Participation to Parenting Courses and Parental awareness

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Abstract

In this research, we analyze the impact of attending parenting courses on time use of parents and children, in different Italian municipalities. The courses were offered during the schooling year 2020-21 within the framework of the social program "FA.C.E. Farsi Comunità Educanti", supported by the Italian Government. The effect of the program was estimated through a before-after design with time controls for the period in which the course started or ended (the beginning and the end of the courses varied across cities). We find that attending the course increased the regular use of formal childcare together with parental awareness that child care services support working parents. Parents were more likely to watch cartoons with children and recognized indeed the educational contribution of TV but not of other digital devices.

J.E.L: J13, D1, I26

Key words: parenting, use of time, digital devices, educational activities, childcare

1 Introduction and background

The program "FA.C.E. Farsi Comunità Educanti" ("Becoming Educating Communities") was promoted by the institution "Con I Bambini"[1] and implemented from May 2018 to June 2021 in four Italian cities: Naples, Reggio, Emilia, and Teramo. The municipalities, schools, and local organizations/associations were involved in the planning partnership, under the supervision of the Reggio Children Foundation which coordinated the whole program.

FA.C.E. aim was to offer care and educational services to families who had not had access to them before. Moreover, another objective was to enhance the engagement of local communities in the education of children, creating and reinforcing networks of families. For this reason, in 2018 local communities were involved in the process of planning the interventions. At the end of this process, one of the main interventions consisted of courses in parenting, based on participatory workshops involving children aged 0-6 years and one parent each. These courses were established for the school year 2019-20 and 2020-21. The intervention was promoted especially to households living in vulnerable conditions but the courses were open to everyone interested, and no fee was asked.

The importance of parenting programs is supported by a large body of literature known as the economics of skills formation, where it is analyzed the effect of parents' behavior on children's development and well-being (Del Boca 2015). Several surveys have shown that parental time investments in their children

[1] A non-profit organization whose mission is to implement programs contrasting the educational poverty of children, funded by a Memorandum of Intent (*Protocollo d'Intesa)* signed between the Italian Ministry of Labor and the Association of Italian Banking Foundations

have a significant influence on child cognitive and non-cognitive outcomes and that they are the most important inputs in the child development process (Carneiro and Heckman 2003, Heckman 2000, Daly et al 2014), outweighing the influence of non-parental time investments.

Building on some of the main findings of this literature (Guryan et al 2008, Moran et al 2004, Jalia 2013) we analyze the impact of parental courses during the schooling year 2020-21 on the importance of engaging in educational activities with children aged 0-6. In detail, the courses consisted of 6 meetings during which parent and child took part in various activities going from storytelling to craft activities. Several workshops within the course were organized by qualified educators: digital, musical, and reading workshops, and infant massage (only for 0-12 months). The aim of these activities was to support the manual, sensory, expressive, communicative, and relational skills of children and parents at the same time. Throughout the course, the relationship parent-child was supported, while peer interactions, both child-child, and parent-parent, were encouraged. Parents were supported in their role and they had the option to discuss with educators about their doubts or difficulties.

During the first phase of FA.C.E. intervention, in schooling year 2019-2020, Del Boca et al (2022) implemented a randomized controlled trial, involving random assignment of the families to a parenting course. At the end of the intervention, the comparison between treated and controls revealed the effects of the program: attending the course increased families' awareness of the importance of educational activities for children, it increased the time spent together, especially in reading to children, and parents' desire of spending more time with them.

The outbreak of the Covid-19 pandemic in 2020 strongly affected the intervention's implementation in the second schooling year. Having in mind the risk of interruptions of the activities, due to restrictions imposed by public authorities to reduce the spread of the COVID-19 virus, children and families were invited to participate at any time of the year, in order to increase their chance to take part in the program. Therefore, families were not randomized, but they could enroll in one of the two or three courses offered throughout the schooling year.

Implementing a before-after evaluation design, we are interested in assessing the impact of the parenting courses on parental awareness of the importance of spending time in educational activities with their offspring, for their cognitive and non-cognitive development, and of attending child care. Our interests are similar to Meroni et al (2021) who have explored the link between time allocation in various activities and child development. Families during the pandemic have largely used digital devices to stay in contact with other families, relatives and educators of kindergarten for example. In this context, we are particularly interested to investigate the use of digital devices by children and parents' opinion about it.

Our results show that parents became aware of the fact that child care services are a support to working parenting. Moreover, while parents do not appear to believe that tablets and smartphones are tools for learning they seem to recognize the potential of the TV as a tool for learning and they are likely to watch at least a cartoon together with the child during the week.

The rest of the paper proceeds as follows: section 2 describes the data we used in the analyses and how we previously collected them; section 3 illustrates the empirical strategy; section 4 presents the results and eventually, section 5 concludes.

2 Data collection

We use data collected during the school year 2020-2021 interviewing families "before" and "after" having attended the parenting course of the FA.C.E. program. We administered to parents the same assessment questionnaire containing questions on a variety of outcomes. In particular, we focus on the use of time of parents and children: i) time together, especially in educational activities (e.g. reading to the child, craft activities, etc.), ii) time that children spend in care services and related parents' motivation, iii) time that children spend on smartphones/tablets and TV and related parents' opinion.

We collected 278 questionnaires during the first meeting and 167 during the last meeting. In each questionnaire was reported an identification code of the child, this allowed us to link 127 "before" and "after" questionnaires. Table 1a reports the descriptive statistics for the families interviewed in both periods.

Table 1a – Descriptive statistics of those who complete FA.C.E. program

VARIABLES	(1) Mean
Child is a girl	0.543
Child's Age (months)	36.87
Child enrolled in kindergarten	0.551
Participating adult	
Mother	0.969
Level of education: High-school diploma	0.370
Level of education: Degree	0.535
Unemployed	0.449
Part-time worker	0.150
Full-time worker	0.402
Presence of a partner	0.976
The portion of FACE programs offered in:	
Fall	0.197
Winter	0.323
Spring	0.480
Naples	0.457
Teramo	0.134
Palermo	0.276
Reggio Emilia	0.134
Number of observations	127

The average child attending FACE is a three years old girl participating with her mother, who in 54% of the cases holds a university degree and in 40% of cases has a full-time job. In our sample, 55% of children are enrolled in kindergarten.

Data report a higher proportion of families enrolled in Naples (about 46%) and Palermo (28%). Due to the restrictions imposed by public authorities to mitigate the spread of the COVID-19 virus, especially during fall, FACE programs suffered of disruptions and postponements. This explains why most of the families attended FACE activities in Spring 2021, when the number of restrictions was lower than the ones in fall/winter.

In order to measure the time parents and children spend together, we count the number of educational activities (provided in a list) in which they were engaged together in the last week.

To measure motivation for using childcare and actual use of care services, we asked whether the parents would like to use the childcare, and the main reasons to enroll him/her (related to the child development or parents' care support), for those who are enrolled we asked the attendance rate (less than 25%, between 25 and 75%, more than 75%). It is also measured whether the child uses/watches smartphones/tablets and TV for more than one hour a day. For all of them, we also asked the parent if s/he considers not only entertainment or communication but also potential tools for learning.

Among parents who did not enroll their children in kindergarten, three-quarters of them would have liked to do it in absence of difficulties, because the child would always learn something new and play with other children, but in 30 percent of the cases also because in this way parents would have more free time (Table 1b). Overall, children have well-scheduled activities during the day (reported by 2 parents out of 5), they watch a maximum of one hour of television a day and during the week they watched at least one cartoon together with their parents (almost in 86% of cases). Parents are more likely to consider watching TV as a way of learning (reported by 84% of parents) than smartphones (45%). This is coherent with the several educational programs dedicated to children in TV.

Table 1b – Descriptive statistics of those who complete FA.C.E. program (initial level at t=0)

VARIABLES	(1) Mean
Weekly activities parent-child together[1]	5.197
Motivation for using childcare[2]	
Child's sociality	1
Child's learning	1
Supports parents work	0.244
Allows more parents' free time	0.289
Regular childcare attendance[3]	0.827
Parent-child watch a cartoon together[4]	0.858
Daily TV watching: +1h	0.178
Daily tablets and smartphone use: +1h	0.059
TV can be a tool for learning	0.838
Smartphone/tablet can be a tool for learning	0.670

Note: [1] Number of educational activities (provided in a list) in which parent and child were engaged together in the previous week. [2] Proportions calculated on 45 answers. [3]Proportion of children enrolled in kindergarten who attend equal or more than 75% (question asked from winter interviews). [4] In the previous week.

4 The empirical strategy

During the 2020-21 school year, all four municipalities carried out two or three consecutive editions of parenting courses: immediately after the end of the first course, for example, the second began. Each parent who participated answered two questionnaires, one at the beginning and one at the end of the course. The effect of the program was estimated by comparing the answers to the same questions before and after participation. Obviously, the risk is that factors that change over time bias the estimates: we may think about the age of the child (growing up), the weather conditions (it's easier to play ball in spring and go to the library in winter) and, in general, to all the events that characterize historical time (for example, closures due to the pandemic).

In order to estimate the impact of the courses on our outcomes of interest (time use parent-child together, attendance of childcare or intention to use it, use of smartphones/tablets or TV), we estimate a linear regression model with the following specification:

$$y_{it} = \alpha + \beta FACE_{it} + \gamma age_{it} + \delta_1 winter_{it} + \delta_2 fall_{it} + \zeta_i + \varepsilon_{it}. \qquad (1)$$

Where y_{it} is the analyzed outcome of the parent of child i at time *t,* FACE is a dummy equal to 1 when the course has been attended, *age* is the age in months of the child, *winter* and *fall* indicate the seasons at which the questionnaire has been filled (spring is the excluded category), ζ_i are individual fixed effects, and ε_{it} are robust standard errors. Thanks to individual fixed effects we control for all those characteristics which do not change between the "before" and "after" questionnaire, such as the gender of parent and child, parent's education, migratory background, and other unobservable characteristics (attitudes, beliefs not changing over time)

To deal with the risk that possible events occurring in the same period may affect the outcomes, we take advantage of the structure of the intervention organized in subsequent - .We observe courses that start (finish) when other courses finish (start). Therefore, we have included in the regression models, for each outcome, the season in which it was measured, exploiting the fact that - in the same season - for someone, that outcome was observed in the presence of the treatment, for someone else in the absence of the treatment.

On the other hand, as far as the age of the child is concerned, it is measured in months and it is included in a parametric way in the model, exploiting the wide variability of this variable in the considered sample.

5 Results

Tables 2a and Table 2b report the results of the analyses. After having followed the courses of the program FA.C.E. parents do not seem to increase the number of activities in which they engaged with their children. However, we have to consider that the questionnaire was administered immediately after the course, parents and children were weekly spending time together during FA.C.E. meetings. For this reason, the absence of a decrease in the other activities could be considered a good signal of the impact of the program (Table 2a column 1). None of the other variables considered in the estimation appear to be significant.

We can notice that after the participation in FA.C.E., the regular attendance rate of formal childcare increases (table 2a, column 2). Whereas for those who are not already using childcare services, we investigate both parental support and child development motivations to use them (table 2a columns 3

and 4). However, child development-related motivations are in common to all parents no matter if before or after FA.C.E. The absence of variation in child development-related motivations, makes it impossible to estimate our regression equation (1) for them. For this reason, in Table 2a (columns 3 and 4) we report only parental support-related motivations. Results showed that after FA.C.E. childcare services are more likely to be perceived as a valid support to working parents who were allowed in this way to work longer hours. Whereas, no significant effects are found on motivations related to more free time for the parents. Eventually, after FACE, parents are more likely to watch at least a cartoon together with the child during the week (table 2b, column 1). On the other hand, it is less likely that the child uses tablets or smartphones for more than an hour a day (table 2b, column 3). Parents indeed do not attribute educational value to tablets and smartphones (Table 2b, column 5) but they recognize the potential of TV as a tool for learning (Table 2b, column 4).

Table 2a: Impact of FA.C.E. on parent-child weekly activities, motivation for using childcare and childcare attendance

			Motivation for using childcare	
VARIABLES	Weekly activities together[1] (1)	Regular childcare attendance[2] (2)	Supports parents work (3)	Allows more free time (4)
FACE program	-0.013	0.115*	0.499***	-0.018
	(0.158)	(0.064)	(0.182)	(0.198)
Fall	-0.580	-	-0.817	1.033*
	(0.795)	-	(0.717)	(0.605)
Winter	-0.267	0.268	-0.390	0.412
	(0.446)	(0.186)	(0.431)	(0.341)
Child's age	-0.012	0.042	-0.219	0.175
(in months)	(0.126)	(0.057)	(0.143)	(0.124)
Constant	5.754	-1.164	5.456	-3.964
	(4.892)	(2.628)	(3.479)	(2.990)
Observations	442	222	132	132
Number of children id	315	172	100	100

Note: [1] The indicator goes from a minimum of 0 to a maximum of 6 [2] Attendance rate self-declared equal to or more than 75%. The question has been asked starting from the interviews conducted in winter. Robust standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 2b: Impact of FACE on the use of smartphones/tablets and TV and parents' opinion regarding their use

	Parent-child	Daily use/watching		Tool for learning	
	Watch a cartoon together	TV: +1h	Smartphone tablet: +1h	TV	Smartphone/tablet
VARIABLES	(1)	(2)	(3)	(4)	(5)
FACE program	0.103*	-0.034	-0.114***	0.102*	-0.054
	(0.053)	(0.074)	(0.039)	(0.059)	(0.094)
Fall	-0.197	0.016	0.626***	-0.433	-0.147
	(0.215)	(0.431)	(0.223)	(0.351)	(0.519)
Winter	-0.105	-0.195	-0.035	-0.175	-0.003
	(0.114)	(0.217)	(0.098)	(0.181)	(0.245)
Child's age	-0.060*	0.062	0.127***	-0.046	0.065
(in months)	(0.035)	(0.078)	(0.039)	(0.055)	(0.093)
Constant	3.070**	-1.949	-4.490***	2.574	-1.562
	(1.336)	(2.892)	(1.439)	(2.051)	(3.390)
Observations	440	377	377	373	365
Number of id	313	277	277	275	269

Note: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

6 Conclusions

In this paper, we have analyzed the impact of a program aimed to increase parents' awareness of the time investments in educational activities with children aged 0-6 and their reported opinion on childcare and its use as well their opinion on the impact of TV and other digital devices.

Parents do not seem to increase the number of activities in which they engaged with their children. However, we have to consider that the questionnaire was administered immediately after the course, parents and children were weekly spending time together during FA.C.E. meetings. For this reason the absence of a decrease in the other activities could be considered a good signal of the impact of the program

As far as the use of childcare is concerned, on one hand, for those families with the intention to enroll children in kindergarten, we observe that all parents recognized the importance of attending it in the child's development for learning and socializing even before the intervention. What changes, it is the awareness that childcare care services are a support to working parenting too who can work longer hours. On the other hand, children already enrolled in kindergarten had a higher attendance rate.

Finally, after FACE, it is less likely that the child uses tablets or smartphones for more than an hour a day. Parents indeed do not believe that tablets and smartphones are good tools for learning. whereas they recognize the potential of the TV as a potential tool for learning. They are more likely to watch at least a cartoon together with the child during the week.

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