

## **The Effects of *Time to Read* on Low Achievement Readers in the Primary School**

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### **Abstract:**

Schools and teachers design different classes and activities with the aim of helping pupils of primary school to succeed in literacy education, such as learning reading comprehension. One such programme is *Time to Read*, a tutoring programme that seeks to assist low achievement readers who are between the ages of eight and nine years old. Evaluations show that *Time to Read* has a positive impact on reading, reading comprehension, and children's overall attitude towards reading books. However, different influences, such as gender and social backgrounds, were not investigated in relation to the success of the program, which will be the focus of this study. My study shows that extracurricular involvement is effective in providing young readers' with the tools to enhance their reading ability, reading enjoyment and increase interests in books.

**Keywords:** reading comprehension, English literacy, extracurricular program, evaluation

### **Introduction**

The academic performance of young learners is a concern for both educators and parents. Schools and teachers design different classes and activities with the aim of helping pupils of primary school to succeed in literacy education, such as learning reading comprehension. Alongside formal education, there are many organizations that facilitate volunteer reading programmes, which engage primary children in order to improve their reading abilities. One such programme is *Time to Read*, a tutoring programme that seeks to assist low achievement readers who are between the ages of eight and nine years old. Since its inception there have been two evaluations conducted on the effectiveness of the programme. Both evaluations show that *Time to Read* has a positive impact on reading, reading comprehension, and children's overall attitude towards reading books. However, different influences, such as gender and social backgrounds, were not investigated in relation to the success of the program. In this study, the different effects of the intervention on the struggling readers in relation to gender and social background and their different aspiration for future due to participation in the programme will be discussed. My study shows that extracurricular involvement is effective in providing young readers' with the tools to enhance their reading ability, reading enjoyment and increase interests in books. My analysis did not reveal any contravening factors in relation to the tutoring reading programme. Indeed, it seems that socio-economic background, gender, and future aspirations have little impact on the overall

success of the programme in assisting young learners. In the future, it would perhaps be better to investigate the specifics of future aspirations in relation to concrete and immediate specifics pertaining to the study itself, such as how a student understands their reading materials, mentor's careers or the relevant field trips on their immediate experience.

### **Review of Literature**

Literacy education plays a crucial role in academic studies for the school age children, reading in particular. As a way to help the students to improve their learning and to enhance learning outcomes the tutoring intends to improve the academic performances to provide mentorship and help the students to build self-esteem and improve characters. (Cohen et al., 1982; Wasik and Slavin, 1993; Fashola 2001) The common tutoring approaches include volunteer or private tutoring and group tutoring or one-on-one tutoring and there are volunteer tutoring programmes aiming to improve the performance of the young learners, such as Reading Global, Reading Letters and Words, Reading Comprehension, Reading Oral Fluency, Time to Read, etc., to name just a few. Ritter (2006, p.23) found that there was a positive and statistical significance after reviewing the studies of involving promoting reading with “a standard deviation of 0.03”. Eccles and Templeton (2002, p.172) declared that “there is growing evidence that youth programs focused on both prevention and promotion do increase positive outcomes and decreases negative outcomes” resulting in “the academic achievement, school engagement, and high school graduation rates... the declines of school-related problem behaviours”. Scott-Little (et, al., 2002) pointed out that mentoring programmes might have more impacts on the younger and lower achievement students.

The programmes such as *Reading Recovery* and *Success of All* were designed to help the struggling readers, who did not perform as well as their peers. (Shanahan, 1998; Wasik and Slavin, 1993) Slavin and Madden (1996, p.41) pointed out that every pupil should be and could be “a skilled, strategic, and enthusiastic reader as he or she progresses through the elementary grades”. After reviewing the five reading intervention programmes Wasik and Slavin (1993) concluded that the students had improved their reading by the intervention aiming to help those who are at the risk of failure in reading. Elbaum et al. (2000) reported that the one-to-one tutoring programme could help the primary school students who were struggling with their reading. Ritter (et al., 2006) found that the participants in the programmes improved their reading as a subject by the trained tutors.

As far as *Time to Read* is concerned Deloitte (2003, p.4) found the programme made great contribution to improve reading along with attitudes change in pupils. It was found that “the most common changes in children that were identified by schools were increased confidence and increased enjoyment in books and reading (p.29) The qualitative interviews conducted by Miller (et al. 2009, p.45) concluded that the mentoring programme “offers a very positive and meaning experience for those taking part”. The randomised controlled trial could not provide evidence for the changes specifically but the tutoring programme could be effective in relation to improve “a range of more specific literacy-related outcomes in children”. (Millar et al., 2009, p.49) For this particular tutoring reading programme there was more need to be discussed. For this assignment I am interested in exploring the different effectiveness of the tutoring programme on the struggling readers in terms of future aspirations, gender and social-economic background. Here are the alternative hypotheses:

1. The reading tutoring programme is having a greater effect for those with lower initial aspirations scores.
2. The reading tutoring programme has different effects on outcome depending on pupils' initial social-economic background.
3. The reading tutoring programme is having a differential effect on children in relation to gender.

## **Methodology**

As discussed earlier, the assignment tends to know the effectiveness of the volunteer mentoring reading programme on outcome of reading of the primary school children regarding their future aspirations in relation to gender and social-economic background. The method applied was quantitative study, which is designed to test relationships between different variables. (Hartes, 2010) To be more specific, the randomised control trial was used. (Torgerson and Torgerson, 2008; Sheldon and Oakley, 2002) Moreover, as pointed out, there was a very convenient and efficient quantitative tool to approach the quantitative data, the Statistical Package for the Social Sciences (SPSS). (Gorard, 2001; Connolly, 2007; Green and Salkind, 2010; Bryman and Cramer, 2011; Leech and Morgan, 2012) In this particular study the software SPSS was used to test the statistics and the significance of the effects was analysed by Linear Regression (Tarling, 2008; Torgerson and Torgerson, 2008) and presented in tables in the appendix.

## Population

The participants were those children who were selected by the classroom teachers in Northern Ireland. The children's reading level was lower than the average pupils and the teacher thought they could be helped by attending the experiments. But those who had special needs in reading were not eligible for the experimental studies. The participants were randomly allocated into intervention and control groups by using the random selection function in SPSS. Moreover, the volunteer mentors were assigned to the children during the one-year period of the experiment.

## Procedures

The mentors were recruited from the local community and trained for the delivering the programme. The children had two 30 minutes' sessions each week for one school year. The setting could be at school or the mentor's workplace. The participating schools provided books from which the mentor could choose.

## Data collection

There was no need for the writer to collect data and it was a secondary analysis. As a result, there was no concern about the ethical issues by collecting and using of the statistics. The data in an SPSS file were provided by the module tutor.

## Data analysis

Hypothesis 1: In the analysis there are one dependant variable, Aspirations\_POST and five independent variables involved, namely, Group, Aspirations\_PRE, Gender, Deprivation Rank

and an interaction effect (Group\_Aspirations\_PRE). The statistical significance of the effects was analysed by Linear Regression. (Millar, 2015)

Hypothesis 2: In the analysis there are one dependant variable, Aspirations\_POST and five independent variables that will get involved, namely, Group, Aspirations\_PRE, Gender, Deprivation and an interaction effect (Group\_Deprivation). The statistical significance of the effects was analysed by Linear Regression. (Millar, 2015)

Hypothesis 3: In the analysis there are one dependant variable, Aspirations\_POST and five independent variables that will get involved, namely, Group, Aspirations\_PRE, Gender, Deprivation Rank and an interaction effect (Group\_Gender). The statistical significance of the effects was analysed by Linear Regression. (Millar, 2015)

## Results

In order to discuss the three interaction effects (Tarling 2009) the main model test was analysed first to test whether the intervention was effective in improving children's aspirations. In this case, as is shown in the Appendix 1 ( $p=0.052>0.005$ ), technically, it is not statistically significant. But interestingly, the factors such as pre-test score, gender, derivation, result in an estimated increase of the effect on the intervention group with the Effect Size ( $ES=0.053/0.32822=0.16$ ), which means each element increase 0.053 points in contrast to control group. See Appendix 5-6. To sum, the tutoring reading programme is effective on children's aspiration but it is not statistically significant.

For the first hypothesis coefficient (-0.055) in Appendix 2 for the interaction term (Group\_Aspirations\_PRE) shows the difference between the control group and the intervention group. It means that the gradient of the line for the control group is 0.055 higher than the intervention group. There are different intercepts with the control group (2.435) and the intervention group (2.708) by using the calculation formula by Miller (2015, p.16). The addition of the interaction effect resulted in two lines of best fit with different slopes, namely, the control group line is much steeper than the intervention group. However, this difference in the gradients does not have a statistical significance. ( $P=0.672$ )

Interestingly, it can be seen the change of the effect size in the main test ( $ES=0.16$ ) and the subgroup test ( $ES=2.708-2.435/0.32822=0.83$ .) The reason of the different effect size results from the difference in the Aspirations-POST mean scores between the intervention and control groups, the different percent of boys and girls and the different social economic backgrounds.

For the second hypothesis, being in the intervention group there is an increased score of 0.097 (See Appendix 3) points on average. For every 100 points decrease in deprivation score, a child's aspiration score will increase by  $-0.00084=-0.084$  points. It means that the children with higher deprivation scores will have higher aspirations scores. Moreover, for every 100 points increase in deprivation score for the participants in the intervention group, their aspiration will decrease by 0.00039, which means that the children with deprived background will perform better than those who are from affluent families. However, this introduced interaction term (Group\_Deprivation) has no statistical significance ( $p=0.814$ ). It can be

concluded that there is no evidence to show that the reading tutoring programme has more effects for those who are from deprived backgrounds.

In the statistics for the last hypothesis, it can be seen from the coefficients (Seen in Appendix 4) that the intervention group will improve the participants' score on average (by 0.049 points) and the girls will have a lower score (by -0.098 points) Interestingly, a girl in the intervention group increases the children's score compared to a boy (by 0.055 points) The mean score for girls in the intervention group will be 0.055 points higher than that for boys. There is some evidence to show the programme has more effects for boys than girls. But in this case, there is no significance in the addition of this interaction term (Group\_Gender) ( $p=0.526$ ) so it can be concluded that there is no evidence to show that the intervention has a differential effect on the gender of the participants.

## Discussion

The first hypothesis concerns the different effects of the *Time to Read* on children's future aspirations. Eiduson and Beckman (1973) found that the boys' scientific interests formed from age ten to fourteen with a little difference in girls. Fouad (2007) and Porfeli (et al., 2008) argued that this could not become stable until adolescent as agreed by Schoon (2001). It was surprised that there was a negative relationship between the children's future aspirations and the mentoring reading programme. However, the value  $p=0.0052$ , which is very close to the threshold number 0.005. The statistical significance was not consistent with Millar's (1999) conclusion that there was relationship between this tutoring reading programme and children's perception of future. Technically I should reject the hypothesis. In this case, the effectiveness was greater for the children with initial lower aspiration scores compared to those who had higher aspiration scores from the coefficients discussed earlier. Interestingly, the difference is not significance. Just as Shoon (2001) pointed out there were other factors such as socioeconomic status such as the gender, the parental education, teacher or self-ratings of aptitudes, test scores in mathematics and school environment, etc. that would be taken into consideration in relation to future aspirations. In the following section, the overall social-economic background of the participants will be addressed.

The second hypothesis tries to find the different future aspirations of the tutoring reading programme on children in relation to their social-economic status. Trice and McClellan (1993) found that the children had chosen their career at an early stage, especially the interest in science. Sirin (2005, p.417) the school success was greatly influenced by "school level, minority status and school location". According to McLoyd (1998, p.192) discussed that "Poor and low socioeconomically children, on average, perform significantly less well than nonpoor and middle-class children on numerous indicators of academic achievement." However, Zief (et al., 2006) Lauver and Maynard (2006) said that the intervention showed that the positive developmental and emotional outcomes in low-income youth with better academic performances were found in the experimental programmes. In this case, in the same way, the aspiration scores for the children from disadvantaged background in the intervention group were higher than those who were from privileged families. But the significance was too small to be considered. For future studies, the relationship between the changes of future aspirations and the reading materials or other components of the programme such as the mentors' background or field trips is worth exploring.

The third hypothesis intends to identify the difference achievements impacts of the tutoring reading programme between girls and boys. In the UK, underachievement has been discussed in relation to boys since 1990s and they were considered to be drift in the alien world where girls dominated. (Osmond and Davies, 1987; Epstein, 1998; Platten, 1999 and Francis, 2000) Elwood (2005) found that girls' GCSE coursework marks were higher than those of boys, and the differences were statistically significant. ( $p < 0.005$ ) Moreover, the boys were regarded as lower than girls in language acquisition and seen as less devoted readers. (Clark, 1995; Milliard, 1997 and Gorman et al., 1998) Pillen (et al., 1988) also agreed that under certain circumstances, the effects of the reading programme worked better for girls than boys. In this particular study there was no significant relation between the gender and effectiveness of *Time to Read* on children from the statistics. But the findings of the small slightly differences of the attainments in reading between girls and boys were in accordance with the literature, which girls performed better than boys. The further studies should focus on why are the boys' achievements lower than the girls and under what circumstances.

In summary, I discussed three hypotheses testing the significant impacts of the programme on children regarding to initial lower aspiration score, social-economical background and gender. It turned out that all of the three hypothesis were not supported by the statistics and there was no difference of effects of the programme on children in relation to children's initial aspiration scores, social-economic background and gender difference.

### **Conclusion**

Along with the formal education the tutoring programmes are popular engaging school age children in extra curriculum courses. As far as the reading programmes are concerned, as discussed earlier by Ritter (2006) there is a significance effectiveness of all the programmes involved in the studies in terms of the improvement of academic reading. Based on the idea that every kid deserves to have good reading ability ensuring their academic success in the future, there are reading programmes aiming to help children who are left behind in reading. *Time to Read* is specially designed for the children whose performances are behind the average level at the age of eight to nine. From the evaluation by Deloit (2003) and Millar (2009) it was found that it was effective in terms of the young readers' reading ability, reading enjoyment and increase interests in books. From my analysis there was no different effect of the tutoring reading programme on school children's aspirations, specifically, the initial aspiration score, the social-economical background and gender difference.

To sum, the evidence shows that the tutoring reading programme does not have effect on children's future aspirations. However,  $P (=0.052)$  value is so close to the threshold with effective size of 0.16. Although technically, the main test suggest that programme is not effective, it may have greater effects on subgroups such as the children with lower initial aspirations scores, the children with different social-economic background and the children of different gender. As far as the aspirations were concerned, as argued by Shoon (2001) that there were more complicated factors influence children's perception including the social-economic background, gender and it would be better to investigate more specific elements that affect their aspirations in this particular circumstances, such as the reading materials, mentor's careers or the relevant field trips included in this reading programme.

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## Appendices

### Appendix 1

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.451	.216		11.369	.000
Group allocation	.083	.042	.127	1.958	.052
Aspirations Pretest	.248	.064	.254	3.888	.000
Child's Gender	-.070	.043	-.105	-1.621	.106
Deprivation Rank	.000	.000	-.080	-1.224	.222

a. Dependent Variable: Aspirations Posttest

### Appendix 2

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.358	.308		7.662	.000
Group allocation	.259	.419	.399	.619	.536
Aspirations Pretest	.277	.094	.284	2.959	.003
Child's Gender	-.068	.044	-.102	-1.555	.121
Group_Aspirations_P RE	-.055	.130	-.274	-.424	.672
Deprivation Rank	.000	.000	-.085	-1.276	.203

a. Dependent Variable: Aspirations Posttest

### Appendix 3

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	2.453	.216		11.345	.000
	Group allocation	.097	.073	.149	1.320	.188
	Aspirations Pretest	.245	.065	.251	3.779	.000
	Child's Gender	-.070	.044	-.105	-1.601	.111
	Deprivation Rank	-8.404E-5	.000	-.066	-.726	.468
	Group_SOArank	-3.975E-5	.000	-.031	-.235	.814

a. Dependent Variable: Aspirations Posttest

#### Appendix 4

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.484	.222		11.197	.000
	Group allocation	.049	.068	.075	.715	.476
	Aspirations Pretest	.244	.064	.250	3.790	.000
	Child's Gender	-.098	.062	-.148	-1.588	.114
	Deprivation Rank	.000	.000	-.083	-1.263	.208
	Group_Gender	.055	.087	.080	.635	.526

a. Dependent Variable: Aspirations Posttest

#### Appendix 5

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Aspirations Pretest	250	1.71	4.29	3.2121	.32822
Valid N (listwise)	250				

#### Appendix 6

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.361	.206		11.482	.000
	Group allocation	.053	.041	.081	1.280	.202

Aspirations Pretest	.258	.063	.260	4.094	.000
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a. Dependent Variable: Aspirations Posttest

Appendix 7

For the main test, the output can be expressed as a formula:

$$\text{Aspirations Posttest} = 2.451 + 0.083 * \text{intervention} + 0.248 * \text{Aspirations Pretest} - 0.70 * \text{Gender} + 0.000 * \text{Deprivation Rank}$$

So, for the children in the control group (Where intervention=0) we get:

Control Group:

$$\text{Aspirations Posttest} = 2.451 + 0 + 0.248 * 3.2121 - 0.70 * 0.59 + 0.000 * 359.38 = 2.835$$

So, for the children in the intervention group (Where intervention=1) we get:

Intervention Group:

$$\text{Aspirations Posttest} = 2.451 + 0.083 + 0.248 * 3.2121 - 0.70 * 0.59 + 0.000 * 359.38 = 2.918$$

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Group allocation	251	0	1	.49	.501
Deprivation Rank	235	3	885	359.38	257.296
Child's Gender	251	0	1	.59	.493
Aspirations Pretest	250	1.71	4.29	3.2121	.32822
Aspirations Posttest	234	1.00	4.00	3.2135	.32487
Valid N (listwise)	220				