How does technology impact the relationship between Gen Alpha and sports in France?

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INTRODUCTION

In the late 19th century, during the Industrial Revolution, organised physical activities began to emerge in Europe as a response to urbanisation and the sedentary nature of modern life, with people having more time to dedicate to physical activities. In France, physical education was introduced into the schools in the late 1800s, recognising the importance of physical health for the growing population of urban youth. Over time, physical activity became a key component of child development, contributing to not only physical well-being but also to social and emotional growth.

In the past decade, the proliferation of digital devices has significantly transformed the daily lives of children and adolescents across the globe. From smartphones and tablets to gaming consoles and smart TVs, screen-based activities have become an integral part of childhood and adolescent experiences. In France, like in many other developed countries, children are increasingly immersed in a digital environment where educational, recreational, and social interactions often take place through screens. While these technologies offer numerous benefits, such as many learning opportunities, social connectivity, and entertainment, they also raise concerns about their impact on children's physical health and well-being, particularly in relation to sports and physical activity. The increasing reliance on screens among children coincides with growing public health concerns regarding sedentary lifestyles and physical inactivity. Sports and physical activities, traditionally seen as essential for healthy child development, play a critical role in mitigating these risks by promoting physical fitness, enhancing social skills, and fostering emotional well-being. However, as screen time increases, the time children dedicate to physical activities may decrease, potentially altering their relationship with sports and outdoor play.

Therefore, we thought this research paper was an opportunity to give some answers to those questions. This paper seeks to explore the relationship between screen time and children's sports participation in France. Specifically, it investigates how different levels of screen exposure can influence children's engagement in organized sports, unstructured outdoor play, and overall physical activity. The study focuses on the perspectives of both children and their parents to provide a comprehensive understanding of the factors shaping this relationship. By examining the role of parental regulations, peer influence, and socio-economic factors, the research aims to identify patterns that may explain the observed behaviors and trends in screen time and sports participation.

This research is timely and relevant in the context of post-pandemic recovery, where screen usage surged due to remote learning and social distancing measures. Understanding how screen time interacts with sports participation can help policymakers, educators, and parents develop effective interventions to promote healthier lifestyles for children. By examining the French context, this study also sheds light on cultural and social factors that may influence children's relationship with screens and sports, offering valuable insights for both national and international audiences.

METHODOLOGY

The methodology section of this study outlines the research design, data collection methods, and participant recruitment to explore how screen time affects children's participation in sports in France. For this study, we employed a mixed-methods approach, combining qualitative interviews with quantitative survey data. The interviews, conducted with parents and children from various age groups, provide in-depth insights into individual experiences, family dynamics, and parental strategies for managing screen time. The survey, which gathered responses from 42 parents across different regions in France, offers a broader perspective on screen usage, sports participation, and parental perceptions of the impact of screens on physical activity, and also allows us to observe trends and general patterns. By integrating the two methods, we overcome the limitations of each approach. For example, the survey alone might show that children who spend over 3 hours a day on screens are less likely to engage in sports, but it would not explain why this happens. The interviews fill this gap, revealing that some parents attribute this change to the addictive nature of digital devices, while others cite the influence of peer pressure. Conversely, the interviews alone would offer detailed perspectives but lack the generalizability needed to make broader conclusions.

1. RESEARCH DESIGN

The study employs an explanatory mixed-methods design. This design is particularly useful for research questions that require an in-depth understanding of social behavior as well as quantifiable trends. By integrating qualitative and quantitative methods, we aim to produce findings that are both rich in detail and generalizable to a broader population.

- **Qualitative Data:** The purpose of the qualitative component is to explore the lived experiences of parents and children in relation to screen time and sports participation. By using open-ended questions during interviews, we can capture the subtleties of family routines, parental control strategies, and children's changing attitudes toward sports.

- **Quantitative Data:** The survey provides a larger sample size and allows us to quantify the relationship between screen time and sports participation. By collecting responses from 42 parents, we identify key trends and correlations, such as how the frequency of sports participation changes as screen time increases.

2. DATA COLLECTION METHOD

- *A.Qualitative interviews:*

Participants: Eight interviews were conducted with parents and children from a range of age groups (5 to 14 years). The interviews were semi-structured, allowing for open-ended discussion while also ensuring that key topics were addressed.

Interview Questions: Questions focused on topics such as:

- Children's daily screen time usage.
- Parental strategies for limiting screen time.
- Children's participation in organized sports and unstructured physical play.

- Observations of changes in behavior after the introduction of screens in the household.

Why did we use Interviews?

The decision to conduct interviews was based on the need to capture personal, lived experiences. Interviews allow participants to provide rich, descriptive data that cannot be captured in a survey. For instance, one parent shared how her child lost interest in football after being given a gaming console, which provides insight into the causal mechanisms behind the observed trend.

- **Quantitative survey**

Participants: 42 parents from different regions in France were recruited to complete a structured survey. The survey was distributed online to ensure accessibility and increase the geographic diversity of the research (*the exact questionnaire is in the Appendix).*

Why did we use a Survey?

The survey was used to obtain quantitative, generalizable data on the relationship between screen time and sports participation. The survey allowed us to identify correlations, such as the percentage of children who participate in sports and the frequency per week, based on their daily screen usage. Unlike interviews, which offer qualitative insights, surveys provide statistically significant patterns that support broader claims.

3. **PARTICIPANT RECRUITMENT**

Participants were recruited through online advertisements shared in parent groups, community forums, and school networks. Care was taken to ensure the sample was diverse in socio-economic status and regional representation, allowing for a more comprehensive understanding of how socio-economic factors influence the relationship between screen time and sports.

I. DIFFERENCES ACROSS VARIABLES

To ascertain if the average time spent on screens daily and on sports weekly varied between different genders, ages, and cities, the mean result of each survey question was calculated and compared to one another.

a) Examining the role of gender

These results were based on 42 participants (22 boys and 20 girls). The results are tabulated in table 1. Boys and girls spend the same average amount of time on screens daily. However, boys spend slightly more average time playing sports per week than girls.

Table 1
Gender Differences: Means, (Standard Deviations)

	Gender	
Item	**Boys**	**Girls**
Average time spent on screens daily (hours)	1.2 (0.7)	1.2 (0.27)
Average time spent on sports per week (hours)	3.64 (7.2)	3.2 (5.96)

These results can be explained through the process of socialization. Socialization, as explained by Bourdieu, specifies that it is a process of internalization of norms (Bourdieu). In the case of gender, in early childhood, girls are often taught that they are not meant to play sports, whereas boys are taught to like sports. Therefore, boys spend more time playing sports per week than girls. However, considering that screens are both a relatively new technology and that screens themselves do not cater specifically to male or female stereotypes (although the content on the screens may), there is consequently no process of socialization for screens. Therefore, boys and girls spend the same average time on screens. Regardless, in the case of gender, screen time does not seem to negatively impact time spent on sports.

b) Examining the role of birth year

These results were based on 21 children born between 2010 and 2015, and 21 children born between 2016 and 2019. The results were not classified according to each different year (2010, 2011, .., 2019) because there were too few results to be able to do so. For example, there were only two responses for 2010, and three responses for 2019. Had the classification been done by each birth year, statistical outliers would have easily been able to skew the results. Consequently, by classifying the birth years into distinct periods of birth years (2010-2015; 2016-2019) that were also equal in response amount, we were able to avoid having statistical outliers greatly influence the final results. Moreover, the split in 2016 means children born then or before will be at least 8 years old, which is typically the youngest age when puberty starts (Herman-Giddens), which can have an impact on both screen time and sports. The results are tabulated in table 2. Older children spend more average time on both screens daily and sports weekly.

Table 2
Birth Year Differences: Means, (Standard Deviations)

	Birth Year	
Item	**2010-2015**	**2016-2019**
Average time spent on screens daily	1.38 (0.55)	1.05 (0.35)
Average time spent on sports per week	4.24 (8.39)	2.62 (3.55)

These results can be explained through autonomy and puberty. As children get older, they become more responsible (Fincham & Jaspars) and go through puberty. Consequently, children gain more autonomy, as parents trust them to be able to handle devices by themselves. Moreover, parents give these older children their own screens, which inevitably increases the children's screen time usage. For example, in an interview conducted during our research, a parent noted that they planned on "g*iving their child their first personal screen around 13/14*" (Parent 2). Indeed, prior to children getting their own screens, their screen time is often restricted. For example, another parent stated that there was a "*restriction of screen time: limited on weekends*" (Parent 6). Additionally, because of the secondary socialization (Bourideu) they go through in school, they make friends, and often spending time with friends involves video games. For example, a parent told us that "*recently, he has been asking more and more because his friends have PlayStation*" (Parent 5). Consequently, it is logical that older children spend more time on screens daily. Moreover, they also spend more time playing sports because they start developing themselves physically, often going from leisure to competitive sports. Thus, in the case of age, screens do not seem to negatively affect time spent on sports per week.

c) *Examining the role of location*

These results were based on 8 participants in Reims, 12 participants in Epernay, and 13 participants in Castanet-Tolosan (33 participants). Although our total respondents amounted to 42, only 33 respondents were taken in this case because the other participants came from different cities, insufficient enough to take into account. For example, there was only one respondent from Nancy. Thus, we took the three largest cities in which parents had their children enrolled in school. The results are tabulated in table 3. The bigger the city, the more time is spent on both screens and sports.

Table 3
City Differences: Means, (Standard Deviation)

	Item	
City	**Average time spent on screens daily**	**Average time spent on sports per week**
Reims	1.5 (0.29)	6.38 (6.84)
Epernay	1.33 (0.61)	2.33 (4.24)
Castanet-Tolosan	1 (0.5)	2.69 (3.06)

These results can be explained by environmental factors. Since Reims is the largest city out of the three, there are more opportunities to play sports in Reims than in Epernay or Castanet-Tolosan. Moreover, Reims has more economic capital than Epernay or

Castanet-Tolosan because of its urban structure, which acts as a shared center for all sorts of activities (Godechot), leading to greater access to devices such as TVs and computers.

Overall, birth year and city affected screen time, and gender, birth year, and city affected sports time. It is important to note that average time on screens never varied too much for a given participant group. Indeed, for the average time spent on screens daily, the data are clustered tightly around the mean each time, as evidenced by the standard deviations that are under one every time. However, for average time spent on sports per week, data are more spread out and the results vary widely for a single participant group, which often led to erratic results in a smaller sample group. For example, the standard deviation for average time spent on sports per week is always above three. This demonstrates that screen usage has become a normalized phenomenon that does not depend on environmental factors; indeed, whereas time spent on sports can often depend on socioeconomic background and location (Stalsburg & Pederson), and is often restricted to certain characteristics (such as basketball and height), screen time is nowadays a fundamental aspect in our lives that, for the most part, does not exclude any population from using it.

II. RELATIONSHIP BETWEEN SCREEN TIME AND SPORT ACTIVITY

Based on our empirical survey and on our interviews, we must now focus on the relationship between the amount of time spent on screens and the one dedicated to sportive activity by Gen Alpha.

a) Survey result correlation

Based on the answers provided to our empirical survey, we are able to observe if there is a clear correlation between the time spent on screens by the respondents' children and their sportive activity. In order to investigate this, three questions of the survey were asking the estimation of: the average daily time spent on screens, the average weekly time dedicated to sport out of school and the average weekly time dedicated to sport in schools (to be noted: no distinction is made between time spent on screens in and out of school as we estimated that the children concerned by this research are not exposed to screens enough in the school time).

Relevant data to consider is the number of screens owned by the children and the number of sportive activities he practices. For this, two questions from the survey provided us information: "Does the child have one or more screens ?" (answers possible being "One","Several","None") and "Is the child practicing a sportive activity ?" (same answers possible). Crossing the results of these two questions allowed the drafting of this second table:

This table gives the general percentage distribution (all years of birth taken into account) of the number of sportive activities practiced (one, several or none) by children having one screen, having several screens or having no screen.
For example, in children possessing one screen, 55,56% practice one sportive activity, 33,33% practice several sportive activities and 11,11% don't practice any.

Percentage distribution of the number of sportive activities practiced based on the number of screens owned

Number of screens	Number of sportive activities practiced		
	One	Several	None
One	55,56%	33,33%	11,11%
Several	18,18%	54,55%	27,27%
None	42,11%	52,63%	5,26%

Looking at each case's extremum, we observe that the lowest percentage of children not practicing any sportive activity is for the children not possessing any screen (5,26%). The highest percentage of children not practicing any sport, however, is for children possessing several screens (27,27%). However, children possessing several screens also present the highest percentage of children practicing several sportive activities (54,55%) closely followed by children not owning any screens (52,63%). For the children possessing only one screen, results are more balanced as they have the highest part of children practicing one sport (55,56%) but the lowest in children practicing several sportive activities (33,33%) and are in-between the two other categories for the percentage not practicing any sport (11,11%).

What is relevant to notice is that we can still notice a correlation between the possession (or not) of screens and the practice (or not) of sportive activities. It seems that children having several screens are more likely than others to practice no sport, while children not having any screen on their own are less likely than others to not practice any sport. We can think that it is because possessing more screens means spending more time in it and so dedicating less time to sport. It would mean that if the average time is balanced between screens and sportive activities, it is because children having no screens counterbalance children having several screens in terms of time spent practicing sport and the contrary for time spent on screens. The high percentage of children possessing several screens and practicing several sportive activities nuances this idea and forces us to admit that if the possession of screens is a clear factor of the variation of children's sport practice, there may exist other factors influencing it. Screen time can be studied as an element explaining the time dedicated to sport; however, we must not overvalue it as the main and only element and stay open to other parameters that may enter into account.

Now, to link these results with the interviews made of six parents on which we will come back more profoundly later: Parent n°1 reports "*no particular impact of screens on the sport practice" of his children but observes that "since he [his son] stopped sport practice [soccer], he is more on screens*" bringing an interesting approach to our study of correlation, raising that, according to this parent, screens do not influence directly the sport practice but present an alternative to it chosen by the children. Parent n°5 raises another interesting parameter, the influence of peers on the children's demand. She says, "*recently, he has been asking more and more because his friends have PlayStation*". Finally, parent n°6 confirms the observation made earlier according to the survey's result by insisting on the fact that his children are registered to extra-scholar activities, making their sport practice regular. Thus, parents' interviews bring to this research for correlation elements that we could not observe through the empirical data and seem to introduce another trend not observed in the two tables, which is the growing demand

for screens as the children are getting older. This is what comes out from the six interviews from which these three examples are taken but also from the last questions of the survey with open answers. At their age, children are still limited in screen time per week but are asking for more as screens are entering their everyday life and their peers' one.

b) Contextual limitations

Elements of contextualization must be brought to these results not only to present their limits but also, to some extent, to explain partly the trends identified in the Gen Alpha.

A first element of nuance is that children in the age limit studied are still under a parental (or equivalent) authority that can impose regulations on both activities. Indeed, some parents voluntarily added in the survey answers that the use of screens was limited for their children, but as it wasn't part of the questions asked, we cannot analyze it or include it in the influential parameters in our study.

It is also important to note that, and it often arose from the interviews, primary and secondary children are usually registered to a sport class outside of school, introducing a regularity of sport practice and so imposing a certain amount of time dedicated to sport in the week. We can certainly assume that it is not the case for screen time. Moreover, on sportive practice, it has to be noted that a recent decree was voted on the 31st of May 2024 implementing a program linked to the 2024 Paris' Olympic Games and aiming to increase the sport practice of children during the school week but also out of school. It contains measures as financial help to register children in sport associations (extension of the program "Pass'Sport") but also the implementation of 30 minutes of school per day in primary school and the addition of 2 hours to sport practice in secondary school. This public policy was presented by the government as a way to fight against children's sedentary lifestyle and is therefore linked to our study. This leads us to question our results. As it was said, the average time of sport combines both extra-scholar activities and in-school practice. Consequently, when we observe a balance of this sport with the screen time, it means that children spend as much time on screens per day as they do practicing sport both at school and out of school. Seen from this perspective, the screen time appears as significant and relevant.

Another nuance concerning the time spent on screen is that all the data collected and used to draft the table is based on the parent's estimation and can therefore be either underestimated or overestimated. We can assume that parents did not answer based on the real screen time indicated by their children's smartphones or tablets, adding to the fact that younger children are more likely to use a diversity of devices, whereas older teenagers are usually more and more centered around a smartphone and a computer (even for video games). Thus, the observation may not be as representative as it could be with the official screen time. But it is still interesting to observe the parent's estimation as a fact in itself and so to analyze it as data as it was done earlier.

c) Relevant future research : students, screens and sport

And this leads us to potential future research going beyond our age limit, studying French students' (higher education) relationship to screens and sport. In this case, screen time would be easier to collect. Thus, it would also be interesting to think about what time would be relevant

to take into account, as the situation is the contrary of children with screen time divided between scholar and non-scholar use of screens while the sport practice becomes mainly an extra-scholar activity. Additionally, students are less likely to be registered in a sport club or association, and therefore, the study would be based on the students' estimation of their own sport time. Of course, other parameters would have to be taken into account to explain the sport practice (or not) of students as they spent, for instance, more time studying than young children. Scientific and statistical studies have already been done on both students' sedentary lifestyles or sport practices and their exposure to screens. But almost no sociological research has been already published linking both as this paper aims to do about the Alpha generation.

Finally, what this broad presentation of a possible research study shows us is that the limitations encountered for this study would be found elsewhere in studying older students.

III. INSIGHTS, CHALLENGES, AND THE GROWING ROLE OF SCREENS

a) Parental interviews and perceptions of weekly time spent on screens and sports

To gain a deeper understanding of screentime's impact on children's practice of sports, it is necessary to complement the quantitative analysis with a qualitative one. Based on 8 interviews conducted with parents in varied locations and contexts, this section aims at analysing parental impressions of their children's weekly activities, and a possible impact of screen time on it. It is important to point out the relevance of parents' insight as they are the primary authoritative figures in children's lives and so the ones setting boundaries, rules, and organising the time spent on screens and playing sports. They can thus directly observe their children's behaviours and routines.

The interviews were conducted over 2 days :

- Day 1 : in front of the public elementary school "Tournebonneau"
- Day 2 : in front of the public elementary school "Ruisselet" ; in front of the private elementary school "Notre-Dame" ; in front of a music school ; in front of a supermarket

The interviews took place between 4:30 pm and 6:15 pm, coinciding with the end of school day, in order to approach parents at school dismissal and extra-curricular activities hours.

Turning to the analysis of the interviews, regarding screen ownership and usage, most children receive personal screens at the beginning of middle-school (11-13 years). Although, concerning shared technological devices like TVs, the children seem to have access to it much earlier. For example, in interview number 3, the mother explained that her 2 children (12 & 14 years old) spend up to 4 hours daily on screens (TV, video games) : *"4 hours a day while being careful".* Showing a high usage of technological devices. On the contrary, in interview number 2, the father explained that his 3 young children have no personal screens, but they do have access to the TV. However, he limited this access to TV only on Wednesdays and Saturdays, demonstrating a low usage of technological devices with structured access.

These results highlight the importance of parents' limitations on screen time. The mother of interview 4 talked about her 14-year-old daughter and how she initially regulated her child's phone usage when she received it at 11 years old, but this relaxed over time (even after she transitioned to social media a year ago). Similarly, the mother from interview 5 does not know

how to act concerning her young child's demand for a technological device, and consequently expressed her concerns. When talking about her 8 year old son, she revealed that *"recently, he has been asking more and more because his friends have PlayStation"*. She refuses any access to the phone before middle-school but does not know if she should limit his access to video games.

Most parents in the interviews did not point out a direct impact of their children's screen time on their sports practice. For the majority, it is because they regulate both screen time and the amount of time spent on sports. Nevertheless, certain parents did remark that since their children stopped practicing sports, they spend more time on their phones (this being linked to the age growing or stopping sports).

"No particular impact of screens on their sports practice, but on the other hand, since they stopped playing sports, they spend more time on screens!" explained the mother of interview 1, talking about her 2 sons of 11 and 8 years old.

Similarly, this is reflected in interview 6 : *"It's true that he spends more and more time on the phone"* expressed the mother of an 11-year-old boy who used to practice both tennis and football but stopped the latter one.

Overall, the interviews revealed that while screen time does not appear to directly replace sports activities, it certainly occupies a significant portion of children's free time, especially as they age. Moreover, the parents' role as regulators is highlighted, and their level of strictness may be influenced by factors such as their personal beliefs, the child's age, the number of children they have or social pressures. However, even if the parents' insights were valuable, they were subjective. Indeed, these are perceptions rather than direct measurements.

b) Obstacles and limitations

Several obstacles were encountered that restricted the generalisability and depth of the findings. Starting with the relatively small sample size. Indeed, 42 survey responses constrained the ability to draw broader interpretations. Moreover, the choice to study generation Alpha (children up to 14 years old) also presented challenges. At this age, the children's activities and habits are more structured and supervised by parents (known as concerted cultivation, as explained by Lareau). Moreover, the children may not own screens at all (this notably emerged from the interviews). Additionally, the findings revealed a less significant effect of technological devices on children's sports practice than anticipated, thus also constraining the possible interpretations. Similarly, a major significant obstacle was the presence of confounding variables. Indeed, there were multiple variables at play that could have impacted children's sports practice, making it difficult to isolate the direct and raw effect of technology and screen time.

The research methodology also posed important limitations. While surveys are highly valuable and interviews bring a qualitative, human perspective, they can also be inaccurate due to dishonesty. Parents might overestimate or underestimate their children's screen time and physical activity time, affecting the reliability of findings.

c) *Increased representation and promotion of screens*

A final point to conclude this study would be to emphasise the growing representation and promotion of screens in children's daily lives. Screens have become an expected and integrated part of children's routines. Even at school, screens are being used daily and have become educational tools in classrooms (tablets, computers, interactive white boards). As a result, children's attention is no longer captured by sports or outside activities but by screens, online platforms and video games.

This was notably encountered through discussions with parents during the interviews. For example, the mother from interview 5 explained *"recently, he has been asking more and more because his friends have PlayStation"*. Similarly, the mother from interview 3 noted that her son spent more time on his phone, and she thinks this is due to TV and commercials.

Children are following trends they see on TV but also the habits of their friends. If their peers are engaged in sports, they are likely to participate as a way to fit in. So the same works with screens : if their friends have personal screens, they are likely to want one too, seeing it as a way to connect and engage socially. Allowing children to discuss on and about games, apps, or online content with their friends, creating a sense of belonging in their social circles. This raises the question of what is the better way for children to integrate socially, through screens or sports. All of this reflects the growing presence of screens in people's daily lives.

CONCLUSION

In conclusion, technology has no single impact on the relationship between Gen Alpha and sports. Its influence is vast, shifting from a minor impact on some children to a major on in others. Indeed, experiences seem to be largely individual as opposed to general. However, some patterns and trends can still be drawn from both the interviews (qualitative) and survey (quantitative).

Beginning with the differences across variables, birth year and city both affected screen time; while gender, birth year, and city affected sports time. Boys and girls spend the same amount of screen time, but boys play more sports because of the socialization process (Bourdieu). Thus, gender has no distinct impact on the relationship between screen time and sports. Additionally, as children get older, they experience more screen time due to increased autonomy, such as getting their own screens. In parallel, older children spend more time playing sports as they develop physically and competitively. Therefore, birth year has no observable effect on the relationship between screen time and sports. Furthermore, larger cities experienced more time spent on screens and sports. Finally, as evidenced by the clustered data on screen time and the spread out data on sports time, screen usage has become a normalized phenomenon that does not depend on environmental factors; the time spent remains relatively stable across individuals. Indeed, whereas time spent on sports can often depend on socioeconomic background (Stalsburg & Pederson), screen time is nowadays a fundamental aspect in our lives that, for the most part, does not exclude any population from using it.

Moving on to the relationship between screen time and sport activity, a correlation can be observed between the possession (or not) of screens and the practice (or not) of sportive

activities. It seems that children having several screens are more likely than others to practice no sport, while children not having any screen on their own are less likely than others to not practice any sport. We can think that this is because possessing more screens means screentime, and thus less sports time. However, although screens influence children's sport practice, it is not the only variable, as examined in the interviews. It is important to note that some limitations apply to these results and interpretations. Notably, children in the age limit studied are still under a parental (or equivalent) authority that can impose regulations on both activities, which makes certain responses more difficult to analyze. Moreover, our sports time combined both extra-scholar activities and in-school practice. However, the implementation of 30 minutes of school per day in primary school and the addition of 2 hours to sport practice in secondary school make it so that children are forced to participate in sports. The results are thus difficult to interpret because the mandatory nature of school sports makes it impossible to assume that the children would not rather be using screens to fill their time. Finally, survey results were based on parental estimation, and can therefore be either underestimated or overestimated. Regarding future research, studying French students' (higher education) relationship to screens and sport would be relevant as they are in control of their own screen time (and thus their estimation may be more accurate) and sports participation comes from their own will.

Finally, regarding insights, challenges, and the growing role of screens, the interviews revealed that while screen time does not appear to directly replace sports activities, it certainly occupies a significant portion of children's free time, especially as they age. Moreover, the parents' role as regulators is highlighted. However, even if the parents' insights were valuable, they were subjective. Indeed, these are perceptions rather than direct measurements. Moreover, there were obstacles and limitations to the methodology. Primarily, the limited survey responses (42 responses) made it more difficult to interpret the results. Furthermore, concerted cultivation (Lareau) limited the screen time of the children. Additionally, screens had no significant effect on children's sports practice, limiting the ability to draw conclusions. Similarly, a major significant obstacle was the presence of confounding variables, which blurred the lines between correlation and causation. Lastly, emphasizing the growing role of screens in children's daily lives is primordial. Screens have become an expected and integrated part of children's routines, not only at home, notably through the influence of peers, but at school as well. This recent technological essentialism raises the question of what the best way to integrate children socially is: through screens, sports, or something else?

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APPENDIX

- **Survey Questions:**

1-Year of birth of the child

2010/2011/2012/2013/2014/2015/2016/2017/2018/2019/2020

2-Sex of the child

Man/Woman/I don't want to specify it

3-Institution in which he/she is educated

(Name of the establishment + city)

4-This establishment is:

Public/Private/Other

5-Does the child have one or more screens?

One/Several/None

6-If so, which ones?

Rudimentary phone (call and text only)/Phone/Computer/Tablet/Game console/TV in the room

7-If so, at what age did he get it?

8-If not, what screens does he have access to on a daily basis?

Rudimentary phone (call and text only)/Phone/Computer/Tablet/Game console/TV in the room

9-Is the child practicing a sporting activity?

One/Several/None

10-Which one

11-Average time spent on screens daily

- one hour/~1h/+ one hour/+ two hours

12-Average time of sports activity per week (excluding school time)

13-Time of sports activity in the school setting per week

14-Do you feel that screens have had an impact on your daily physical activity?

15-Do you feel that the screens have had an impact on the time spent on sports in the week?

16-Other remarks/observations to be sent to us: