was designed to train and place a critical mass of older adults in a given school to serve in roles identified by principals as their greatest unmet needs.[22] The hypothesized mechanisms by which the program was expected to impact the early risk antecedents of poor reading/academic achievement and classroom behavior are shown in the Figure. Beneficial outcomes were expected to include reading/academic performance; behavioral indices, including disruptiveness and conflict; and readiness for learning and motivation/expectations regarding school and learning.

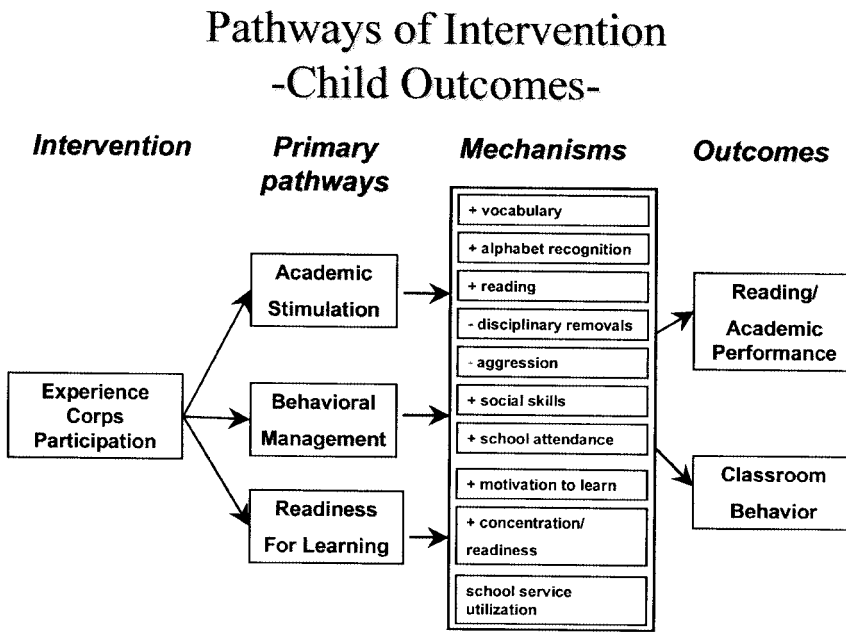

FIGURE 1. Causal diagram showing pathways through which Experience Corps–Baltimore is hypothesized to affect children's academic performance and classroom behavior.

Children in the Experience Corps schools were expected to perform better on measures of verbal ability and reading readiness than children in the control schools in terms of the proportion showing reliable improvement. Behavioral problems were expected to be reduced as a function of having older volunteers in the classroom. It was also expected that teachers' sense of their teaching efficacy would improve as a function of participating in the program because they would have more time to devote to their teaching tasks.[23] Secondary outcomes that were expected to show improvement included school climate, teacher perceptions of older adults, and teacher morale and retention.

We report here the results of a pilot evaluation of children and schools randomly allocated for up to 8 months to either the Experience Corps–Baltimore program or a control group from fall 1999/winter 2000 through spring/summer 2000. Our immediate goal is to describe preliminary evidence for the short-term ability of the program to improve urban children's literacy performance and classroom behavior. The ultimate goal is to have an impact on success and well-being of children, schools, volunteers, and the community through a broad-based, ongoing collaborative effort in both urban and rural environments.[1,25–28]

METHODS

Standardized Intervention Protocols

Program volunteers were 60 years and older. Each volunteer served at least 15 hours per week, usually over 3–4 days per week. A central feature of program design is that a critical mass of older volunteers is placed in a given public elementary school, both to maximize impact on the climate of the entire school and to increase the

sense of collective efficacy of the volunteers.[1,26] They typically work either in one on one or in small groups with children who have been selected by the classroom teacher as students most in need.

In the Baltimore program, we developed four high-quality, standardized program modules to address the highest priority unmet needs of the schools as identified by the school principals. They were, uniformly, literacy support, opening or helping maintain the school libraries, and two violence prevention programs. These programs are described next.

Bound-for-Reading, a General Literacy Support Program The Bound for Reading program (developed for Experience Corps–Baltimore by Barbara Wasik, modified by Tom Glass) was designed as a literacy support program to help adults who are reading with and to children. It focuses on a set of tools that assess children's current reading levels, book selection, build vocabulary and comprehension, and ask different types of questions (factual, open ended, prediction) about the book.

Library Support This program (developed by Sylvia McGill) supports library functions (from shelving or cataloguing books, to reopening and helping staff school libraries, to helping children pick books they will enjoy, to reading to/with children) under the guidance of a librarian. With the aid of this module, Experience Corps has been instrumental in reopening and helping to operate several of the schools' libraries after a 5-year closure.

Violence Prevention Conflict Resolution Programs: Partners in Play and I to I The Partners in Play program (adapted by Joel Hill) develops peer conflict resolution skills while teaching children how to play (both actively and in quiet board games) according to group rules and in nonviolent ways. The I to I program, developed by Lee Stern of the Society of Friends Schools in 1975, helps children and adults develop one-on-one conflict resolution skills. The goal of I to I intervention is to facilitate communication and conflict resolution from person to person (older adult to child; older adult to older adult, etc.) through the use of games, role plays, and listening learning techniques. The training exercises teach volunteers how to engage in friendly, yet firm, communications with children so that they move from blame to encouragement.

Volunteers are encouraged to participate in at least two of the program modules described above. Most elect to start with literacy support and then add others. It is important to emphasize that the literacy support module is not a typical school tutoring program. It differs in terms of the large number of hours per week that the volunteers spend with the children, the presence of a critical mass of volunteers per school, the defined nature of the roles, and the extensive amount of training and oversight provided.

The Experience Corps–Baltimore program was implemented in six public elementary schools in Baltimore in November 1999 in a partnership between investigators at the Johns Hopkins University and the Greater Homewood Community Corporation, an umbrella community organization serving 43 neighborhood organizations in northern Baltimore City.

The six participating schools agreed to be randomly assigned, and three were randomly selected to receive the Experience Corps–Baltimore program (Dallas Nicholas, Abbotston, and Guilford Elementary schools) or not (Barclay, Mildred Monroe, and Margaret Brent Elementary schools) during the first year. A total of 1,194 children in grades K–3 from these schools were assessed in fall 1999/winter

2000 and, at follow-up, in spring/summer 2000. Over a 3-month period, beginning October 1999, older adults were recruited to participate in the program.

Standardized Evaluation Protocol

The assessments were conducted during regular school hours in a quiet room outside the classroom. All assessments were conducted in individual testing sessions. Six interviewers who had been trained and certified by Dr. Rebok administered the child assessments prior to the beginning of the program and then again at the end of the school year. Teacher and school assessments were administered about three quarters of the way through the school year.

A comprehensive assessment protocol of primary and secondary outcomes was developed for participating schools and children to evaluate the program's impact. The evaluation instruments were chosen to yield a broad-based, standardized assessment of outcomes important to children's success and feasibility of administration within an urban public elementary school setting.

Child Outcome Measures Alphabet Recognition. This test assesses sight recognition of the 26 letters of the English alphabet. The letters were presented in randomized order, one at a time. The capitalized form of each letter was drawn in black ink on a white background and held in front of the child. The child's task was to name the correct letter. No time limits were imposed, but if the child did not respond in 15 seconds, the tester was instructed to provide prompts (e.g., "Tell me the one you think it might be. It's all right to guess."). If the subject still did not respond, the answer was scored as a nonresponse.

PPVT-III.[29] The PPVT-III is a wide-range measure of listening comprehension for spoken words in standard English and a screening test of verbal ability. Two parallel forms, IIIA and IIIB, were administered to kindergarten and first-grade students at baseline and posttest, respectively, to assess performance changes. PPVT-III is a culturally fair instrument that is appropriate for assessing verbal abilities of African American children.[30]

The Comprehensive Test of Basic Skills (CTBS; fifth edition).[31] The CTBS is one of the most frequently used standardized achievement batteries in the United States. Subtests of the CTBS cover both verbal (word analysis, visual recognition, vocabulary, comprehension, spelling, and language mechanics and expression) and quantitative topics (computation, concepts, and applications). The CTBS was standardized on a nationally representative sample of 323,000 children from kindergarten through grade 12. The test is administered in the spring of each year to all grades in the Baltimore City public school system.

The Maryland School Performance Assessment Program (MSPAP). The MSPAP is an assessment program designed by Maryland educators for purposes of providing information that can be used to improve instruction in schools. It consists of criterion-referenced performance tests in reading, mathematics, writing, language usage, science, and social studies for students in grades 3, 5, and 8. The MSPAP does not yield individual scores, but an overall school composite score.

School behavior records. School record information on number of principal office referrals for disciplinary reasons was obtained from the principals of the participating schools.

School and Teacher Outcome Measures: Teacher Self-Efficacy. A five-item scale was employed to assess teacher self-perceptions of their instructional efficacy.

TABLE 1. Characteristics of children and schools in the pilot randomized trial of the Experience Corps–Baltimore program, by treatment group

	Intervention (N = 688)	Control (N = 506)	*P*
Age, years			
Kindergarten and grade 1	7.0 (range 5.3–9.3)	7.0 (range 5.7–9.6)	ns
Grades 2 and 3	9.5 (range 8.0–12.5)	9.4 (range 8.0–11.4)	
Gender, %			
Female	47.4	45.3	ns
Male	52.6	54.7	
Race, %			
African American	96.5	92.1	.0001
Caucasian/other*	3.1	7.7	
Enrollment (number of students per school)	440.0	340.0	ns
Free/reduced meals, %	88.8	88.8	ns
Mobility (entrants and withdrawals), %	42.7	40.8	ns
Teachers, number per school	23.7	22.7	ns
Principals' tenure at school, years	1.4	1.2	ns

ns, not significant.
*Race data missing for three children in the intervention group and one child in the control group.

Teachers answered each item (e.g., "If I try really hard, I can get through to even the most difficult or unmotivated student.") on a 5-point scale ranging from 1 (strongly agree) to 5 (strongly disagree).

Teacher Perception About Seniors in the Classroom. A 20-item survey was developed to assess teachers' attitudes toward having seniors in their classrooms. Teachers answered each item (e.g., "My perception is that seniors lack the energy to keep up in the classroom.") on a 5-point scale ranging from 1 (very much) to 5 (not at all).

School Climate. Teachers were asked to rate statements about the effectiveness of their educational environment on the School Climate Survey developed by the Partnerships for Youth Initiative.[32] For each statement, they rated how important a particular characteristic was in creating an effective school environment and how evident each characteristic was at their school. Importance was rated on a 5-point scale ranging from 1 (not important) to 5 (critical), and evidence was rated on a 5-point scale ranging from 1 (not evident) to 5 (extremely evident).

RESULTS

Demographic characteristics for children and schools in the intervention and control conditions are shown in Table 1. The age range for the sample was 5.3 to 12.5 years, with a mean age of 8.3 years. Females were 46% of the total, and 95% were African American. There were no significant differences between the intervention and control groups on age or gender, but there was a higher proportion of African American children in the intervention schools ($P < .0001$). Intervention and control schools were similar in terms of number of students enrolled, percentage of students

receiving a free lunch or entering or withdrawing from school, number of teachers, and principals' tenure at the school.

Child Outcomes

Reading/Academic Performance It was hypothesized that children participating in the Experience Corps–Baltimore program would show increased verbal abilities compared with children in the control schools, and that this increase would be most evident among the youngest children. To test this hypothesis, we compared the scores of kindergarteners and first graders in the intervention (n = 251) relative to control children's scores (n = 154) on the Alphabet Recognition Test and the PPVT-III[28] at baseline and follow-up in June 2000. A three-way (Grade × Treatment Group × Time of Testing) repeated measures analysis of variance was performed using a general linear models procedure. For the Alphabet Recognition Test, there were significant effects for grade, $F(1,401) = 41.1$, $P < .0001$; treatment group, $F(1,401) = 8.54$, $P < .004$; and time of testing, $F(1,401) = 22.0$, $P < .001$. There were also significant Grade × Treatment Group, $F(1,401) = 8.1$, $P < .005$, and Grade × Time of Testing, $F(1,401) = 9.67$, $P < .002$, interactions.

As can be seen in Table 2, kindergarten children in the intervention schools had higher Alphabet Recognition Test scores than children in the control schools. Scores increased for both groups of kindergarteners from pre- to posttest, but this effect did not vary by treatment group. No improvements were seen among first graders because of ceiling effects. For the PPVT-III, there were significant effects for grade, $F(1,401) = 125.8$, $P < .0001$, and time of testing, $F(1,401) = 14.6$, $P < .0002$, but no significant effect of treatment group. The Treatment Group × Time of Testing interaction was in the expected direction, but not significant, $F(1,401) = 2.5$, $P = .11$. As shown in Table 2, PPVT-III scores for the kindergarten children in the treatment group increased more than those in the control group. This result lends tentative support to anecdotal reports from Experience Corps school principals that they had observed significant improvements in younger children's vocabulary ability over the course of the school year.

Performance of grades 1–3 on the reading subtest of the CTBS for the years 1998–2000 for the Experience Corps schools and the control schools was examined. No significant differences were found between the intervention and control schools, $t(4) = 0.86$, $P > .44$, although the overall percentage change from 1999–2000 was higher in the intervention schools (mean 49.3) than in the control schools (mean 30.7) (see Table 3). By grade 3, children in all three Experience Corps schools were above the 30th percentile rank in reading, compared to two of the three control schools. The magnitude of these gains was between 10 and 20 percentile points for the Experience Corps schools, whereas percentile ranks dropped from 4 to 6 percentile points in the control schools.

We next examined changes in MSPAP reading scores for third graders in the Experience Corps schools and control schools. A significant difference was found, $t(4) = 3.80$, $P < .02$, between intervention and control schools. Scores for the three Experience Corps schools increased from 1999–2000, whereas scores for two of the three control schools actually decreased, and those for the third control school increased by only a negligible amount (see Table 3).

Classroom Behavior According to reports of the three Experience Corps school principals, the number of referrals to their offices for behavioral issues dropped

TABLE 2. Means and standard deviations for the PPVT-III and Alphabet Recognition measures at pre- and posttest, by grade and treatment group

	Kindergarten				First grade			
	Intervention		Control		Intervention		Control	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Alphabet Recognition	24.5(3.6)	25.1(2.9)	22.8(6.0)	23.4(5.1)	25.8(0.9)	25.9(0.6)	25.8(0.8)	25.9(0.4)
PPVT-III (raw score)	66.2(13.2)	70.4(13.1)	66.8(15.8)	67.9(12.1)	79.7(10.5)	82.2(13.6)	81.0(13.0)	82.6(15.2)
n	111		73		140		81	

TABLE 3. CTBS and MSPAP reading scores before and after Experience Corps–Baltimore (EC) participation

	CTBS TerraNova Reading: median national percentile ranks (averaged grades 1–3)			MSPAP Reading: percentage of students scoring satisfactory (grade 3)		
	1998	1999	2000	1998	1999	2000
EC, School 1	17	19 (+2)*	28 (+9)	2.3	5.3 (+3.0)	7.3 (+2.0)
EC, School 2	26	32 (+6)	58 (+26)	34.0	22.6 (−11.4)	36.2 (+13.6)
EC, School 3	25	30 (+5)	36 (+6)	16.2	6.3 (−9.9)	12.3 (+6.0)
Control, School 1	49	52 (+3)	57 (+5)	28.3	24.0 (−4.3)	6.8 (−17.2)
Control, School 2	34	26 (−8)	40 (+14)	14.5	19.6 (+5.1)	20.0 (+0.4)
Control, School 3	39	50 (+11)	64 (+14)	28.6	36.4 (+7.8)	14.0 (−22.4)

*Numbers in parentheses represent change scores.

50% (from as many as 150 total referrals/school) in two schools and 34% in the other, making the classrooms more teachable for all students. Similarly dramatic drops in office referrals were not reported by the three control school principals, who reported that the number of referrals had remained stable. A major reason for the large decreases in the eyes of the Experience Corps school principals was the overall improvement in school climate and a calmer, more respectful classroom environment, which they attributed primarily to the presence of the senior volunteers.

School and Teacher Outcomes

Teachers' Perceptions of Their Teaching Efficacy Teachers in both the intervention (n = 19) and control schools (n = 22) reported high perceived teaching efficacy. Although the perceived efficacy of the intervention school teachers was slightly higher (84% responding "agree" or "strongly agree") than that of control school teachers (82% responding "agree" or "strongly agree"), this difference was not statistically significant (see Table 4). Most teachers (100% in the intervention schools and 91% in the control schools) felt they were making a difference in the lives of their students.

Attitudes Toward Seniors in the Classroom Teachers participating in the program had somewhat more favorable attitudes toward seniors than teachers in the control schools (87% vs. 73%, respectively, with good or very good perception of seniors), although this overall difference was not statistically significant. As shown by the cross-tabulation results in Table 5, the majority of teachers in both groups (>80%) liked the idea of having help in the classroom. Teachers in the program were significantly less likely than teachers in control schools to be concerned that it would be difficult to guide seniors in ways to work effectively with children, and they were also less concerned that a senior in the classroom would judge the way they managed their class. The biggest concerns for both groups (expressed by 10% or more of the respondents in each group) centered on seniors' use of appropriate classroom management techniques, the amount of time volunteers take, and the differing expectations for managing student behaviors.

TABLE 4. Teachers' self-perceptions of teaching efficacy, by treatment group

	Percentage of teachers responding "agree" or "strongly agree"		
	Intervention	Control	*P*
If I try really hard, I can get through to even the most difficult or unmotivated student.	74	68	.54
If some of my students are not doing well in math, I feel that I should change my approach to the subject.	84	86	.75
By trying a different teaching method, I can significantly affect a student's achievement.	78	91	.79
There is really very little I can do to ensure that most of my students achieve at a high level.	16	27	.69
I am certain I am making a difference in the lives of my students.	100	91	.98
Summary score to measure teachers' self-efficacy: percentage with high or very high self-efficacy	84	82	.86

TABLE 5. Teachers' perceptions about seniors in the classroom, by treatment group

	Percentage of teachers responding "much" or "very much"		
	Intervention	Control	*P*
Seniors lack the energy to keep up in the classroom.	0	9	.73
Like the idea of having help in my classroom.	84	86	.71
Concerned that seniors will not use appropriate classroom management techniques.	11	18	.74
Expect seniors to be critical of how I manage my class.	0	5	.65
Most volunteers take more time than the help they provide.	11	14	.60
Lots of times volunteers will get in the way of teaching.	0	9	.28
Hopeful that a senior volunteer will help me be effective with that child who needs a little extra help.	95	86	.35
Hard to teach when a volunteer is in the classroom because they always expect too much of teachers.	0	5	.22
Grandparents should be of great help in the classroom because they know and like children.	68	55	.24
Concerned that a senior in my classroom will judge the way I manage my class.	5	5	**.03**
Expect that the senior and I will have different methods of managing student behaviors.	13	27	.15
Imagine that older volunteers will be difficult to be around every day.	0	10	.15
Concerned that it will be difficult to guide seniors in ways to work effectively with children.	0	9	**.02**
Worry that seniors will have a disruptive effect on my class.	0	10	.08
Older volunteers will probably have problems answering the questions children ask.	0	5	.71
Older people may be lonely and want to talk instead of allowing me to get my paperwork done.	0	5	.25
Very uncertain about having a senior in my classroom as a volunteer.	7	14	.25
Worry that a volunteer will not have the judgment to keep confidential information to themselves.	0	9	.90
Expect that my senior volunteer will be sick too often to be effective.	7	5	.95
Overall, I think that having senior volunteers in the schools is a good idea.	93	82	.42
Summary score for perception of seniors: percentage with a good or very good perception of seniors.	87	73	.25

Note: Bold denotes significant P-value.

School Climate There were no overall differences between intervention and control schools on the school climate measure. Interestingly, however, teachers in the Experience Corps program were somewhat more likely to feel that teachers at their schools had strategies for adapting instruction for students who need it (68% vs. 57% for the controls), that they were part of a team effort (61% vs. 50% for the controls), and that the majority of the classrooms had clearly defined sets of rules about appropriate behavior (89% vs. 82% for controls).

DISCUSSION

Taken together, the results from this pilot trial lead us to conclude that the Experience Corps–Baltimore program can potentially make an important difference in the lives of young children and their schools, even after a relatively brief exposure period. Although preliminary, this evidence converges with the findings from the national Experience Corps demonstration project,[22,23] which also suggested beneficial effects of the program on children in underserved, urban elementary schools. In the present evaluation, short-term improvements were seen in reading achievement, as evidenced by increased MSPAP scores, and in children's classroom behavior, as evidenced by a decreased number of principal office referrals. A promising, but nonsignificant, trend for improvements in kindergarten children's alphabet recognition and vocabulary abilities was also observed. A short exposure period and small sample size may have limited our ability to detect significant changes in these outcomes. The possibility of differential school effects (clustering) related to differences in a variety of administrative and community factors and changes also must be acknowledged.

There was also some suggestive evidence for more favorable perceptions of senior adults in the classroom. This finding is encouraging in terms of evaluation of the potential for older adults to bring valued social capital to public elementary schools.[26–27] Anecdotally, teachers (and principals) reported high satisfaction with the program. This suggests that the program could help to lead to higher teacher retention in the long run. According to recent reports, about one third of teachers quit during their first 3 years, and almost half leave within 5 years; turnover is highest in poor, urban, predominantly minority schools.[33] Thus, teacher retention has become a major challenge for today's schools and will be a critical focus of future investigation in the Experience Corps program in Baltimore.

Several elements of the program appear to be critical to its success in improving children's reading skills and behaviors. First, the volunteers meet with the students at least three times a week, and in many cases more often than that, as part of their minimum 15 hours of service per week. This level of commitment on the part of the volunteers helps ensure that students have a high-intensity exposure to the program. The volunteers are trained prior to and during the intervention program, and programs have been moderately to fully implemented.[26] Third, both teachers and principals appreciated the intergenerational benefits of having senior volunteers in the classroom who can serve as role models for the students and who connect to the school and community. They perceived that volunteers are instrumental in reducing aggressive/disruptive behavior problems and promoting prosocial behavior, which is a major area of concern given the rising tide of school violence in recent years.[34–36] A final key to the program's success is the willingness of the schools to allow formal evaluations to assess the program's short- and longer-term benefits.

Urban public schools, providing education to the majority of the children in this country, are underfunded and overworked, needing more human capital to serve increasingly needy children while having less available for this important mission. Older adults can possibly offer some of this stability, caring, and consistency, which are essential to learning, as well as the richness of their experience and presence as role models.[25] Older adults can provide social capital needed to support the educational needs and outcomes of children directly.[26–27] At the same time, older adults can be investing in the development of the well-educated workforce essential to the future stability of their own entitlement programs, Social Security and Medicare.[25,27]

In conclusion, the preliminary findings from this pilot trial suggest that there is selective improvement in each of three primary pathways postulated to lead to improved reading/academic performance and improved classroom behavior (Figure 1). The Experience Corps–Baltimore program led to gains in student academic achievement and behavior, two of the top areas selected by the principals, and did not burden the school staff. To bring this program to the scale necessary to evaluate these outcomes fully and assess what it takes to make a program have an effective large-scale impact, a much larger number of schools, children, and older adults will ultimately need to be enrolled.

ACKNOWLEDGEMENTS

This work was supported in part by funding from the following sources: the Retirement Research Foundation, the Erickson Foundation, the state of Maryland, the state of Maryland Department of Education, the Baltimore City Public Schools, the Baltimore City Commission on Aging and Retirement Education, the Johns Hopkins Prevention Center, and the Corporation for National Service. We would like to thank the teachers and principals of the six participating schools for their cooperation in conducting the evaluations. We would also like to thank Dr. Qian-Li Xue for his assistance with the data analysis.

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