THE EFFECTS OF THE LOCKDOWN ON CHILDREN: AN EMPIRICAL ANALYSIS ¹

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Abstract. The two years of the pandemic, with a series of alternating lockdowns, have certainly influenced the neuro-cognitive development of each of us; even more so the growth of the children who experienced this sad period in a delicate and important moment of their lives. The resulting consequences will be able to be observed and studied in the future, when these now grown children will be able to express their fears, insecurities and everything that has been conditioned by a past that will only be a memory, perhaps to joke about or remember fondly. Meanwhile, in this work we wanted to outline a micro-investigation at a local level to test a possible cognitive-behavioral questionnaire on the evolution of educational and pedagogical processes. The numbers are small, but this moment could be useful to imagine a larger scale investigation using a much larger panel.

1. Introduction

The effects of the pandemic have not yet been fully explored, neither from an economic nor from a social point of view. In particular, children aged 0 to 3 years may have had a distorted view of the world, with consequences that will influence their current and future growth (Itard, 2007). Always attentive to the growth and education of the child, the Montessori Method pays particular attention to the environment and the effects that surrounding events can have on the child's education (Montessori, 2017a). Education, according to this scientific method, should start from the maternal womb so that the new-born's consciousness can develop in a complete and balanced way (Haines A., 2021, Eagleman, 2021). In particular, the possibility of a pilot project, carried out in an institute in Southern Italy where the Montessori method is applied, represented the determining element in the drafting of this work, not so much due to the small amount of data collected (only 44 interviews) but, above all, for evolutionary perspectives; an event that could count

¹ This article is the result of the coordinated work of both authors. In particular, however, paragraphs 1 and 3 are attributed to Iaquinta; to Abbruzzese paragraphs 2 and 4.

on an audience of around 7,000 children (and their families) spread across the entire national territory. Social analysis, although developed on small samples, represents a good method for investigating the evolution of people's behaviour, and in this case the opportunity is interesting because it has rarely been attempted to investigate how children react when faced with such changes. sudden, like the one suffered due to the Covid-19 restrictions. The sample size is typical of pilot surveys (Del Vecchio, 1995) and does not claim to have any statistical significance, but as already mentioned previously, has the sole purpose of probing into a study opportunity that could bring into its fold approximately 7,000 possible contacts.

2. The Montessori Method

Maria Montessori was: doctor, scientist, active feminist, anthropologist, educator, pacifist, traveller and tireless scholar. Presenting her as an educator would reduce her life and work, in honor of children, to a simple educational style; but she did much more. She loved to define herself as a "rigorous scientific researcher" intent on observing children in various occasions of daily life, without intervening, but only observing them in their "natural" movements, in their interests and needs (Mecocci 2019). Montessori's aim was neither to become an educator nor to invent an educational method, but to consider the child an integral part of the family, endowed with great potential which the adult must awaken through silent guidance, and which respects the principles of freedom and independence (Malloy, 2017).

His Method is considered revolutionary for three main reasons: the conception of the child (placed at the center of education and considered a "thinking being"); the importance given to the prepared and "tailored" environment; the role of the teacher, understood as a "guide", whose main role is to prepare the environment based on her observations (Gordon, 1995). In 1896 Maria Montessori graduated in medicine, with a thesis in psychiatry concerning the problem of hallucinations. Two years later, in 1898, at the Pedagogical Congress of Turin, she brought attention back to the education of children then defined as "abnormal" or "frenasthenic", for whom she took care of as a doctor. When the first "Children's House" was born, on 6 January 1907, in the infamous neighborhood of San Lorenzo in Rome, Maria Montessori was already known in Italy for her education, for her feminist struggles and for her commitment to children slows us down; so she decided to extend the experiment to able-bodied children too (Montessori, 2021).

In fact, the intent of the project was to redevelop the poor neighborhood of San Lorenzo, creating apartments equipped with toilets, electricity and water; to create a "home school" by entrusting the task of directing these special schools to Montessori,

given the commitment shown over the years in favor of children and, in general, the socially weak and inferior groups.

Montessori, with her Method, indirectly implemented a revolution in the educational field; in particular with the concepts of "absorbent mind" (Montessori, 2021) and sensitive periods (Montessori, 2017b) make a solid contribution to pedagogy. From 1910 M. Montessori decided to abandon medicine and dedicate herself completely to education, organizing various courses to prepare teachers, studying and expanding scientific research regarding the liberation of childhood. He traveled the world where, in the meantime, numerous nursery schools and Montessori schools sprang up.

Today Montessori nursery schools and nursery schools are now widespread (at a national and international level) in all continents, but there are conflicting opinions regarding the relevance of the Method and its effectiveness.

3. Territorial research

3.1. The fields of researcher

The opportunity for this research arises from the desire of a Montessori teacher, who, working in a Method school, decided to investigate the children's perception of the pandemic event. An event that unquestionably marked the experiential phase of growth of the typical users of these structures. As already mentioned previously, the prospect was to identify a sort of pilot survey in order to then be able to extend the data collection to the entire national territory, counting on an audience of over 7,000 possible users (D'Ovidio 2012). The questionnaire, however, had already been approved and therefore the summary results of this first analysis are affected by the choices made during the drafting of the questionnaire itself, being based on openended questions addressed to parents and/or those who take care of the children in the structure.

In this first phase, 44 questionnaires were collected, of which 41 were considered valid (Del Vecchio, 1995), aimed at understanding the perception that small users had during the period of forced closure imposed by the imminent pandemic that characterized 2020 and 2021.

The questionnaire, proposed with Google Forms, was made up of ten questions:

- eight multiple choice questions;
- two open-ended questions.

After generating the link, it was sent to parents of children aged 1 to 7 through social networks, such as Instagram and Facebook, and messaging apps such as WhatsApp and Telegram, starting from April 1, 2022, when the effects of the

closures were quite evident and the perception of young users was still very much alive, due to the various obligations that covered daily life in those times (masks, green passes, restrictions on access to shops, mandatory school closures, etc.).

After a few days of presence, 44 questionnaires were received, considered sufficient to incorporate some reports from the small users of the structure, covering approximately 85% of the users of the structure (52 children, of which 25 belonging to the nursery section and 27 to the school of childhood), although of these only 41 questionnaires were considered valid, therefore with a user coverage that falls just under 80% (Viola, 2005).

3.2. The structure of the questionnaire

The questionnaire, as already mentioned, consisted of 8 multiple-choice questions and 2 open-ended questions.

Even the multiple-choice questions, however, did not provide for a range of possible answers, but left users with the possibility of describing the proposed discriminations with their own adjectives and nouns. The result was the need to use a textual analysis technique with a spectrum of opinion in order to understand the quantitative meaning of the answers (Fabbris, 1997).

While keeping in mind the operational difficulties of this technique, it was thought that leaving the interviewees free to respond could have returned more pervading sensations of reality.

In any case, the questions posed to the users of the facility (their parents) were as follows:

- 1) Had the child sensed the spread of the virus?
- 2) What was the child's reaction to the news of the lockdown?
- 3) How did you explain the virus to the child?
- 4) How did you justify the school closure?
- 5) How long did it take for the child to want to go back to school?
- 6) How long did it take for the child to actually return to school?
- 7) During the lockdown how much time did the child spend in front of the TV?
- 8) During the lockdown, how much time did the child spend in front of tablets, PCs, smartphones?
- 9) In your opinion, what were the consequences deriving from the pandemic crisis in your child (short and long term)?
- 10) How did the child react to the news of going back to school?

3.3. First processing results

A first summary descriptive analysis (Iaquinta, 2018) highlights how over 50% of the children had understood the situation that was being created when the pandemic spread and only ¼ of them had arrived unaware of everything at the time of the imposition of the total block which took place at the beginning of March 2020.

It was not easy to find adequate and suitable words to explain the virus to children, many families tried to make it concrete such as:

- An invisible monster;
- · A big bad germ;
- A little being that if touched or inhaled could cause discomfort to our body.

Unfortunately, the lockdown (imposed in March 2020) forced both families who decided to reassure their children and those who preferred to keep them in the dark to become aware of the reality.

Figure 1 – Did your child sense the spread of the virus?

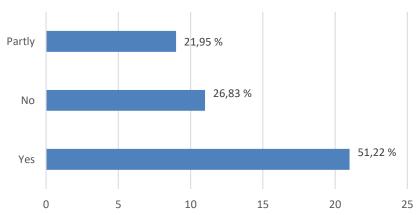


Figure notes. our elaborations on questionnaire data

That "home" environment has become the fortress of each of us, a protection from the virus, a "sacrifice" to be able to "feel well" and return to school soon. Thus, in a "fertile" moment of growth and interest, children were forced to stop and, indirectly, to give up moments of socialization, play and sharing. Upon hearing the news "today the school will be closed" and when faced with "why", many families, as emerged from the investigation, simply told the truth. When schools were completely closed,

children were initially happy but soon this illusion of freedom from school constraints turned into a "prison".

Once they understood the situation, the children reacted differently. In order to classify and have a minimum amount of feedback regarding the responses received to the questionnaires (which presented the most disparate responses) we operated manually by classifying those responses that could be defined as positive (spending more time with the family, being able to play more freely, etc.) from those that presented a negative impact (not being able to go to school, worrying about illnesses, not being able to play with classmates, etc.), and, finally, by those that denoted an absolute sense of indifference to the situation.

Figure 2 – What was your child's reaction to the news of the lockdown?

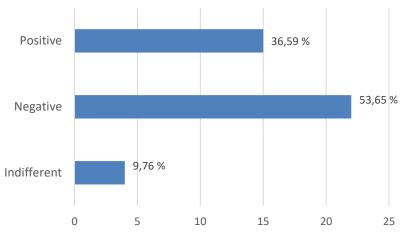


Figure notes. our elaborations on questionnaire data

As can be seen from the data in Figure 2, over half of the children showed a negative attitude towards the lockdown event.

Once they understood that the lockdown would somehow affect their habits, it took the children some time before they began to show the typical intolerance of childhood. An interesting measure of the child's distress can be identified in the time between the start of the total closure and the request to return to school.

Also, in this case, given the heterogeneous quantity of responses, a reclassification was carried out, obtaining a grid of possible responses that varies from a few days to a few weeks and is monthly in size.

From the results of the responses it emerges that almost 3/4 of the interviewees expressed the desire to return to school within a few weeks.

Figure 3 – *After how long did the child want to go back to school?*

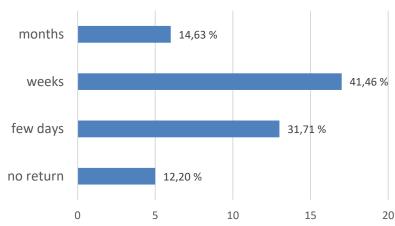


Figure notes. our elaborations on questionnaire data

Among the most interesting topics that can be explored in more detail from the proposed questionnaire is, certainly, the management of the time spent by children in the new domestic dimension imposed by the lockdown.

One of the most recent pedagogical problems is given by the excessive use of electronic devices (PCs, Tablets, Smartphones) and television.

The most frequent mistake found in families is the belief that the use of technology in childhood is sufficient for growth (Fogassi, Raniero, 2019). In reality, disproportionate use can be counterproductive if not even limiting in their growth. Time is one of the aspects underestimated by parents, in fact the research showed that approximately ¾ of the children spent more than two hours a day in front of the TV and more than 3 hours using electronic tools, a precious and important learning time in this delicate growth phase. The parents themselves underlined the abuse and the repercussions, as will be seen better later, that the pandemic crisis has had on the educational path of the interviewees. This is not intended to imply a refusal to use technology in education, but rather an invitation to reflect on the educational purpose and the appropriate age to introduce these devices. The brain, in early childhood, is not ready to welcome certain stimuli, consequently they interfere with brain development. There are very conflicting opinions regarding the appropriate age for their introduction, scholars recommend around 6-8 years of life (Valle, 2017). In this regard, Montessori considered the first six years of life fundamental for balanced and

healthy growth, free from negative influences but open to exploring the world through real and concrete experiences. Hence the importance given to the use of the hands and the development of the senses.

Figure 4 – In your opinion, what were the consequences deriving from the pandemic crisis in your child (short and long term)?

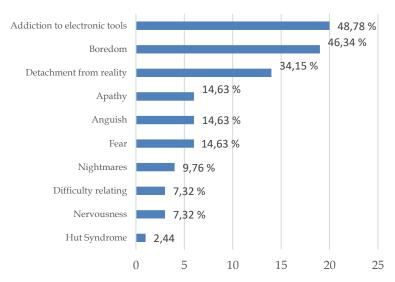


Figure notes. our elaborations on questionnaire data

The consequences of the pandemic have been multiple, both in the short and long term. The greatest enemy, as mentioned previously, for approximately 46% of the subjects interviewed was boredom, which they attempted to overcome by resorting to the almost spasmodic use of electronic instruments, which however resulted, as a consequence, in the acquisition of period of dependence.

Fears follow, with almost 40% (the children have started to be afraid of being alone, as well as moving independently) and around 35%, they have suffered a detachment from reality. This is followed by a lower percentage, around 10-13%, but this should not be underestimated, with consequences such as: anguish; nightmares; apathy; eating disorders. In fact, around half of the subjects interviewed developed negative situations in experiencing the closure period, an event which certainly had a strong influence on the growth of the children (especially the youngest) and which will almost certainly have repercussions on their future educational path, when they become teenagers.

Нарру **5**6,10 % Enthusiastic 36,59 % Fearful 26,83 % Melancholy 17,0... Scared 7,32 % No reaction 4,88 % Curiosity 5 10 15 20 25

Figure 5 – How did the child react to the news of going back to school?

Figure notes. our elaborations on questionnaire data

The end of the lockdown obviously triggered the reaction of the young school users, who in almost 90% of cases expressed positive feelings towards the reopening of schools, (Isaacs, 1982) also linked to the end of isolation and the possibility of seeing their classmates again. game. Only a quarter of the children showed moments of negativity, most likely due to the previous school situation, thus demonstrating a pre-existing discomfort.

4. Conclusion

The last twenty years have been characterized by a slow abandonment of childhood; the most alarming fact is that this topic seems to be of less and less interest to the institutions, no one deals with it and no one cares to do so. Not only does the State appear indifferent to the education of children (especially under 3 years old), but the recently enacted laws seem to have been created specifically to further limit their growth. Just think of the October 2017 circular in which the Ministry of Education obliged school staff to hand over children and young people to their parents or a responsible adult. Especially for children aged 11 to 14, this security has become a real limit since they have been denied the possibility of becoming autonomous, responsible and independent.

Today, at least in Italy, we can say that, in addition to childhood, we have also lost children, that is, children have left the collective imagination, losing their social relevance. Children are seen as a burden and a "management difficulty" to worry about, parents are not helped, nor supported and supported in the education of their children, furthermore society does not seem to notice the absence of children in public places. Pedagogical support, which educates them and informs them about their child's growth, would probably make the parent's difficult task less complex.

The state, on the other hand, further burdens parents with even greater burdens, creating laws tailored to every situation in which parents could endanger their children. With the result of making them doubt even more - as if there was any need today - of their own abilities. Think of the law on life-saving child seats born following various episodes in which children were forgotten and helped by their parents, busy with their occupations and work worries. The State has therefore decided to make these seats mandatory so as to be able to intervene in the event of involuntary abandonment, through a connection with an App programmed to send a message in the event of "forgetting" your child in the seat.

All of this is an alarming sign that indicates a fracture in the relationship between child and parent, a fracture that is also evident in school. Educators and teachers, in fact, complain about requests from parents that border on the absurd:

- "try not to paint it today, otherwise it will get dirty!";
- "don't let it come out if you use chalk!";
- "avoid washing, otherwise you'll get wet!";
- "don't give him the salty pasta, who knows he'll eat it!"
- "don't let him run today, otherwise he will sweat".

Requests that are unlikely to be fulfilled, given that the protagonist in question is always the child, whose aim is to grow and learn in freedom!

References

DEL VECCHIO F., 1995. *Scale di misura e indicatori sociali*. Bari: Cacucci Editore D'OVIDIO F. D., 2012. *Elementi di statistica per la valutazione dei servizi*. Padova: CLUEP.

EAGLEMAN D., 2021. L'intelligenza dinamica. Milano: Garzanti.

FABBRIS L., 1997. Statistica multivariata, Analisi esplorativa dei dati. Milano: Mac-Grow-Hill.

FOGASSI L., RANIERO R., 2019. *Maria Montessori e le neuroscienze. Cervello, mente, educazione.* Roma: Fefé editore.

GORDON T., 1995. Insegnanti efficaci. Firenze: Giunti & Lisciani editori.

HAINES A. 2021. *Maria Montessori Lezioni da Londra 1946*. Perugia: Il leone verde.

IAQUINTA P., 2018. Esercizi di statistica descrittiva. Bari: L'Arco e la Corte.

ITARD J., 2007. *Il fanciullo selvaggio dell'Aveyron... cresciuto nei boschi come un animale selvatico*. Roma: Armando Editore.

ISAACS S., 1982. Il valore educativo della scuola materna. Brescia: La scuola.

MALLOY T., 2017. *Montessori e il vostro bambino*. Roma: Edizioni Opera Nazionale Montessori.

MECOCCI M., 2019. Narrare il vero. Perugia: Terra nuova edizioni.

MONTESSORI M., 2017a. Educare alla libertà (1949). Milano: Mondadori.

MONTESSORI M., 2017b. La mente del bambino (1949). Milano: Garzanti.

MONTESSORI M., 2018. Come educare il potenziale umano (1947). Milano: Garzanti.

MONTESSORI M., 2021. Educazione per un mondo nuovo (1946). Milano: Garzanti.

VALLE M., 2017. *La pedagogia Montessori e le nuove tecnologia*. Torino: Il Leone Verde.

VIOLA D., 2005. Valutazione della qualità e customer satisfaction nei servizi di pubblica utilità e nelle imprese. Bari: Cacucci.

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