Children’s Socialisation
The social development of children is a very important aspect of the growth process. It involves the formation and development of children’s independent personality, as well as the formation of a complete and positive understanding of the outside world (A. Fabes et al., 2002). It can be said that children’s social activities are as important as adults’ (Fabes, 2002). However, public events like lockdown caused by COVID-19 have artificially blocked the social life of children. When the children’s social circle is blocked, socialization cannot be formed smoothly in the critical age group, which will not only cause physical problems but also easily affect the children’s psychology. As adults, especially the role of parents, they often ignore the importance of peer circles to children, which leads to a series of problems.

Therefore, under this topic, I plan to treat the long-term blockade caused by COVID-19, the most current issue, as an entry point, and then look at the situation similar to the blockade brought by the epidemic, examining the negative emotions and psychological problems that children may have in short-term or long-term social isolation, as well as the subsequent impact of such psychological problems on children’s future behavior and daily life. It also includes research on the positive and negative effects of family factors on children’s mental health, and how to help children ease and avoid negative emotions during and after social isolation, helping them return to their social circle where they were forced to be ‘kicked out’.

BACKGROUND
TIMELINE

Stage Three: 8-week project
Desk Research
DESK RESEARCH

What is socialisation & its importance

Social actions such as activities and interactions have a positive effect on human emotions, especially in the childhood stage, which is a period when personal identity is being established and developed, and the trajectory of personal behavior is being finalized (Matthews et al., 2015). Whether it is possible to maintain good interpersonal relationships through social behaviors at this stage is particularly important.

However, due to an epidemic such as COVID-19 or lockdown caused by external reasons, pre-school and school-age children are forced to enter a long-term social isolation state. Leaving school and staying at home means they are out of the social bubbles with their peers (Drachler et al., 2009), which will be a blow to children’s mental health.

DATA ANALYSIS

Current situation around the world

Children leaving the social circle may hinder their social development. Then through the three sets of data, we can see that, in the current lockdown situation caused by COVID-19, the situation of affected children around the world is not optimistic.

The analysis of existing data can reflect the current grim situation and alert us that it is time to pay more attention to children.

At the same time, this set of data also made me pay attention to why 88% of children feel stressed.

60% of world’s children live in countries under full or partial coronavirus lockdowns

88% of children said that they had ever felt stressed

From January to May, only in Guangxi Province, China, there were as many as 46 incidents of teenage suicide or self-harm, this data increased by 60% over the same period last year

Online Data Resource: https://www.weforum.org/agenda/2020/05/covid-19-is-hurting-childrens-mental-health/
WHAT makes them feel STRESSED...?

**Relationship**
- with peers
- with parents
- with teachers
- of friends
- of family members
- of themselves

**Education**
- time arrangement
- grades
- money
- device
- opportunity to go back to schools

**Health**
- financial crisis
- food
- be forced to be grounded
- lack social activities

**Life**
- parents lost their jobs
- food
- money
- opportunity to go back to schools

Online Resource: https://www.childrenscommissioner.gov.uk/2020/04/03/angry-fed-up-isolated-coronavirus-and-childrens-mental-health/
CASE STUDY

The bidimensional comparison

In the case study, I used the time axis method to compare the three historical cases vertically and horizontally; they are: Harrican Katrina in 2005 (Franklinwallis, 2020), ‘Black Saturday’ bushfires in 2009, and Ebola in 2014 (Chavez, 2015), which can more intuitively show the similarities and differences in each event.

Looking back at similar public events that have occurred in history, we can find that their direct impact on children is very similar. All of them, without exception, stopped the children from attending classes and caused varying degrees of trauma to them both physically and psychologically.
What will happen during or after the COVID-19 in the UK?

I have made a hypothesis about ‘what will happen to children in the UK in the post-COVID-19 period?’

We can see through the data available until now, schools have been closed for at least 3 months and 4.7 million children have been out of school. Children in the UK will undoubtedly go through the plot after the hurricane, after the bushfires, and after Ebola.

Through the analysis, there is an important focus point that when disaster strikes, the biggest change to children’s daily lives is that they are forced to leave the scenario of ‘school’. The focus of their lives has changed from a social campus environment to a single and closed family environment (family environment means ‘stay at home’ or ‘stay with their families’). One end of the balance has almost been vacated, and the other end has been too heavy - the contradiction naturally appears here.

What I have found

Focus Point - The role and importance of ‘school life’

STAKEHOLDER MAP

Analysing stakeholders

I have summarised the stakeholder map and classified them according to the four major groups of children’s self-conscious growth and psychological construction. Each group plays a different role in the social development of children.

From the table, we can find that both the groups of parents and peers are included in the partner group cluster, which is also the two groups where children have the most contact and interaction in the normal daily social life.
Before entering the process of primary research, I was faced with an important choice, that is, the time span of the project not only includes the lockdown period, but also involves the resumption of work and school after lockdown. I have concentrated the target area in the UK, but during this period, the resumption of work and school is still a ‘future time’ for the UK. Fortunately, after June, the epidemic situation in Spain, China and some other countries has been under control, and the resumption of school has been carried out more comprehensively. It has been a while since the children returned to school. In comparison, the situation in China will be more helpful for me to understand the changes and feedback that the children have made after returning to school (this means children return to their social circle).

So Emma and I discussed this issue and I made a decision: researches and interviews could be conducted by Chinese interviewees (especially primary school teachers).

But this means that some problems need to be noticed and I need to adjust my strategy. First of all, if the interviewee group is based in China, the first issue I need to focus on is how to avoid the influence of cultural differences between the East and the West on my judgment. Because the research involves the two major social environments of home and school, the differences in concepts and behaviors caused by cultural differences cannot be ignored. If the interview is conducted rashly, there may be a phenomenon that some problems have a great response in China but not surprising in the UK. In response to this issue, what I did was to carefully design the interview questions and try to analyse more common situations, instead of focusing too much on the aspects that are more affected by the environment and the region.

Meanwhile, I also need to reorientate the direction of the project. What kind of project orientation and language expression can more accurately show what I want to achieve? What I want to do is to learn experience from countries whose unlocking process is faster than that of the United Kingdom, and apply them to similar situations that may occur in the United Kingdom and even in the future. Then in the subsequent research, I need to adjust the type and direction of the information I want to obtain.
First Round Interview

Question to explore:

WHAT changes have children made when they were isolated at home?
INTERVIEW - 01/02

Learn about the changes in children through interviews with parents

Mother A
8-year-old boy’s mother

- Child was unfamiliar with the online mode of class and learning efficiency was not high
- School requires children to exercise at home every day, but my son were not active. Prefer to play online games than doing exercise
- He often mentioned that he wanted to hang out with friends
- More time to watch current news

Mother B
12-year-old girl’s mother

- Became more attentive and often called grandparents to ask about their health, reminding them how to prevent epidemics
- The phone call time with friends becomes longer and the frequency becomes higher
- Topics shared with parents are not the same as topics shared with friends - there are some things like complaints that are more inclined to talk to peers
During the first round of interviews, I talked with two mothers, to understand the changes in language, behavior, and mentality of the children during the three months of COVID-19 lockdown. And from the perspective of parents to understand what they are most worried about after returning to school.

However, this step has not been that smooth. After finishing the interview with Mother A, I had a doubt: I have no children myself, and I am not a mother. Can I completely treat the changes and problems in children from the perspective of parents? Am I objective enough when asking questions and analysing data?

Emma helped me a lot. She asked me to look at this issue from another perspective: because I have not been a mother myself, I can be more sensitive and accurate to grasp the unusual points when facing some changes in children’s behavior and psychology. Conversely, parents may be easier to ignore the tiny and unusual details.

In the follow-up interview, I focused on how to break out of an overly subjective thinking mode and try to analyse the problem from a more objective perspective. Critical thinking shows its importance here. Before, I only focused on the information that I wanted to know or the information that could serve my project, but obviously what I need to do is not limited to negative information, but to understand the situation from both sides. Only when the two paths are parallel can I make my research results more complete, without being biased towards one side, which seems too purposeful and oriented.

So, at this stage, I adjusted the way I asked questions during interviews.
Children rely on news/social media for getting information. They have no self-judgment on the authenticity of the information, which will cause anxiety.

Children’s "screen time" have been increased.

Maintaining social interaction with families and friends is of great benefit to children who live at home for a long time, although the common practice now has been to interact through online video and telephone.
Second Round Interview

Question to explore:

HOW will these changes affect children's behavior and emotions?
After the re-opening of school, what behavior or performance change of children makes you feel…

**Engagement Tool**

1. Happy?
2. Unexpected?
3. Afraid?
4. Angry?

I added the *engagement tool* in the second round of interviews. I asked my interviewees to prepare four small pieces of paper and quickly write down their first impression of the four questions on the card within 5 minutes. After that, sorting the four cards according to their degree - the one with the most intense emotions is placed at the top.

Photo from: **Photographed and provided by interviewees**
I chose to add the **engagement tool** here because I found a **key problem** that is not conducive to the interview: when interviewing some non-professionals, even I have explained and shown the project direction in advance, they still subconsciously provided some information that has been polished. For example, when Mother A was answering my questions, she tried to modify and guide her answer in a positive direction all the time. She was unwilling to expose some negative aspects. I encountered a similar situation during the interview with Mother B. It can be seen that this is not an accidental phenomenon.

I think this is probably because that non-professionals have **different understandings** of the expressions and the angle of view of the problem from that of the researchers, and it is difficult for researchers to guarantee that every interviewee can maintain the same thinking dimension. So a simple engagement tool can alleviate the adverse effects of this issue to a certain extent, helping them understand the problem so that researchers can get more information they want to dig in a short time.
INTERVIEW - 04

Explore the effects of isolation on children's performance by interviewing teachers in China

**Teacher A**
Second-grade class teacher

- Children become more **blundering** when studying
- Children run and play more **madly** during break time
- To calm the children down to study, school held an **activity** named '21 Days to Develop the Good Habit of Walking', and it has had **some success**
- Children are **no longer afraid** of the 'authority' of the school and teachers

**Teacher B**
Third-grade class teacher

- Most of the children's **grades** have been **dropping**
- Some of the children become **bad-tempered** and begin to **talk back** to their teachers
- The number and frequency of **sick leave** has increased, with some children **feigning** illness to **avoid school**
- The bridge of **information** among parents, teachers and children has been **broken**
Third Round Interview

Question to explore:

WHAT is the problem when children need to go back to school?
Opinions of child psychologists and child education expert

Dr. Helen Dodd
Professor of Child Psychology at University of Reading

• It will be especially challenging if children are expected to remain 2 metres away from their friends.

• Compared with speeding up the learning process, allowing children to play or talk with their peers as soon as possible without social distance can help them rebuild diverse emotional bonds faster.

Dr. Jenny Gibson
Senior Lecturer in Psychology and Education at the University of Cambridge

• It’s easy to dismiss play as unimportant, but for children, playing with friends and classmates has a very significant impact on their social development.
Under normal circumstances, there are many people the child contacts daily, including parents, teachers, friends, and so on. But what happens after long-term home isolation? The child’s relationship network collapsed. Their connections with their parents have increased significantly, and the rest can only rely on electronic devices—their relationship network is unbalanced.
The process of children returning to school is a process to help them break away from the two-dimensional relationship network and reorganize the multidimensional relationship network. However, this process should not become a force that makes children move from one environment to another immediately, and changing without a cushioning process is even more harmful to them. Then, what is missing in this process?
Question to explore:

WHAT are the current child support organisations doing?

- **Games** are a great way to distract young children and encourage them to speak their mind.

- **Social interactions** and “difficult conversations” with others are important, but finding the right way can be tricky.
By simulating user’s emotional changes before, during and after home isolation, locating the pain points and opportunities:

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>BEFORE</th>
<th>DURING</th>
<th>AFTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>be at school</td>
<td>study/play with friends</td>
<td>stay at home do everything with parents</td>
<td>return to school face heavier schoolwork get back into friend circle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAIN / GAIN POINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>• increasing screen-time</td>
</tr>
<tr>
<td>• set up two-dimensional relationship bond that is only with the parents</td>
</tr>
<tr>
<td>• less chances to communicate with peers</td>
</tr>
<tr>
<td>• have to go straight to study</td>
</tr>
<tr>
<td>• less time to rebuild multi-dimensional relationship bonds</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FEELINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• multi-dimensional social circle, social network is more balanced</td>
</tr>
<tr>
<td>• daily living is guaranteed by guardians</td>
</tr>
<tr>
<td>• protect physical health</td>
</tr>
<tr>
<td>• return to social circles</td>
</tr>
<tr>
<td>• increasing opportunities for group activities</td>
</tr>
</tbody>
</table>
INSIGHTS & IDEAS

Based on the first-hand information I have obtained, I have summarised the insights from the perspectives of parents, school and children, as well as the opportunity points:

Parents’ perspective

- ‘Screen-time’ increases, direct interaction chances decline
  Opportunity: The increase of screen-time is inevitable. How can we interact both online and offline?

- There is a problem with the two-dimensional relationship bond that is only with the parents
  Opportunity: Is there a way to interact in a multi-directional, multi-mode way, not just to make phone calls

- Communication with parents is different from communication with peers, but equally important
  Opportunity: Common topics and activities

School’s perspective

- Is it a good thing for children to go straight to study when return to school?

- It needs time and media to rebuild multi-dimensional relationship bonds
  Opportunity: Set up the transition period and plan appropriate activities, from activities to learning

Children’s perspective

- Children need opportunities to create positive things and express negative things
  Opportunity: Give them a medium or channel to talk about and share
In the research process, the research method I chose to use was Ethnography. Because the stakeholders directly involved - parents, children, and school (teachers) - shape a specific form of behavior meaning in a specific environment through the continuous interaction and communication between individuals. As a researcher, I need to understand their thoughts, emotions, and behaviors before I can explain the meaning of certain phenomena. So I need to have direct contact with these three groups. I contacted my stakeholders directly and focused on interviews and small talks with them.

But this is a little different from the past. In previous projects, I personally prefer to use Participatory Action Research. I like to observe the environment where the interviewees are and what they have experienced, and making analysis by experiencing their true feelings. But due to being restricted online, my research method this time is a bit simple. I have also tried to understand my interviewees through video and recording methods (for example, asking my friends who are the primary school teachers to provide some official school video to understand the children’s behaviors and activities after returning to school), the original intention was to be more direct to observe the target user, but considering the ethical problems and the privacy issues of the school and students, I terminated this plan.
In the UK...

**How Might We** make recommendations as to learn from China in making children’s socialisation a gradual transition?

- **How Might We** help children get back into their social bubbles with peers after a long period of isolation?
- **How Might We** help children rebuild multi-dimensional relationship bonds?
- **How Might We** offer children an opportunity to talk about and share their feelings?
Since at the beginning of the research process, it is difficult to immediately determine which age group is facing greater problems in such a situation. I need to make a decision after research and analysis.

**Why focus on 7-12 years old?**

As 0-6-year-old children have a strong dependence on parents and family, their social training is still mainly concentrated in the family. At the age of 13-18, they have entered the later stage of social-psychological development and training, which has been initially finalized. In comparison, 7-12 years old is the peak period of children’s social development, and it is also a critical period. At this stage, it is necessary to rely on external forces to help them.
Tom

10 years old ✦
live with parents ✦
lively, love to play games ✦

“I can't wait to play with my friend Jack.”

“I'm a little worried that I won't be able to keep up with my studies after returning to school.”

“There are something I don't know how to say to mom and dad.”

“My mom talks too much and sometimes I find her annoying.”
DESK RESEARCH - ROUND 2

Methods currently being used by Children Support Group:

Based on the research of Children Support Group website, we can conclude that the current popular decompression methods can be classified as:

1. Pass the time with games that require agility
2. Write down or draw the feelings

However, these methods still have some drawbacks:

- These are the games that rely too much on the screen
- Most of them are personal games, lack of interaction
- Lack of opportunities for children to ‘speak out’ what they think
Solution
Regarding the solution, my initial idea is to use a product as a medium to connect the online and offline sides in series. I drew some sketches based on this idea.

I mainly combined my ideas with nature and outdoor world. ‘Forest Schooling’ is a new children education concept. There is an enormous weight of scientific research demonstrating the benefits of wild green space for people’s mental and physical wellbeing, and a growing body of evidence pointing to the specific benefits of outdoor schooling (Maller, 2009). It’s very important to help children ‘connect’ with the natural world.
PROTOTYPE

1. Order seeds through special vending machine or mobile app.

2. Plant them at home with parents.

3. Share, interact and play online via mobile app.

4. Schools and communities provide facilities that can be decorated for children. Children can decorate their own plants in special facilities.
I contacted three volunteers (one of whom was mother A in Interview01 and her 8-year-old son), showing them the prototype of the storyboard form, and summarised their feedback and suggestions:

**Volunteer A:** In the second step, consider enhancing the cooperation and interaction between parents and children. Are parents all willing to participate in cooperative plantings?

**Volunteer B:** The way to get seeds can be more varied, making this process fun and giving children the motivation to get new seeds.

**Volunteer C:** The overall process is not very consistent. Whether the final field decoration activities can be carried out in the form of events or competitions. Besides, reward mechanisms can be added.
REFLECTION

Affected by lockdown, losing the opportunity for face-to-face communication, the test becomes difficult. This is also the second major difficulty I have encountered in the project.

In the past, prototype tests were all experiential modes. After the prototype has an entity, the target user can access the design project in the most direct way. But there are no such test conditions now, and online testing is the most convenient method so far. However, the prototype of my solution is not a simple product or an online terminal, it is a series of experience processes.

In the last Stage 2 tutorial, our group actually faced the same problem. At that time, the suggestion given by Iain was to use the storyboard to draw the whole process and test it. I think this is a good method, and it is also suitable for my design solution (which needs to show the complete use process).

I also encountered some obstacles in the process of testing through a storyboard. Although I successfully received some useful feedback, some users still had difficulty understanding the storyboard process during the test. If the participators are difficult to fully understand the content of the storyboard correctly, it would reduce the user's experience of the solution. This process was very frustrating. Moreover, participators do not have an immersive experience of the entity prototype, which greatly reduces the effect of the test. Although I tried the new online test method, I am not very satisfied with the test process and results.

But at the same time, it made me realize the importance of a proper test method to verify whether the direction of the project output is reasonable.
This online app named BUDLET, which is mainly used for online interaction and information integration:

- **sunlight point can be used to exchange seeds**
- **flower fields, used to record the plants that have been planted**
- **collect sunlight point**
- **basic data for each plant**

**Enter Interface**
- get start

**Index**
- basic information

**Function Page**
- introduction of plants and encyclopedia
- vr panoramic observation, recording and viewing of decorated facilities
- update the planting/decorating activities organized by BUDLET, users can sign up here

**App - Index Interface**
App - Function Interface Part 1

Online Check-in
- Use the button here to care for the plants in the app.

Achievements
- Icons of completed achievements will be lit.
- Accomplishing achievements can earn sunlight points.
- Share the latest news with friends anytime and anywhere.

Friends Circle
- Students can share their latest news with friends in their circle.
**FINAL SOLUTION - V2**

**App - Function Interface Part 2**

- **City Map**
  - Isometric map displays the BUDLET device (e.g., seed venting machine or BUDLET garden*) in the city in real time.
  - Users can select the service they want to find here.

- **Online Store**
  - Search the plant seeds to buy.
  - The sunlight points needed to exchange seeds are shown here.
  - Top-selling seed: Coriander
    - The most popular plant seed of the season.
    - The fresh leaves and the dried seeds of Coriander are the parts most traditionally used in cooking.
  - Tips: ‘BUDLET garden’ means the facilities which need to be decorated, offering by BUDLET.
FINAL SOLUTION - V2

Plant seeds Package

**BUDLET Seed Packs** act as the connection medium between online and offline ports. Children can get them in the following methods:

1. BUDLET Seeding Vending Machine
2. Exchange by using sunlight points in the BUDLET app store
3. Children who participate in offline activities can exchange the special seeds of the activity
Offline Activity - Decorate BUDLET facilities

BUDLET will hold various planting activities in specific places offline from time to time. Children can register online through the Event page on the BUDLET app and go to local venues to participate in activities. The activities may include workshops, competitions, and exhibitions.

The workshop and competition are mainly based on the given theme, and the children decorate the BUDLET planting scene on the campus or in the community. They can use the plants provided on-site, or they can contribute their own plants. The decorated scene will exist as an outdoor greening decoration, and it will also support the children to continue caring for the plants.

The main form of the exhibition is that the children will display the plants they have grown. Meanwhile, there will be an introduction and display of the plants existing in the BUDLET system.
Service Blueprint helped me sort out the operation process of the entire solution, and it intuitively showed the mechanism of how the three main elements (BUDLET’s online app, BUDLET Seed Packs, and offline activities undertaken by BUDLET) interact and operate with each other.
1. Two ways to obtain BUDLET Seed Packs

2. Get the seeds and plant them with the help of BUDLET App

3. Interact online through the functions provided by BUDLET App

4. Sign up for offline activities through BUDLET App and participate in offline workshops, competitions and exhibitions organized by BUDLET
In the previous team project at Stage 1 and Stage 2, each step was discussed with the team members. It can be said that each step forward was bringing the thinking of multiple people together. The weekly tutorial and two interim reviews provide us with a platform for group discussion to a certain extent. But this is far from enough. In order to overcome the above difficulties as much as possible, I tried a new way under the advice of my tutor.

By watching the videos uploaded by my classmates, I found that Rosi's project is also about rebuilding social bubbles, while Bridget's project is also about the behavior and psychological research of children and family. In the discussion with them, I also benefited a lot. In the discussion with Bridget, we exchanged views on children's behavior and psychological makeup, and we all obtained new information from each other. I am very grateful for their help to me. This is a very important experience of cooperation.

At the same time, I also want to thank Emma, Jonathan and Iain. They can always give me suggestions when I was confused, letting me discover and explore new ideas, and fix the shortcomings in time.

COVID-19 has brought tremendous changes to my campus life. But I am very fortunate that I still have found a suitable learning method in such a special learning situation. Even because of the limitations of lockdown, the solution I want to implement is difficult to achieve the best, and the result may not be perfect. But learning to solve difficulties in difficult situations is also an important lesson for me.


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