The Weekend School Effect on Perceived Cognitive and Social Competences: Evidence from a Randomized Controlled Experiment

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TIER WORKING PAPER SERIES
TIER WP 11/01

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Abstract

This study reports the results of a randomized controlled experiment in the Netherlands that was conducted in 2005 to examine if a Weekend School did positively affect perceived competences. For this purpose, 216 Dutch 7^{th}graders (aged 10/11) were randomly assigned to a Weekend School program and a waiting list. This study focuses on the following competences: scholastic competence, social acceptance, behavioral conduct, global self-worth and outspokenness. These competences are measured before and 10 months after the start of the Weekend School program. Experimental results suggest that the Weekend School program did not affect children's perceived competences.

JEL Codes: I21, C93

Keywords: Weekend School, Perceived Competence, Random Assignment

*We would like to thank IMC Weekend School for providing us with the experimental data.

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1 Introduction

A Dutch research report that appeared in 1998 showed an alarming loss of school-motivation among children aged 11 to 14 from immigrant neighborhoods in Amsterdam. Furthermore, these students had little knowledge about their future perspectives, as well as low levels of well-being (Terwijn, 1998). Following these observations, IMC Weekend School was founded in 1998 as a school for supplementary education. The main objective is to engage students in real-life issues outside the context of formal learning. Specifically, the Weekend School invests in students' future perspectives and self-confidence through education by a wide variety of volunteer professionals in a context of 'learning by doing'.

To ultimately improve practice, the Weekend School is interested in general stepping-stones towards students' motivated outlook on study and career choice. As a first step to grasp such stepping-stones, Weekend School hypothesizes that its' educational program might increase students' perceived cognitive and social competences. In fact, increased levels of perceived cognitive and social competences might enhance students' interest in learning, and also - perhaps - enhance their cognitive performance, such that overall perspectives of Weekend School students improve.

This study reports results of a randomized controlled experiment at three IMC Weekend Schools in Amsterdam in 2005, and examines if perceived cognitive and social competences of primary school children aged 10 to 11 (Dutch grade 7) were positively influenced by participating in the IMC Weekend School program. The focus of this study is in particular on scholastic competence, social acceptance, behavioral conduct, global self-worth and outspokenness.

There is an extensive empirical literature on how children perceive their cognitive and social competences. This literature, first of all, shows that different domains of perceived competences are interrelated. Harter (1978; 1986), for example, shows a clear relationship between measurable school skills, perceived behavioral conduct and perceived scholastic achievement for children aged 9 to 12. Mercer (1997) finds that children value themselves as less if they experience school tasks as more difficult, or if they perform less well on school tasks. Moreover, children with a learning disability tend to have lower perceived competences (Coosemans, 1992). Secondly, literature shows that cognitive performance levels correlate with perceived cognitive and social competence levels and that the correlation is stronger for children with learning disabilities (Mercer, 1997). Moreover, it is found that perceived social and cognitive competences and lagging behind in reading and spelling skills are closely related (Coosemans, 1992; Kavale and Forness, 1996; Mercer, 1997; Elbaum and

Vaughn, 2001; Pretzlik et al., 2003). These empirical findings suggest that if the Weekend School program effectively increases perceived cognitive and social competences, it may also improve achievement levels in regular school.

Because the IMC Weekend School program is a newly developed concept in the Netherlands, there are no evaluation studies available that examine the effectiveness of the Weekend School program. However, evaluations of extended school time programs may be indicative for the effectiveness of Weekend Schools. Literature evaluates two types of extended school time programs: summer schools and extended school day programs. Even though many studies examine the effectiveness of these programs for primary education there are only a hand full of them that can be marked as causal and these studies focus only on the effect on math and reading achievement. These causal studies show, first of all, that the knowledge loss in mathematics and reading during the summer holiday is reduced by participating in a summer school program (see Jacob and Lefgren, 2004; Borman and Dowling, 2006; Patal et al., 2010). Secondly, they find that extended school day programs tend to increase math and reading perfomance, but the effect is small (see Bellei, 2009; Nomi and Allensworth, 2009; Patal et al., 2010). On the one hand, the empirical evidence indicates that Weekend Schools may be effective, since summer schools and extended school days are effective. On the other hand, the evidence on summer schools and extended school times may not be so informative for the effectiveness of Weekend School programs, due to the different nature of these programs. Moreover, evaluations of extended school time programs are not so informative with respect to childrens' perceived competences.

The first contribution of this study is that it focuses on perceived social and cognitive competences of primary school children. Thereby it recognizes the value of these perceived competences. Evaluations of extended school time programs frequently focus on math and reading and neglect perceived competences, and in a broader sense, that social emotional development may be of importance as well (some exceptions are Claessens and Duncan, 2009; Chevalier et al., 2009; Attili et al., 2010). Heckman and Rubinstein (2001) even mention that it is surprising that academic discussions of skill and skill formation almost exclusively focus on measures of cognitive ability and ignore noncognitive skills, while the impact of noncognitive skills on social behavior and labor market outcomes has been demonstrated. Secondly, this study contributes to the literature that evaluates extended school time program, which is predominantly correlational, by evaluating the weekend school program. For this purpose, a randomized controlled experiment was performed and 216 children in Dutch 7^{th} grade were randomly assigned to the Weekend School and to a waiting list. The research

design allows us to control for (un)observed heterogeneity and selective participation in the Weekend School program. Hence, we are able to measure how IMC Weekend School *causally* influences perceived cognitive and social competences.

We proceed as follows. In Section 2, we discuss the nature of the Weekend School intervention. The experimental data is described in Section 3 and in Section 4 we present and discuss the experimental results. Finally, Section 5 concludes.

2 IMC Weekend School

The initiative to raise the Weekend School was due to a Dutch research report that showed that children in socially deprived neighborhoods had lower levels of school-motivation and well-being, and had limited knowledge about their future perspectives (Terwijn, 1998). The report showed that these unwanted outcomes were observed more often for children with lower achievement levels and it mentions two reasons for this. First of all, the Netherlands has a system of educational tracking, which means that children are assigned to different secondary education levels based on the achievement outcomes of a national test that children make at the age of twelve. As a consequence, children with lower achievement levels in primary education feel that their future perspectives are limited, because their 'predetermined' place in the achievement distribution determines their future secondary education level. For children with lower achievement levels the tracking system may not only be demotivating, it may also affect their self-confidence negatively (Coosemans, 1992; Mercer, 1997).

Secondly, primary schools tend to mainly focus on cognitive (math and reading) performance. Numerous studies, however, have shown that non-cognitive skills, such as tenacity and self-confidence, influence labor market outcomes and social behavior (Heckman and Rubinstein, 2001; Heckman et al., 2006; Borghans et al., 2008). Therefore, future perspectives could be improved by focusing on the broad range of talents that children have, including the noncognitive skills, instead of only on specific cognitive talents.

The Weekend School program aims at improving participants' future perspectives in three ways. First of all, the program literally tries to increase the scope of future perspectives by engaging students in fields that are normally not within in their reach. This is effectuated by (1) having volunteer professionals introduce students in their fields of work, (2) offering a curriculum that comprises a variety of disciplines from the fields of science, arts, and social issues. Among the fifteen disciplines are, for example, Medicine, Law, Philosophy, Poetry, Mathematics, Astrology, Visual Arts, Journalism, Entrepreneurship, and Politics,

(3), encouraging students to enrich the program with topics of their own interest.

Secondly, the Weekend School tries to improve the children's perspectives by offering skills trainings that are considered to be important for their development, but that are not the primary focus of primary schools. The skill trainings given by the Weekend School relate to giving presentations, doing research, debating, and conflict resolution. These skills trainings may have important spillover effects with respect to the competences that are the focus of this study. For example, improved debating and presentational skills may positively affect scholastic competences or global self-worth.

Thirdly, from a more general perspective, Weekend Schools' working philosophy is that motivation gets shape and substance depending on the quality of activities that one engages in. Therefore, not only subject matter and methods are important, but also Weekend Schools' general context. In sum, key-elements of the Weekend School program are: (a) a program that starts at a receptive age (age 10) when curiosity to learn about the world peaks, (b) a broad range of subject matter, presented by (c) motivated experts, (d) continuous encouragement to engage, (e) encouragement of individual talents, (f) the general message that a school diploma is important, but that it is also important to find a study and career that matches what one likes to do, and g) age-accurate programs with growing attention for students' individual talents and preferences.

The duration of the Weekend School program is 2.5 years, and as mentioned above, children enter the program when they are in the Dutch 7^{th} grade of primary school. This means that an effective Weekend School program in the first year may affect how well children score on the national test and this may result in children going to a higher level of secondary education. The Weekend School classes are given each Sunday from 11 AM to 2:30 PM and each class has three effective school hours with a half an hour lunch-break.

Children are selected to participate in the Weekend School program as follows. First, the Weekend School selects six to eight schools in certain socially deprived neighborhoods and all children from these designated schools who are in seventh grade are invited to participate in the Weekend School program. Children are informed that no more than 40 children per neighborhood can enroll in the Weekend School program. Those children who indicate that they are motivated to participate in the Weekend School receive a brochure to discuss with their parents. In the following weeks, information meetings are organized for the parents to inform them about the character and the goals of the Weekend School. At these meetings parents are informed that participating in the Weekend School program is for free and that absence is only tolerated to a maximum of four Sundays per year. Children are selected for

the Weekend School program if they indicate that they are motivated and if their parents give their consent.

This study focuses on cohort eight that enrolled in the Weekend School program, and this cohort exists of 216 children who were selected in accordance with the selection procedure described above and who wanted to participate in the Weekend School program in Amsterdam in 2005. There are two reasons why we are particularly interested in this research population. First of all, the 216 selected children were randomly assigned to the Weekend School program and to a waiting list, such that an ideal experimental setting was created to analyze the effectiveness of the Weekend School. Secondly, various self-perceived competences were measured at the start, and one year after the start of the Weekend School program for all 216 children. This provides us with a unique opportunity to examine if the program affected the perceived competences of primary school children positively in the first year of participation.

3 Experimental Data

Children who wanted to participate in the Weekend School program, and whose parents gave their consent, were randomly assigned to either the IMC Weekend School program or a waiting list. The group of waiting list students serve as a control group in this study. 105 children participated in the IMC program and 111 children were put on a waiting list. The difference in the number of children occurs because students were randomly assigned to the IMC program until the maximum capacity of the Weekend School was reached.

Because randomization does not ensure comparability of IMC and waiting list students, we examine if observed student and school characteristics for students who were assigned to the Weekend School program are comparable to those who were assigned to the waiting list. Table 1 shows the means and standard deviations of the observed student characteristics, and the p-values in the last column indicate if the mean differences between both student groups are significant. The last three rows of the table represent the means of dummy variables that indicate the location of the school.

The table shows that the mean differences between the IMC and waiting list group are not statistically significant at traditional significance levels for all student characteristics. This means that the randomization was performed succesfully and that, in terms of the student characteristics considered, the waiting list students are a proper control group for the participating students in the IMC program.

Table 1: **Comparing IMC students with waiting lists students**

	IMC		**Waiting List**		**Difference**
	Mean	Std. Dev	Mean	Std. Dev	p-values
Boy	0.420	0.496	0.396	0.491	0.715
Age	11.02	0.600	10.99	0.576	0.678
Raised by two parents	0.653	0.478	0.670	0.472	0.788
Father is Dutch	0.107	0.311	0.152	0.360	0.530
Mother is Dutch	0.107	0.311	0.143	0.351	0.315
Family Size	2.264	1.749	1.905	1.620	0.415
Amsterdam South-East	0.322	0.469	0.339	0.476	0.120
Amsterdam West	0.347	0.478	0.330	0.472	0.784
Amsterdam North	0.331	0.472	0.330	0.472	0.788
Number of Observations	111		105		

The table shows that IMC and waiting list students are more often girls and are more likely to have parents with a non-Dutch nationality. The latter finding is as expected, because the overall Weekend School goal is to improve the perspectives of students living in socially disadvantaged neighborhoods and ethnic minority families more often live in these neighborhoods.

Even though IMC students are comparable to waiting list students, they may come from different schools/classes. For example, IMC students may come from classes with relatively more ethnic minority students and this may have its affect on the perceived competences measured. In Table 2 we therefore compare the class characteristics of IMC students with those of the waiting list students. The table shows that, on average, IMC and waiting list students come from very similar classes. Tables 1 and 2 show that IMC students more often have parents with a non-Dutch nationality compared to their class peers. Girls are, furthermore, more likely to attend the IMC program, and this follows from the observation that the proportion of boys of the IMC and waiting list students is lower than the proportion of boys in these participants' regular school classes.

Table 2: **Comparing regular school classes of IMC and waiting list students**

	IMC		Waiting List		Difference
	Mean	Std. Dev	Mean	Std. Dev	p-values
Fraction of boys	0.475	0.103	0.466	0.097	0.532
Fraction raised by 2 parents	0.679	0.161	0.695	0.158	0.430
Fraction Dutch fathers	0.165	0.198	0.157	0.185	0.730
Fraction Dutch mothers	0.169	0.208	0.155	0.198	0.620
Class size	14.07	5.192	14.83	4.732	0.248
Number of Observations	111		105		

In this study perceived competences are measured using the CBSK questionnaire, which is the Dutch version of Harter's Self Perception Profile for Children (Veerman et al., 1997; Harter, 1985).[1] Harter's Self Perception Profile for Children is a self-report questionnaire, developed for assessing children's self-esteem, and evaluates self-esteem in six domains: scholastic competence, social acceptance, athletic competence, physical appearance, and behavioral conduct, as well as global self-worth. Because the Weekend School program does not focus on athletic competence and physical appearance, this study focuses on the other competence domains. Harter's Self Perception Profile is widely used by social psychologists and it has often been shown that the competences measured in this questionnaire are reliable (see, van den Bergh and Marcoen, 1999; Muris et al., 2003 and references therein).

Each competence domain is represented by 6 questions, which are formulated using by pairwise-contradiction. For example, 'some kids behave well' but 'other kids have difficulties to behave well'. First children pick which category is most applicable for them, and then they indicate if the picked category is a somewhat true for them, or very true for them (Veerman et al., 1997). Each question therefore receives a score on a 4-point scale, where 1 point refers to the lowest perceived competence level and where 4 points refers to the highest perceived competence level.[2]

In the analysis each of the domains is represented by the mean of the 6 questions that are associated with this particular domain. We assessed Cronbach's alpha for each set of questions associated with a certain domain to verify if these questions measure the same

[1] CBSK stands for 'CompetentieBelevingsSchaal voor Kinderen', which means (freely translated) Perceived Competence Scale for Children.

[2] Due to copyright issues it is not possible to show the questionnaire. For the English version of the questionnaire we therefore refer to Harter (1985).

Table 3: **Reliability of Question Sets**

	Cronbach's α
Scholastic Competence	0.777
Social Acceptance	0.790
Behavioral Conduct	0.766
Global Self-worth	0.824
Outspokenness	0.745

(unobserved) factor. The reliability α is defined as the square of the correlation between the measured scale and the underlying factor and a set of questions is considered as reliable if α lies around 0.8 (Nunnally and Bernstein, 1994). Table 3 shows the α-values and based on these values we conclude that each set of questions measures the underlying domain in a reliable way. Although not shown in the table, the item-test correlations are roughly the same for all items, meaning that each question within the set of six questions explains the underlying factor equally well.

The IMC Weekend School emphasizes the importance of interaction between children and interaction between students and teachers. The Weekend School therefore expects that this interaction may affect the level of outspokenness. Therefore a questionnaire was developed with 10 questions to measure how outspoken students are in the group. Each question receives a score on a 7-point scale, where 1 point refers to the lowest level of outspokenness and where 7 points refers to the highest level of outspokenness. In Appendix A these questions are shown translated in English. Similar to the competences formulated above, we represent the domain 'outspokenness' by the mean of the 10 questions. For this set of questions, Table 3 shows an α-value of around 0.8, indicating that these questions measure the same (unobserved) factor *outspokenness*.

We notice that we have defined alternative perceived competence variables that served as dependent variables in the analysis (e.g. the aggregate scores of all questions associated with a particular domain, or the first two factors after performing a principal component analysis). However, these different alternative specifications all lead to very similar empirical findings and are therefore not reported in this study.

For the evaluation it is important that the perceived competences of IMC students are comparable to those of waiting list students before the start of the Weekend School program. Otherwise, the initial situation would differ to begin with, such that differences in perceived competences after one year between the two groups can not be attributed to the Weekend School program. In Figure 1 we show, for each domain and separately for waiting list students

and IMC students, the spread of the distribution using a 'box and whisker' plot. The box represents the inter-quartile range (the range between the 25th and 50th percentiles) and the whiskers cover most of the rest of the observations, although some outliers can still lie outside the whiskers. The line within the box shows the median value of the distribution. The first four box plots for each student group describe the distribution of the outcome variables from the CBSK questionnaire before the start of the Weekend School. The fifth box plot for each student group describes the distribution of the constructed outpokeness measure.

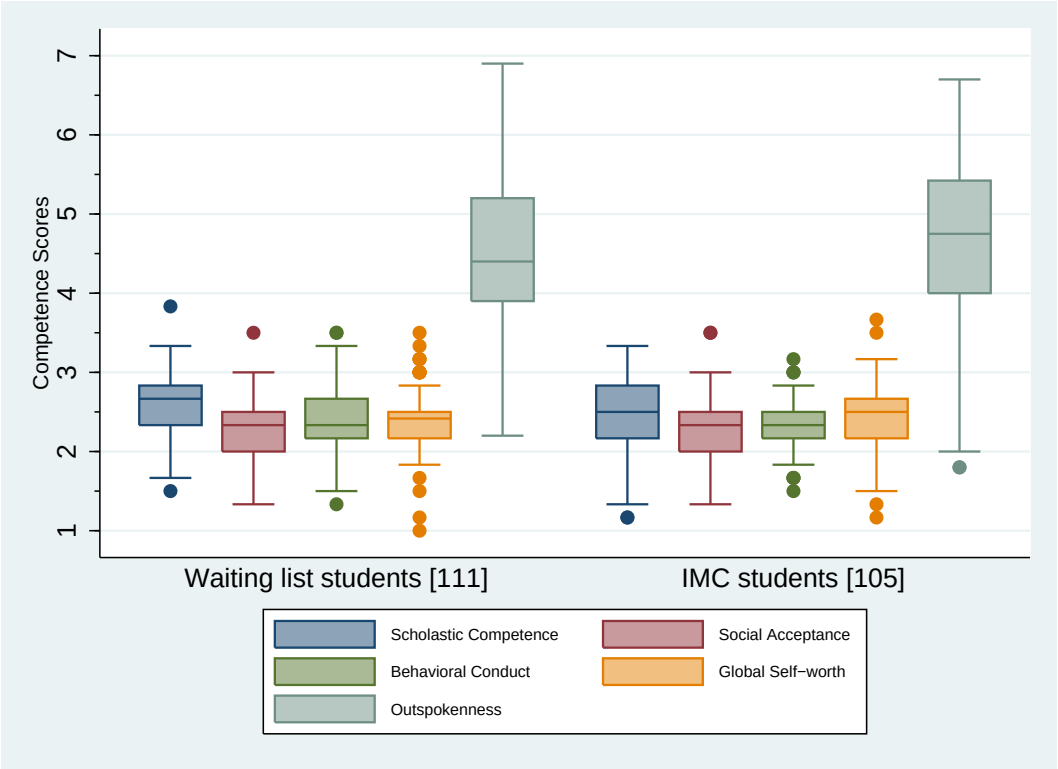

Figure 1: Distributions of Perceived Competences

When we compare the mean competence scores of IMC students with those of waiting list students we find no significant differences at the 95% significance level. Because some of the distributions are rather skewed, which can be seen from the fact that some lines in the box are rather close to the upper or lower hinge, and because there are some outliers for the domains self-value and behavioral attitude, we also tested nonparametrically whether the perceived competence distributions of IMC students and waiting list students are the same.

A Wilcoxon signed-rank test showed that the perceived competence distributions between the two groups did not differ significantly. We therefore conclude that observed differences in the perceived competences between the two groups over a period of one year can be attributed to the Weekend School program.

4 Empirical Strategy and Results

Figure 2 shows how perceived competences change in one year for IMC students and waiting list students. The change for the IMC students is presented by a dashed line, while the change for waiting list students is presented by a dotted line. Before we discuss the observed changes in Figure 2, we address two important issues. First of all, the figure presents only unstandardized competence scores, even though Figure 1 suggests for the domains 'self-value' and 'behavioral attitude' that it would be better to standardize the competence scores of these domains, due to variance differences and the presence of outliers. For presentational convenience we present only unstandardized competence scores, but emphasize that we obtain similar results if standardized competence scores are used.[3]

Secondly, the note of the figure shows that students drop out from both the IMC and the waiting list group. If we compare the number of students in Figure 2 to the number of students of the box plot figure (i.e. Figure 1) we find that 15 students drop out of the Weekend School program and that 23 students 'drop out' of the waiting list group.

Fortunately, there is information available on drop out of the Weekend School program or entrance into the program. For the IMC students we find that 10 students dropped out of the program during the first year, which means that we do not observe a post-competence score for 5 students because of another reason (illness, etc.). For the waiting list students we find that 10 students entered the Weekend School program during the first year, which is consistent with the observation that 10 IMC students dropped out of the Weekend School program. Three students were removed from the waiting list, and so we do not observe a post-test score for 10 students who were placed on the waiting list due to other reasons.

If we compare student and school characteristics between the remaining students in the IMC group and the waiting list group, we find that they are not significantly different at the 95% significance level. Moreover, initial differences in competence scores for the two student groups were are not significantly different. Therefore there appears to be no selective drop out of the Weekend School program.

[3]Results are available upon request.

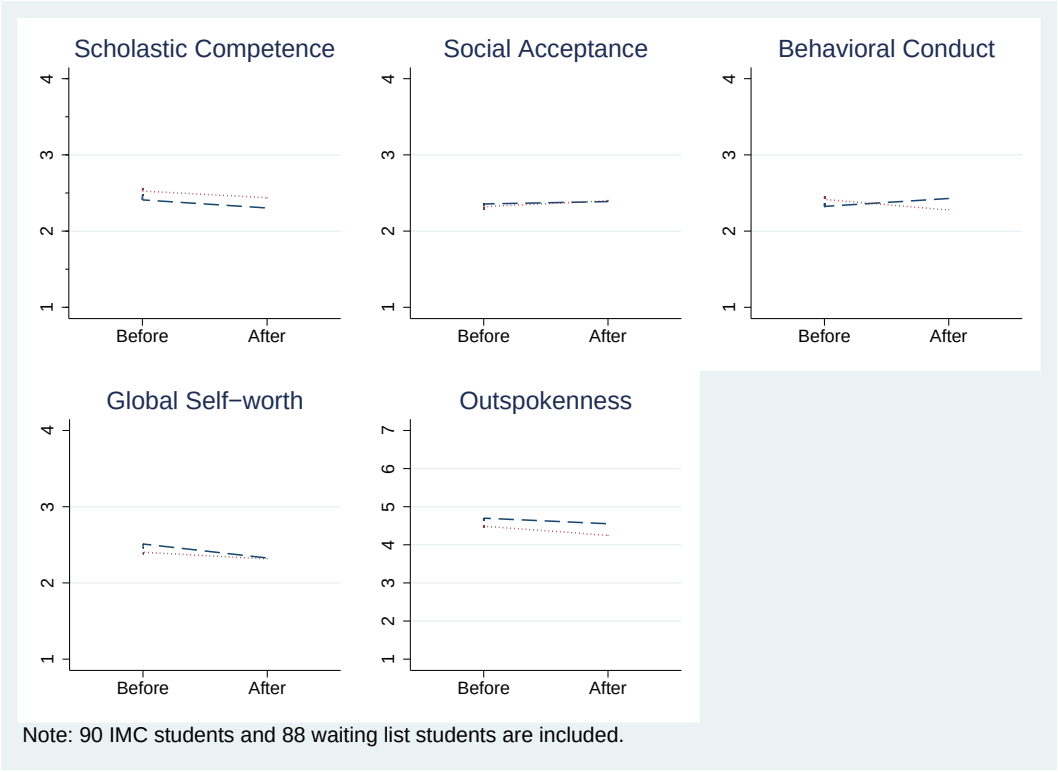

Figure 2: Changes in perceived competences

The figure shows, first of all, that differences in competence scores between IMC students and the waiting list students remains rather constant over time. Secondly, the competence scores themselves seem to be rather constant over time. Given that IMC students and waiting list students have similar background characteristics, and that the observed differences presented in Figure 2 are not significant[4], we conclude that the Weekend School program did not positively influence the perceived competences examined in this study. Coosemans (1992) found that children with a learning problems tend to have lower perceived competences. Therefore, we also made the graphs for children with lower competence scores, because these there may be more to gain. The results were however similar to those shown in Figure 2.

In Figure 2 we perform a direct comparison of the change in competence scores between the IMC students and the waiting list students. Even though IMC students appear to

[4]As we will see later, there is one exception where we find a significant difference for behavioral conduct. However, this significance is caused because the observed lines cross each other (see Figure 2).

have similar competence scores than waiting list students, we did not control for school and student characteristics. First of all, these underlying characteristics may influence the effect of the Weekend School program. Secondly, it is interesting to examine how competence score changes depend on student and school characteristics. It may be that competence scores are *on average* constant over time, but that competence scores change in a non-constant way for children who, for example, grow up in a one parent family. More generally put, it may be that changes in competence scores are not constant over time for children in a particular environment that supposedly influences the perceived competences negatively.

To take into account that changes in competence scores depend on observable factors we evaluate the Weekend School program by estimating an ordinary least squares (OLS) regression of the following model:

$$\triangle Y_i^s = \alpha + \beta X_i + \delta IMC_i + \varepsilon_i \tag{1}$$

where $\triangle Y_i^s$ represents the difference in competence score for competence s of student i, X_i represents a vector of student and school characteristics, and IMC indicates if the student participated in the IMC Weekend School program. As is usual, the error term, ϵ_i, is assumed to be normally distributed with mean zero and variance σ_ϵ^2 and all explanatory variables are assumed independent of the error term. Each model is estimated with region fixed effects included, where the region dummies indicate if students go to school in the West, North or South- East of Amsterdam. In this way we control for unobserved differences at the region level, and hopefully at the school level, that influence the competence levels in a constant way. We do not include school fixed effects, because the IMC participants come from 20 schools and given the total number of IMC and waiting list students for whom we observe competence scores and backgroud information (178) it is not possible to obtain reliable estimates with school fixed effects. The estimation results are shown in Table 4

The estimation results show that the IMC indicator is never significant, except for the regression model on behavioral conduct. However, for the latter estimation model we find, at the same time, that the regression model itself is rejected (Prob>F(7,168)). This result is explained by Figure 2, that shows that the lines of the graph associated with behavioral conduct cross each other. Furthermore, the significance of the IMC indicator is as much driven by the change of the IMC group as it is driven by the change of the control group, and hence we cannot interpret this significance as a positive effect of the Weekend School program.

We find that each estimation model is rejected, except for the estimation model for social

Table 4: Estimation Results

	Scholastic Comp.		**Social Acceptance**		**Behavioral Conduct**		**Self-worth**		**Outspokenness**	
	Coef.	t-value	Coef.	t-value	Coef.	t-value	Coef.	t-value	Coef.	t-value
IMC Program	-0.008	-0.090	-0.064	-0.900	0.232 ***	2.800	-0.086	-1.060	0.077	0.560
Student Characteristics:										
Boy	-0.052	-0.560	0.054	0.730	0.097	1.130	0.009	0.110	0.023	0.160
Raised by two parents	0.047	0.480	0.062	0.790	-0.007	-0.080	0.084	0.950	0.039	0.260
Mother is Dutch	-0.332	-1.970	-0.051	-0.380	0.055	0.350	0.037	0.240	-0.072	-0.280
School Characteristics:										
Class size	-0.017	-1.780	-0.018**	-2.280	-0.001	-0.130	-0.004	-0.480	-0.008	-0.550
Fraction of boys	0.780	1.630	1.451***	3.800	0.339	0.760	-0.138	-0.320	-0.073	-0.100
Fraction Dutch Mothers	-0.333	-0.740	0.298	0.840	0.104	0.250	-0.344	-0.850	-0.248	-0.360
Constant	-0.165	-0.630	-0.435**	-2.090	-0.369	-1.520	0.099	0.420	-0.051	-0.130
Region Fixed Effects	Yes		Yes		Yes		Yes		Yes	
R^2	0.09		0.13		0.07		0.03		0.03	
Prob > F(7,168)	0.09		0.00		0.15		0.74		0.90	
Number of Observations	178		178		178		178		178	

Note: */**/*** means statistically significant at the 10/5/1 percent level.

acceptance. The estimation models are rejected because student and school characteristics, and the Weekend School indicator do not enter the estimated equation significantly, and, so all the model variables included in the model do not explain the observed variation of the perceived competences. As a consequence, the estimated linear estimation model does not predict better than the mean of the perceived competence and so the model is rejected.

The model for the social acceptance is not rejected, and the significance is driven by the class characteristics 'fraction of boys' and class size, although the effect of the latter is small. With school characteristics we mean characteristics that give information about students' regular school classes. A closer examination of the 'fraction of boys' effect, where we splitted up the sample into a group of students from classes with less than 50% boys and a group of students with 50% boys or more, shows that the initial competence level is similar for the two groups, but that the competence level increases more for the student group with 50% boys or more. It is worth mentioning that we do not find a significant Weekend School effect if we interact the IMC indicator with the variables 'fraction of boys' and class size.

5 Conclusion

In 1998 the Dutch IMC Weekend School opened her doors for primary school children who lived in socially deprived neighborhoods in Amsterdam. IMC Weekend School was designed as a school for supplementary education and the main objective was to engage students in real-life issues outside the context of formal learning. Specifically, the Weekend School invests in students' future perspectives and self-confidence through education by a wide variety of volunteer professionals in a context of 'learning by doing'. Because the Weekend School is interested in general stepping-stones towards a motivated outlook on study and career choice, one of the formulated Weekend School objectives is that the supplementary education program enhances students' perceived cognitive and social competences.

This study examines if the Weekend School influenced the following competences: scholastic competence, social acceptance, behavioral conduct, global self-worth and outspokenness. These competences are measured by using the Dutch version of Harter's Self Perception Profile for Children (Veerman et al., 1997; Harter, 1985), a questionnaire that is widely used and recognized as a high quality and reliable questionnaire by social psychologists. To measure the effect of the Weekend School a randomized controlled experiment was conducted at three IMC Weekend Schools in Amsterdam in 2005. The participants in the Weekend School program are primary school children aged 10 to 11 (Dutch grade 7), and the duration of the

experiment was about 10 months.

We find that the Weekend School did not effectively increase the perceived competence levels of the participating children. For the competence domain 'social acceptance' we find that it is influenced by the class characteristics 'fraction of boys' and class size, although the effect of the latter is small. Specfically, the competence levels tend to be somewhat smaller for children who come from relatively larger classes and tend to be somewhat larger for children who come from classes with relatively more boys. An explanation for the former relation is that children can develop their competence level better if they are in smaller classes. An explanation for the latter relationship is less obvious.

Several factors could serve to explain why the Weekend School did not effectively increase students' perceived competence levels. First of all, it may be that perceived self-competence is not an important stepping-stone towards the ultimate aim of the Weekend School, which is students' motivation to pursue a specific study or career. As data suggests - if it is true that the Weekend School encourages such motivation - perceived self-competence rather follows than precedes motivation. Although new to current empirical knowledge, this possibility is worth closer examination. It suggests that feelings of self-competence only truly develop once one knows what one's goals are. Secondly, and related to program, the Weekend School might miss some crucial opportunities. Most importantly, scientific literature suggests that educational programs are more effective when they are precise about their objectives. However, the Weekend School largely leaves it to the students what they get out of the three-year course. Weekend School staff defends this approach by saying that 'independently giving meaning' is crucial. But empirical evidence shows that effective programs do not only state program objectives (c.q. a motivated outlook on life) but also explain how and through which channels objectives could be achieved. This creates a challenge to IMC Weekend School. The question that they have to address is how and through which channels a motivated outlook on life could be achieved, and how these effects could be communicated to students, teachers, and parents. In addition, the Weekend School needs to speak up on how it relates to the principle of evidence-based working. As for a final note, IMC Weekend School engages students in interesting activities at a crucial age, with the aim of stimulating them to discover and pursue their interests for their future careers. Indeed, as participation rates shows, the majority of students complete the three-year course and subsequently keeps engaged in interest-targeted alumni programs. Thus, 'something' seems to be working and this 'something' is likely related to motivational aspects. For future research it is therefore interesting to characterize these motivational aspects and examine

how these aspects influence students' perspectives.

Appendix A

In this Appendix the translated questions are shown that are used to measure how outspoken children are. All questions are measured 7-point scale, where 1 point refers to the lowest level of outspokenness and where 7 points refers to the highest level of outspokenness. The questions are the following:

1. I like to decide what happens in a group.
2. I am always one of the first to answer a question of the teacher.
3. I never allow anyone to jump the queue.
4. If someone is bullied, I say something of it.
5. I always dare to give my opinion.
6. If I have a good idea, I think everyone should follow this idea.
7. I usually have an opinion quite fast.
8. Whenever the class has to do something without the supervision of the teacher, I am happy to take the lead.
9. I often express my opinions openly in the class
10. If teams have to be formed during sportsclass, I am happy to form them.

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