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Reading mentors in primary education. Lessons learned from piloting an intergenerational school model

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ABSTRACT

Intergenerational Programs (IP) are increasingly present in all stages of formal education, mainly through intergenerational tutoring and mentoring IP. Improving reading skills has been one of the traditional purposes of IP. However, this study looks at something less frequent: a pilot IP around reading implemented as part of an intergenerational primary school model. After a multisite quasi-experimental control group design including 6–7 years old students (n = 184) from three experimental and three control primary schools in Spain, and a group of community dwelling seniors (n = 41) acting as voluntary mentors, no significant impact on children's reading competence is identified. Reasons for this apparent failure are discussed, as well as recommendations for further studies on reading IP in intergenerational schools.

1. Introduction

For decades Intergenerational Programs (IP) have been known to be an excellent instrument for promoting interaction among people of different generations (Sánchez & Kaplan, 2019). In North America IP first came into being in the mid-1960s, as a reaction to the deterioration of family-based intergenerational contact resulting, primarily, from growing job mobility and the increase in single parent families following the separation or divorce of the parents (Newman, 2014). The initial intention of early IP was to compensate for such deterioration by promoting extra-family opportunities to interact with members of other generations, while making the most of the growing presence of older people in many communities.

However, nowadays these programs have become a means toward something much more ambitious. For one thing, IP can contribute to the ability of our increasingly aging societies and communities to adequately serve and protect - without ageism - people of all generations. In this respect, Burnes et al. (2019) have recently conducted a systematic review and meta-analysis that led them to the conclusion that the most effective programs for combating negative attitudes toward aging are those that combine educational and intergenerational components. In addition, many IP are designed to act upon social problems that affect one or more generational groups (Newman & Sánchez et al., 2007). For example, the Across Ages intergenerational program focused on substance abuse prevention in at-risk adolescents (Taylor, LoSciuto, Fox, & Hilbert, 1999).

At any event, the proliferation of IP in their half century of history is serving to heighten intergenerationality awareness and also to increase intergenerational language and practice. So, nowadays it is not strange to hear expressions such as "intergenerational spaces" (Kaplan et al., 2020), "intergenerational communities" (Cushing & van Vliet, 2016), "intergenerational housing" (Garland, 2018) or "intergenerational societies" (Sánchez & Hatton-Yeo, 2012), and IP are a fundamental element of all of these concepts.

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However, it is still unusual to hear talk of "intergenerational schools" (George, Whitehouse, & Whitehouse, 2011), which is precisely the framework of the present research.

Despite the shortage of scientific literature specifically about intergenerational educational spaces (Mannion, 2012), a preliminary study on the subject (Kaplan, 2001), undertaken at the initiative of UNESCO, already confirmed that there was growing interest in integrating intergenerational activities into education systems. The passage of time has shown the potential of intergenerational intervention in all stages of formal compulsory education (Mannion et al., 2018; McAlister, Briner, & Maggi, 2019; Sánchez, Whitehouse, & Johnston, 2018), although it cannot be said that it has systematic benefits for students (Giraudeau & Bailly, 2019; Maley, Yau, Wassel, Echenrode, & Pillemer, 2017).

At schools, two widely extended IP models are mentoring (Hatton-Yeo & Telfer, 2008; Kaplan, 2002; McArthur, Wilson, & Hunter, 2017) and tutoring (Kinnevy & Morrow-Howell, 2000; O'Grady, 1996; Teufel, Gilbert, Foster, Holtgrave, & Norrick, 2012). In general, tutoring is understood to be those activities whose primary objective is to help the tutored person learn particular skills and competences. In contrast, mentoring focuses more on the relationship between an older mentor and a younger person, taking into consideration the whole of the mentored person, beyond academic issues strictly speaking (Hatton-Yeo, 2002). If done well, a positive and long-lasting mentoring relationship between an adult and a child or teenager can have a very positive impact on self-esteem, social and academic skills, and the child's motivation and involvement in his or her education (Komosa-Hawkins, 2009). It has also been found that these students, thanks to the support of a mentor, feel more connected to their schools and, as a result, may be less likely to drop out (Portwood & Ayers, 2005) and may even see improvements in their academic performance (Pinazo, Sánchez, Sáez, Díaz, & López, 2009). As for intergenerational tutoring, whether it be in the one-to-one, small-group or large-group format, evidence shows its possible efficacy in areas such as reading (Washington, 2018), math (Powell, Wisenbaker, & Connor, 2002) and the acquisition of a second language (Lai & Kaplan, 2013). Since this paper focuses on a project involving mentoring and tutoring in the area of reading, it is fitting that this question be addressed specifically.

1.1. IP and reading

The acquisition of reading competence is one of education's basic objectives and IP are being used as vehicles to contribute to this goal. Evidence indicates that tutoring programs in which adults are involved can improve young students' reading abilities (Fives et al., 2013; Gattis et al., 2010).

The North American project Experience Corps (EC) (Glass et al., 2004) is an interesting case in point. This program has about 2000 volunteer tutors aged 50 and over who commit to spending 6–15 hours per week collaborating at schools, during the entire academic year. All together these volunteers are helping to improve the reading competence of almost 30,000 primary school children (AARP, nd). EC has been thoroughly evaluated (Frick et al., 2004; Fried et al., 2004; Fried et al., 2013; Gattis et al., 2010), with attention being paid, among other aspects, to the impact this type of tutoring has on children's reading competence. For example, Morrow-Howell, Jonson-Reid, McCrary, Lee, and Spitznagel (2009)), using a totally randomized experimental methodology with schoolchildren 6–8 years of age, from 23 schools in the United States, showed the statistical significance of the increase of reading competence in these children —all with low levels of reading competency at the beginning of the intervention— after having participated in 30 − 40 minute work sessions with adult and older adult tutors over one academic year. Seventy-five percent of participating students received over thirty-five tutoring sessions, i.e. about one session per week. More specifically, children who participated in the EC program experienced greater improvement in passage comprehension and in grade-specific skills (Lee, Morrow-Howell, Jonson-Reid, & McCrary, 2011). The effect was even stronger for the students who had, at least, thirty-five tutoring sessions. It should be reiterated that EC focuses on vulnerable students who have struggled with their reading skills.

For their part, the researchers Shenderovich, Thurston, and Miller (2016) reviewed studies about cross-age tutoring in kindergarten and elementary school settings in the area of reading. Albeit with limitations, their conclusion is that cross-age tutoring shows small significant effects for 5 − 11 year olds in a composite measure of reading, decoding skills and reading comprehension. Typically, highly-structured reading programs lead to more benefits than those that are loosely structured.

Many programs for struggling elementary school readers make use of tutoring (Inns, Lake, Pellegrini, & Slavin, 2019) but it is less common to connect tutoring and mentoring and to do so in the framework of an intergenerational program, which has requirements of its own that must be met: for example, interest not only in the benefits it brings to children but also to those it brings to the participating adults and older people (Fujiwara et al., 2009) or paying attention to the family and community impact it has (George & Wagler, 2014).

Another interesting case is *The Intergenerational School* (TIS). Located in Cleveland (Ohio), TIS has an ongoing IP focused on reading mentoring. In its manual for teachers (Learning Network Associates, 2009), TIS recommends that senior mentors "work with students one-on-one, listening to them read and reading to them (…) during class time, out in quiet sitting areas in hallways." And the school asserts that having incorporated reading mentors is part of what explains that in 2009 100 % of TIS 6th graders scored proficient, accelerated, or advanced in reading, compared to 54.1 % in Cleveland and 82 % statewide. In fact, TIS has not just focused on increasing reading proficiency but rather on developing students as lifelong readers: "We don't want to just teach you to read, we want to teach you to be a reader," is something constantly repeated by Cathy Whitehouse, founding Chief Educator at TIS. Through its reading mentors program and the setting up of "intergenerational reading rooms", this charter school launched in 2000 – and which now boasts three schools – has demonstrated that educational spaces can simultaneously develop literacy and enhance intergenerational relationships. "For the 2017-18 school year at 3 schools, 67 mentors spent over 2500 h with students and many others engaged off site in assisted living facilities and other community locations" (Whitehouse, Whitehouse, & Sánchez, 2020). The weekly commitment of these reading mentors at the schools is an average of two hours.

1.2. The ISCI project

It is in the context of interventions like the ones just described that the project *Intergenerational School – Colegio Intergeneracional* (ISCI) began. The project set the general objective of planning, piloting, and validating a model of intergenerational school in three elementary schools (children aged 6–12) in two of Spain's Autonomous Regions (Andalucía and Murcia). Such a model is based upon two main principles: (i) learning is a lifelong process, and (ii) knowledge is socially constructed in the context of diverse communities. Building upon and inspired by the experiences at *The Intergenerational School*, ISCI included, among others, a component dedicated to strengthening reading competence using an intergenerational approach. The aim of the project was to increase the attention that Spanish schools currently pay to intergenerational tutoring and mentoring as vehicles for improving this competence at the primary education level. According to 2012 data obtained from the PISA study, Spain is below average in reading and at that time it ranked 27 out of 35 countries, with no substantial changes having been detected in average reading performance since 2000 (Vázquez-Cano, López-Meneses, & Sirignano, 2014).

In December of 2016 the ISCI project began its pilot stage, which consisted of a combined tier 2 and tier 3 (small group and one-to-one, respectively) school-based reading intervention (Stentiford, Koutsouris, & Norwich, 2018), with the help of unpaid adult volunteers - a group of adults and older adults. In November of 2017, after one academic year of piloting, and following both the TIS model and guidance drawn from the literature, the ISCI project began its experimental phase with the hypothesis that, regarding children involved, the intervention could lead to improved reading ability among participating pupils.

2. Materials and methods

2.1. Selection of schools and mentors

To start, the education authorities of the two regions where the project was to be conducted were informed and authorization was obtained. Then the process of selecting the participating schools began. The main criterion used in the selection was that the experimental schools and the control schools had to have the same socioeconomic and cultural index, which is an indicator reflecting the household's resources, the number of books in it and the level of education and profession of the students' parents.

The researchers contacted the six schools selected – 2 in Murcia and 4 in Andalucía – and met with their directorial teams, to obtain approval from the teachers and school councils. Then the researchers contacted the families to explain the project and get their permission. At the same time an array of actions (meetings at senior citizen centers and continuing education facilities, making contact with social services staff, and with representatives of various local media) were carried out to recruit the adults and older adults who would act as mentors. The only conditions for participation were to enjoy reading, to meet the requirements laid down in child protection laws and to commit to spending at least one hour per week at a school. No age limit was set for the project's volunteers. Volunteers were given training to help them understand their role as mentors, which was conceived to include but not be limited to reading-related activities. The training covered aspects such as aging, learning and the importance of intergenerational relationships in human development, the concept of intergenerational schools, the figure of mentors at schools and in learning processes and the important role that reading plays in such processes. These volunteers were not trained to work with students with Dyslexia and/or other learning difficulties since teaching staff considered that while these students' involvement in the pilot's activities was convenient not to make them feel separated from their peers, their learning process to read should follow a personalized program fully managed by special education teachers based at the different participating schools.

2.2. Description of treatment

The part of the intervention addressed in this paper has to do with the reading sessions – one-on-one and group format –, inside and outside of the classroom, with first- and second-grade students (6 and 7 years of age, respectively) that were held every week that school was in session between November and May (7 months). The reading tasks to be performed were decided by the class teachers, who also chose which students would participate in each session. The length of each session varied but in general they lasted around 30 min. In addition, prior to each session the tutors received instructions from each teacher about the particular reading tasks to be performed. Unlike other similar projects – Experience Corps, for example –, the tutoring did not focus only on students with reading difficulties. It aimed to work, in rotation, with all of the students of each class, including students with learning difficulties, in order to avoid the labeling of kids according to their reading capacity and to ensure that no child felt left out of this educational innovation. During the intervention period each of the 41 mentors (23 in Andalucía and 18 in Murcia) did an average of 22 h of tutoring (SD = 9.63). On average, each student was in contact with a mentor for 13.6 h (SD = 7.61).

At the control schools no specific activity to support reading was carried out except for the ones traditionally used in the classroom.

2.3. Design

It was not possible to allocate participants randomly to groups because of initial conditions established by the schools participating in the IP. Therefore, our groups were non-equivalent intact ones. The study had to be structured as a quasi-experimental pre-test-post-test control group design.

Table 1
Baseline sample demographics (n = 184).

1st Grade			Control n = 32	Intervention n = 33	Total n = 65
	Region	Andalucía	32	33	65
		Murcia	–	–	–
	Gender	Girls	15	16	
		Boys	17	17	
	School	School #1		23	23
		School #2	24		24
		School #3		10	10
		School #4	8		8
2nd Grade			Control n = 63	Intervention n = 56	Total n = 119
	Region	Andalucía	40	34	74
		Murcia	23	22	45
	Gender	Girls	26	21	47
		Boys	37	35	72
	School	School #1	–	21	21
		School #2	26	–	26
		School #3	–	13	13
		School #4	14	–	14
		School #5	–	22	22
		School #6	23	–	23

2.4. Sample

There were initially a total of 212 students in first and second grade, at 4 schools (10 classes in total, at a rate of one or two classes per school and with only one class per grade), including students with learning difficulties. However, as Table 1 shows, the final number of students whose data could be used in the study fell to 184, which meant a loss of 13.2 %. This loss was due to absence at the pre-test (7), at the post-test (10), or at both tests (7) or to students changing from the control group to the experimental group during the intervention period for academic reasons (4). Missing values due to inability of student to read at pre-test because of insufficient reading competence were transformed into zero values so as not to lose the opportunity to track reading improvement in these particular cases.

2.5. Measures

The official body in charge of educational evaluation in one of the two participating regions provided the research team with validated instruments for gathering information about reading competence in first- and second-grade students. These instruments were selected from previous external testing on reading progress carried out in public schools like the ones involved in the pilot. More specifically, in first-graders we measured words per minute, reading comprehension and reading efficacy (a proportional measure of reading speed and comprehension) after having read a short text, and words/pseudowords attack (students were asked to read in a pre-determined amount of time a list of actual words and nonsense pseudowords). Second-graders were asked to read a descriptive text after which researchers were able to measure reading speed (words read per minute), reading comprehension, reading accuracy (dependent on the number of mistakes made while reading, such as omission, addition, substitution, inversion and invention), syntactic accuracy (capacity to read in accordance with periods, commas, question marks and exclamation marks), and reading efficacy. Reading efficacy was considered the most comprehensive indicator of students' reading capacity.

Considering the seven necessary components in order to learn to read correctly (i.e., phonological awareness, phonemic awareness, alphabetic principle, orthographic awareness, fluency, vocabulary, and comprehension) (Literacy & LDS, 2020), we would contend that whereas in first grade instruments covered aspects of fluency, vocabulary, and comprehension, in second grade measurement focused on orthographic awareness, fluency, vocabulary and comprehension.

2.6. Data analysis

To begin with, univariate statistics were calculated for sample description and bivariate tests were carried out for baseline comparisons. Since the different methods used to teach reading skills at the different schools could potentially have an impact on the actual reading level among students, it was decided that separate ANCOVAs would be carried out for first and second grades, considering pre-test scores as the covariate, post-test scores as the dependent variable and partialling out for school site and region (only in the case of second graders because all first graders were in the same region). Actually, data for first-grade readers tended to be very skew because it is usually at age 6 when the Spanish school system begins teaching students to read and the proportion of students with no or very low reading skills at pre-test was high, except for those students who had attended a kindergarten in which

Table 2
Baseline Means (M) and Standard Deviations (SD) on all measures.

	Measure	Control (n = 95)			Intervention (n = 89)			Mann-Whitney U (Z) / t-test(Ŧ)	
1st Grade		n	M	SD	n	M	SD	Z	Sig.
	Words + pseudowords	32	22.47	13.81	33	12.03	17.08	−3.46	**0.01**
	Words per minute	32	26.88	14.70	33	20.16	22.78	−2.55	**0.01**
	Reading comprehension	32	31.77	31.78	33	21.87	32.36	−1.59	0.11
	Reading efficacy	32	10.60	12.57	33	9.30	20.60	−1.79	0.07
2nd Grade		n	M	SD	n	M	SD	Z/t(Ŧ)	Sig.
	Words per minute	63	73.44	26.60	56	63.71	19.15	−1.797	0.07
	Reading accuracy	63	96.80	3.41	56	96.36	3.65	−0.68	0.50
	Syntactic accuracy	63	83.20	12.26	56	84.38	10.79	−0.35	0.73
	Reading comprehension	63	61.80	27.07	56	70.00	22.04	−1.79	0.07
	Reading efficacy	63	49.33	31.24	56	46.07	21.84	−0.65(Ŧ)	0.52

they had already started to learn to read. This initial skewness also had consequences on the normal distribution of second-grade data. Therefore, we opted for non-parametric ANCOVA – Quade (1967) rank analysis of covariance. In all instances, assumptions for ANCOVA were duly tested (Dancey & Reidy, 2017).

Following strategies used in similar studies (Fives et al., 2013), to assess whether experimental and control students had experienced the same or different changes in their reading competence, and once outliers corresponding to students with learning difficulties had been discarded, we carried out comparative analysis of how the mean 'Average' (A) and 'Below Average' (BA) students' reading skills had changed from pre-test to post-test. The 'Below Average' group was defined as students whose scores were more than half standard deviation below the sample mean in each of the measures.

3. Results

The initial comparative results (Table 2) showed equivalence among the first-grade students in reading comprehension and efficacy. However, equivalence was not found in the case of the capacity to read words and pseudowords nor in the case of reading speed (words per minute). In second grade the initial conditions did allow for a comparison of the five reading acquisition processes explored.

Given the impossibility of changing schools or school groups, it was decided that the two first grade measures found not to be equivalent at baseline (words + pseudowords and words per minute) would not be considered for further analysis.

Table 3 shows a summary of the results of the non-parametric ANCOVA taking post-test scores as the dependent variable.

In general, the differences between the mean ranks of the control groups before and after the intervention are low. In fact, the results of the statistical analysis indicate the non-existence of significant differences ($p \leq 0.05$) in the post-test for all the measures except reading efficacy in first grade ($F(1,62) = 3.93$, $p = 0.05$), where, despite this, the control group shows a mean rank clearly superior to that of the experimental group, very similar to the one registered in the pre-test. Taken together, these data indicate that the initial hypothesis has not been confirmed: in general no significant differences have been found between the reading competence

Table 3
Summary of non-parametric covariance analysis.

Measure	Time	Control	Intervention	Quade's ANCOVA
		Mean ranks	Mean ranks	
1st Grade				
Reading comprehension	Pre-test	35.70	29.30	
	Post-test	35.19	29.81	$F(1,62) = 1.24$, $p = 0.27$
Reading efficacy	Pre-test	36.16	28.84	
	Post-test	37.28	27.72	$F(1,62) = 3.93$, $p = \mathbf{0.05}$(*)
2nd Grade				
Words per minute	Pre-test	64.79	53.45	
	Post-test	63.29	55.16	$F(1,116) = 1.43$, $p = 0.23$
Reading accuracy	Pre-test	61.49	57.22	
	Post-test	65.65	52.45	$F(1,116) = 2.44$, $p = 0.12$
Syntactic accuracy	Pre-test	58.48	60.66	
	Post-test	57.41	61.89	$F(1,116) = 0.04$, $p = 0.85$
Reading comprehension	Pre-test	54.27	65.49	
	Post-test	61.48	57.24	$F(1,116) = 0.72$, $p = 0.40$
Reading efficacy	Pre-test	60.71	58.12	
	Post-test	62.87	55.64	$F(1,116) = 0.03$, $p = 0.86$

Table 4
Variation from T1 to T2 (Mean and SD) in subgroups 'Average' and 'Below Average'.

Measure	n	Average				Below Average			
		$M_{T2\text{-}T1}$ Exp (SD)	$M_{T2\text{-}T1}$ Con (SD)	$Z/t^{(T)}$	Sig.	$M_{T2\text{-}T1}$ Exp (SD)	$M_{T2\text{-}T1}$ Con (SD)	$Z/t^{(T)}$	Sig.
1st Grade									
Reading comprehension	65	24.99 (26.12)	15.78 (31.65)	$0.84^{(T)}$	0.40	36.51 (31.01)	57.38 (23.20)	$-2.08^{(T)}$	**0.04**
Reading efficacy	65	33.01 (16.07)	30.75 (24.09)	$0.28^{(T)}$	0.77	16.65 (15.59)	28.87 (17.50)	$-2.12^{(T)}$	**0.04**
2nd Grade									
Words per minute	119	16.42 (14.79)	15.41 (14.90)	−010	0.99	16.00 (9.30)	12.68 (9.38)	$0.81^{(T)}$	0.42
Reading accuracy	119	0.85 (1.98)	0.77 (1.37)	−0.17	0.85	2.13 (3.45)	4.84 (3.52)	$-2.11^{(T)}$	**0.04**
Syntactic accuracy	119	4.50 (8.68)	1.78 (11.04)	−0.11	0.91	17.08 (16.63)	16.22 (13.99)	$0.16^{(T)}$	0.86
Reading comprehension	119	−4.96 (16.32)	2.17 (19.72)	−1.60	0.10	17.77 (30.81)	32.32 (29.83)	$-1.40^{(T)}$	0.16
Reading efficacy	119	14.78 (22.80)	15.12 (22.26)	$-0.06^{(T)}$	0.94	12.75 (21.11)	21.50 (20.27)	$-1.37^{(T)}$	0.17

Exp: Experimental Group. Con: Control Group. Z: z score for Mann-Whitney U. t: t-test value.

measures in the experimental students and those in control students, contrary to what might be expected.

Finally, as for the comparison of the different scores of the student subgroups 'Average' (A) and 'Below Average' (BA) the data obtained are shown below (Table 4).

Minimal significant differences ($p \leq 0.05$) can be found only in the subgroup 'Below Average' in reading comprehension and reading efficacy, in first grade, and in reading accuracy in second grade. However, in all three cases it is the control group that registers a greater increase in score between pre-test and post-test, which goes against the expectation of improvement in the experimental group posited by the starting hypothesis.

Nor does the subgroup 'Below Average' make greater gains than the subgroup 'Average' in the experimental group, in comparison with the control group, as other studies have found (Fives et al. (2013). However, it is true that the ISCI did not focus especially on students who began with a lower-than-average reading level and, therefore, there was no reason to think that this subgroup would be the one to register a greater improvement in its reading capacity.

4. Discussion

Overall, the quantitative results of the measures used show that the intervention did not have the desired impact. Yet the qualitative impressions obtained in interviews with teachers, directorial teams at the schools and the mentors – which are not the subject of this paper – lead us to think that there has been a certain improvement in reading competence that could be attributed to the project. These subjective impressions are not corroborated by the data and, therefore, we must ask ourselves about the reasons for what apparently, based on the data analyzed, could initially be interpreted as a failure on the part of the intervention, as it has been confronted in similar projects (Rebok et al., 2019).

Other studies that have analyzed the potential of intergenerational programs to bring about change in the reading acquisition of elementary school pupils have explored the conditions required to successfully intervene in this type of context. For example, Wasik (1998) asserts that tutoring programs focused on reading that make effective use of paraprofessionals in the program activities are characterized by having provided expert guidance, in-depth training and being highly-structured in terms of its procedures, manuals and materials. However, these criteria do not always fit easily into the project when the framework of action is an intergenerational mentoring program in which the improvement of reading skills is not the only priority. In our combined – tutoring and mentoring – strategy the priority was as well building a quality relationship between mentors and students that will allow the school to embrace lifelong learning and benefit from role models (Rebok et al., 2019). This kind of relational approach requires flexibility in how things are done and it means giving priority to the child as a person in a process of ongoing construction, as opposed to the child merely as a reader, something the ISCI project instilled in its mentors. In fact, the impact of the work done by the mentors involved in ISCI has been evaluated and has been seen to contribute to the life of the experimental schools in very different ways, beyond tutoring in reading (Sánchez, Sáez, Díaz, & Campillo, 2018).

Fried et al. (2013) conclude that deploying a critical mass of older tutors is essential in attaining an aggregate effect across different grades. In the case of the ISCI project, the number of mentors per school averaged 13 (ranging from 9 to 18). But the diverse characteristics of students found at different schools makes it difficult to establish a general formula with which to calculate the number of older tutors needed to be reach critical mass. Glass et al. (2004) have suggested that 15 seniors per school would be the minimum for such consideration. Based on our own practice, we would contend that it is not so much the number as the quality and capacity of older volunteers, i.e. mentors' features such as their professional and cultural background, their love for reading, and their relational competence to spend nurturing time with children, that really make a difference. Anecdotal as it may be, one of the ISCI mentors was able, after months of patient work in reading sessions, to elicit conversation for the first time in a student affected by self-induced mutism. This single change had a great impact not only on the student but also on teacher acceptance and motivation

regarding the IP and also on the mentors' determination to stick with the program.

Recently, Van Susteren (2017) has come up with some guiding principles for best practices in the implementation of K-3 literacy programs. They include: offering frequent sessions (2–3 times a week) that number at least 35 in total, designating an on-site program coordinator and creating constant opportunities for observing and informally coaching the tutors. One of the most significant limitations of the ISCI program has probably been the number of sessions with students (13.6 h of contact between mentor and student on average) over the year. However, it is important to remember that ISCI's mentors have interacted with school students in more ways than just the hours devoted to reading activities. They have supported some students' learning in math, they have taken part in school theatre activities, they have participated in cultural events, engaged in informal interaction with children during recess and been involved in educational sessions on health issues such as vaccination. For ISCI the main goal has been to combine mentoring and tutoring with a view to reaching a broader goal: implementing a model of intergenerational primary school where lifelong learners from different generational groups are able to teach and learn together.

While it is true that using unpaid volunteer tutors may be a limitation in this type of IP (Inns et al., 2019), often no resources are available for an alternative strategy, as was the case with ISCI. Moreover, the participation of older citizens in their neighborhood school as volunteer mentors has value in and of itself, since an intergenerational school intends to "provide skills and experiences for lifelong learning and spirited citizenship for learners of all ages" (Whitehouse & Whitehouse, 2005, p. S58). The presence of older mentors as unpaid volunteers committed to educating younger generations altruistically and co-learning with students enhances the civility at school and makes that a certain gravitas in the seniors to spill over onto students (Learning Network Associates, 2009).

5. Conclusions

Although it would be premature to attempt to draw solid conclusions after only seven months of implementation of a quasi-experimental intervention, some reflections can certainly be made, and they may serve to enrich practice and research conducted in the area of mentoring and tutoring IP that focus on reading skills at elementary schools.

The first conclusion has to do with the connection between IP and the school model where these programs take place. To date little attention has been paid to this educational connection. The ISCI project did attempt to address this issue in that it worked from the outset with the idea of piloting an intergenerational school model within which reading mentoring and tutoring played a relevant role, instead of implementing reading tutoring/mentoring in isolation. Although more efforts to understand the impact of IP in schools are slowly appearing (Giraudeau & Bailly, 2019), and sometimes they look at questions that go beyond the effects of the program on the participants – e.g., the school climate (Parisi et al., 2015) –, there is a lack of more holistic approaches that explore how intergenerationality affects the education model implemented, and vice versa. To put it another way, instead of focusing just on how to organize activities and IP at schools, and in order to capture the full potential of these programs, it would be worthwhile to study in greater depth the idea of promoting intergenerational schools – instead of just running IP in these schools - where learners of all ages may become lifelong learning contributors to democratic societies (Whitehouse & Whitehouse, 2005).

Secondly, while it is necessary to have some guidance regarding the ideal conditions (number of persons, type of training, session structure, intensity and continuity of the project, and so on) for carrying out an IP involving tutoring in reading, it is also important to know how to adapt to the situation's limitations. In the case of the ISCI, the number of mentors and mentoring hours could be considered scant, and the intervention too unstructured, and yet the impression of the educational community at the experimental schools has been positive. A project like ISCI can bring changes in diverse areas, changes that cannot be detected by measuring improvements in reading competence. For this reason, the recommended procedure is to gather a great deal of information, both quantitative and qualitative, that is capable of reflecting all of the project's contributions. The existence of limitations should not prevent the most important aim: opening elementary schools to the participation of other generations.

Lastly, it would be good to rethink whether a reading mentoring IP should concentrate solely on struggling students. Even with its limitations, our analysis does not give the impression that such a strategy is always the best one. Although there are academic and learning motives in its favor, it is also important to consider what it means, in educational terms, to deprive some of the students of an opportunity for intergenerational contact: if learning to read at an early age is important, it is becoming more important every day to learn to live in aging societies in which multigenerational contexts are the order of the day. And this lesson can only be learned through day-to-day interaction with people from other generations, the ultimate *raison d'être* of any IP.

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Declaration of Competing Interest

None.

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Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.ijer.2020.101539.

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