

# LENS ON PRACTICE

**2021-2022**

Guo Xintong (MIA)



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# BREIF

Our brief is to define a lens & personal viewpoint for design practice and apply this to our own self created design brief based on one of two given themes, PEOPLE or PLACE.

you will need to identity our Project Title, Project Question and which of the given themes we have chosen and how this will be explored through our project. We will then need to detail the context, target audience, key stakeholders, objectives and value of our project. Finally we will need to outline resources, potentially delivery partners, ethical considerations and the deliverables for our project.

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**WEEK1**

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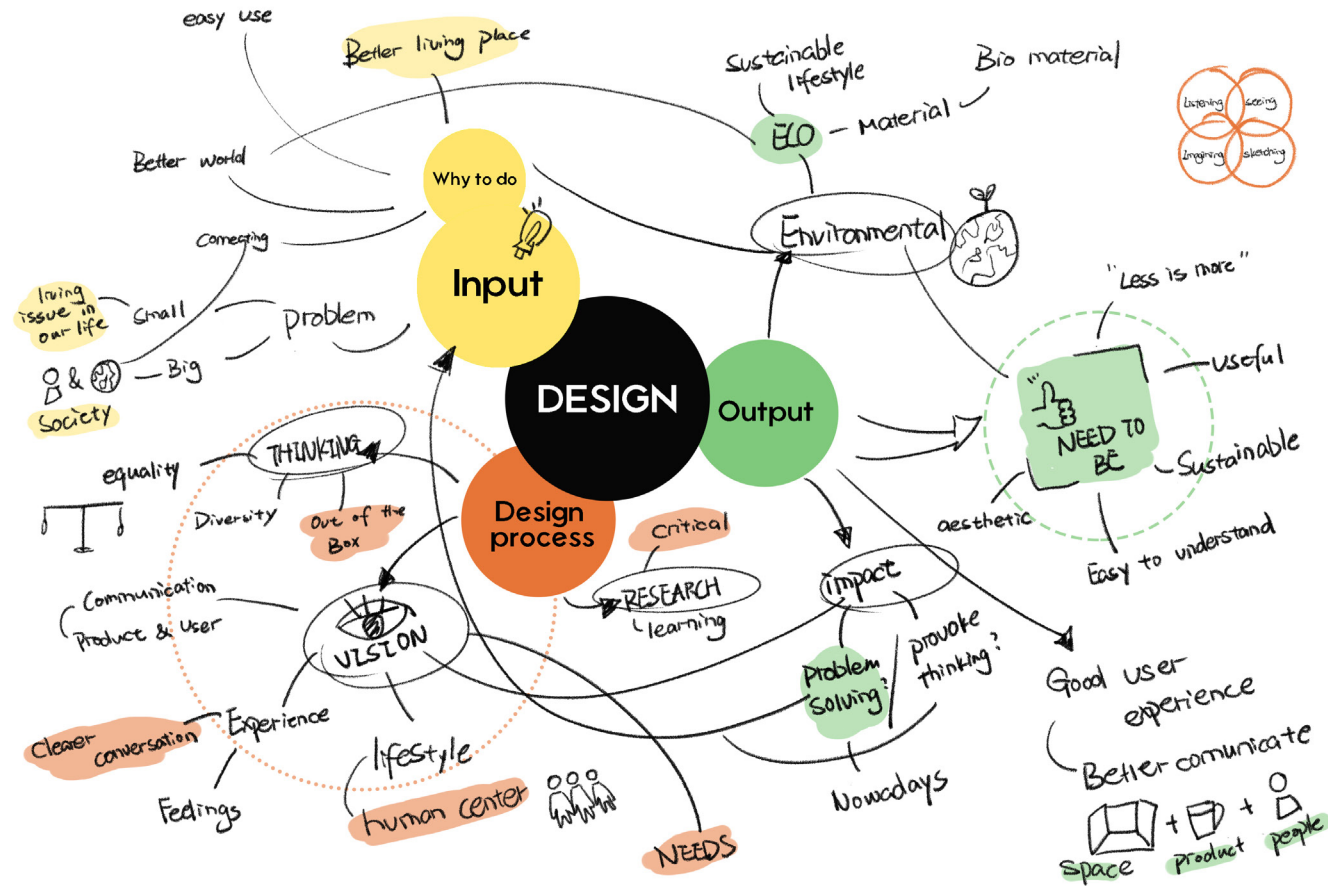
# WEEK 1

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- Mindmap
- CDP case study card
- Design practice map
- Inspirations
- Brief

# MINDMAP

what traits and values influence me as an individual and as a designer





After mindmapping map I found out that I am interested in human center design focusing on what are their real needs are and solve their problems helping them to live in a better place.



# CDP CASE STUDY CARD

## First draft

### CDP Case Study

Krill Design is an Italian studio specializing in the development of new design products within a 100% circular and sustainable process. Give new life to the resources of nature such as fruit peels, seeds and shells to create eco-design products and promote an environmentally friendly Circular Economy process.

#### Values

1. sustainable
2. long-lasting
3. passionate

#### Why have you chosen this example?

1. Design Concept
2. Design Methodology
3. Environmentally friendly production process

#### Links

<https://www.krilldesign.net/>  
<https://www.stirworld.com/see-features-ohmie-lamp-by-krill-design-is-the-world-s-first-3d-printed-lamp-made-of-orange-peels>



### Krill Design

*Feed the change, shape the future*

Date:  
2018-present

### CDP Case Study

Fukasawa is well-recognized for his designs - which are imbued with a quiet power that embodies peoples' hopes and expectations - as well as his design philosophies. Conveying them using such terms as "design dissolving in behavior", "center of consciousness", "normality", "outline" and "archetype", he continues to put these philosophies into practice in his designs.

#### Values

1. minimalness
2. connection
3. design balance
4. No pressure for people

#### Why have you chosen this example?

1. Design thinking
2. Communication
3. "making our life better"

#### Links

<https://naotofukasawa.com/>  
<https://www.youtube.com/watch?v=7ce6opWQpL4>



### Naoto Fukasawa Design

*"Without Thought"*

Date:  
2003-present

### CDP Case Study

BIG's architecture emerges out of a careful analysis of how contemporary life constantly evolves and changes, create architecture by mixing conventional ingredients such as living, leisure, working, parking and shopping. By hitting the fertile overlap between pragmatic and utopia, we architects once again find the freedom to change the surface of our planet, to better fit contemporary life forms.

#### Values

1. Ambition
2. Demand Satisfaction
3. internality

#### Why have you chosen this example?

1. Divergent thinking
2. General of design
3. concept

#### Links

<https://big.dk/#about>  
<https://big.dk/#projects>



### Big

*Pragmatic utopian*

Date:  
2005-present

### CDP Case Study

Olafur Eliasson is an Icelandic-Danish artist known for sculptured and large-scale installation art employing elemental materials such as light, water, and air temperature to enhance the viewer's experience. In 1995 he established Studio Olafur Eliasson in Berlin, a laboratory for spatial research.

#### Values

1. Reflective
2. connection
3. emotionalw

#### Why have you chosen this example?

1. Design thinking
2. Communication
3. Connecting

#### Links

<https://olafureliasson.net/>  
<https://www.linlinsen.com/>



### Studio Olafur Eliasson

*Human-Space-World*

Date:  
1995 -present

### CDP Case Study

Alcantara is an extremely versatile organization fuelled by continuous dialogue with the creative world. Alcantara has always been profoundly committed to sustainability. In fact, for a number of years, the Company has based its approach to development and profitability on the balance between social, economic and environmental factors. Over time, sustainability has become a true guiding principle, involving the entire corporate structure and creating a real shared culture. It is key to the Company's mission: making every day extraordinary.

#### Values

1. Balance (between Development and sustainable
2. Shared culture
3. value

#### Why have you chosen this example?

1. Interprise core
2. Principled
3. legality, integrity, fairness and transparency

#### Links

<https://www.alcantara.com/>  
<https://www.alcantara.com/corporate/>



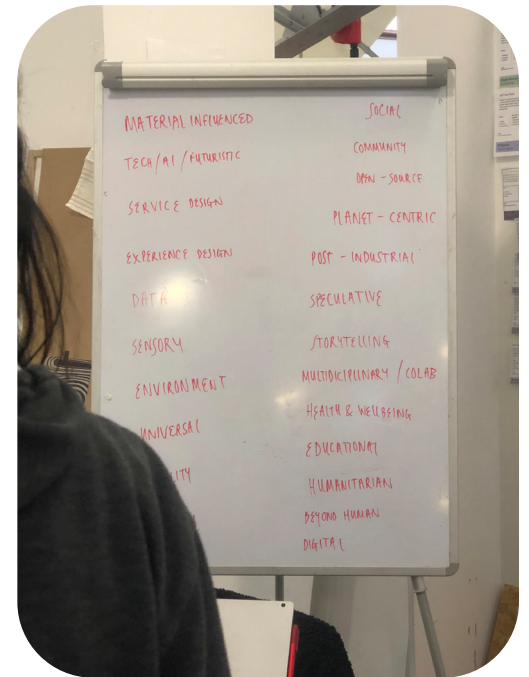
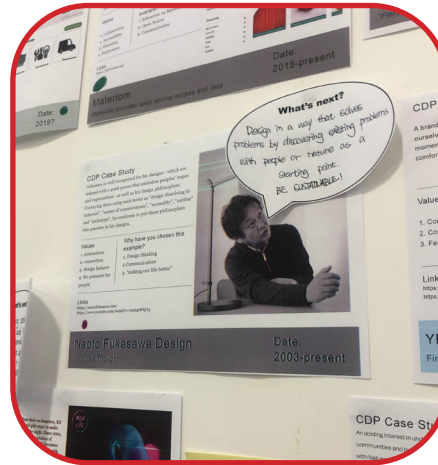
### Alcantara

*making every day extraordinary.*

Date:  
1970 -present

# DESIGN PRACTICE MAP

First draft

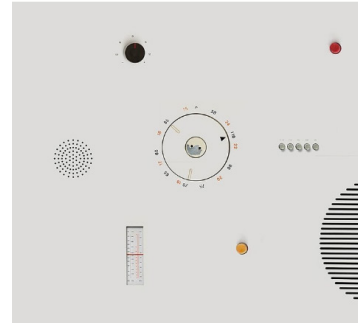
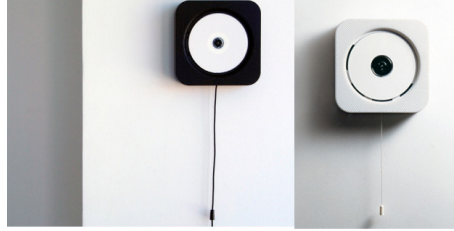




At first I was trying to go with the design that can solve simple living problems in peoples daily life and also focusing on sustainable material.



# INSPERATIONS



## Embarrassed Robots (2017)

The project Embarrassed Robots questions whether emerging intelligent technologies will need to adopt human expressions and emotions in order to integrate better into our lives.

**ALKA**

ALKA is a companion that cleans and cultivates air whilst working from home. The device has been designed to live and work alongside home plants in order to maintain a healthy environment.

## Living things

architect jacob douenias and industrial designer ethan frier have created an installation called 'living things' , where furniture cultivates a symbiotic environment between people and microorganisms. three stations, – a living room, dining room and kitchen each adopting a different bioreactors functioning distinctively in each space.

# BREIF

## First draft

### LENS ON PRACTICE STUDENT BRIEF

#### Student

Xintong Guo (Mia)

#### Project Title & Theme

Title: Design with childrens healthcare

Starting from child's health perspective, explore how the environment affects children in resen years and how parents response on it, what will it be in the future?

#### Issue(s)

What is the issue & context of the project question, who does it affect directly, who is the target 'audience' and / or stakeholder(s)?

Children are our future, numbering over 2.2 billion worldwide (aged 0-19) and representing boundless potential. Child survival and development hinge on basic needs to support life; among these, a safe, healthy, and clean environment is fundamental. Children are exposed to serious health risks from environmental hazards. Environmental risk factors often act in concert, and their effects are exacerbated by adverse social and economic conditions, particularly conflict, poverty, and malnutrition. There is new knowledge about the special susceptibility of children to environmental risks: action needs to be taken to allow them to grow up and develop in good health, and to contribute to economic and social development.

#### Objective(s)

What do you hope to achieve? What issue(s) would your project look to address?

Looking to achieve healthier, safer, and cleaner environments in the places where children live, learn, work, and play to the imperative for child health.

Health effects (or hazards) on children from environmental impacts

#### Value

How might your project add value? This should be considered from a personal design practice development perspective as well as what the external and future impact of the project could be.

This project becomes valuable as considering the impact of the environment on children's health in nowadays, which is very worthy of attention. This project finds existing children's health problems and conducts well research and tests to ensure that Outcome can better solve the problems.

#### Resources Required

What might you need to ensure the effective delivery of this project?

Online research of what issue are children facing at the moment globally.  
Steeple card  
Conduct survey with children or parent.  
Workshop (if possible)  
Model testing

#### Potential Delivery Partners

Who might you speak to and / or 'collaborate' with in gathering information, opportunity spotting and developing your project?

Children from the age 7 to 12ish and their parents

### LENS ON PRACTICE STUDENT BRIEF

#### Ethical Considerations

Have you considered the ethical implications of your proposal and how you might address them within the scope of your project?

When we talk about children, children's privacy issues cannot be ignored. When children's health issues encounter children's privacy issues, how should parents and designers balance. As a designer, it is also very important to understand the inner thoughts of children, not only to listen to the unilateral words of parents.

#### Deliverables

What are you doing? Who is it for? Why is it valuable? What are the intended deliverables of this project? List any documents / artefacts / media you intend to produce.

In this project, I hope to uncover more child health problems that are happening that we did not aware of. Help a specific group of children or their parents as a design starting point. Designing a more comfortable or convenient environment for them to ensure that children can grow up in a better and healthier environment. The intended diliverables of this project will include: Research of how is nowadays environment affect childrens health, Interview or questionnaire with children or their parient ( it can be some interacting game)

#### Bibliography

List any documents / projects / publications / books you have identified that will inform your work.

Child Health BBC News:  
<https://www.bbc.co.uk/news/topics/crr7mlg0v82t/child-health>  
THE BUILT ENVIRONMENT AND CHILDREN'S HEALTH:  
<https://www.sciencedirect.com/science/article/abs/pii/S00313955050703722>  
The Future of Children:  
[https://www.jstor.org/stable/3844795?casa\\_token=SlFop5yzWWoAAAAA%3Atig-jf87fFSGw-wj1FmkY0dTzG72Wx18lk1EwBtX1XO3xVmsqf6Uw1gi6FyKS3D\\_D34LbKsYP9rbOnx9bIPkb4f3f99T\\_oU1n5diiPrvNOS7EKQ9Kvc&seq=1](https://www.jstor.org/stable/3844795?casa_token=SlFop5yzWWoAAAAA%3Atig-jf87fFSGw-wj1FmkY0dTzG72Wx18lk1EwBtX1XO3xVmsqf6Uw1gi6FyKS3D_D34LbKsYP9rbOnx9bIPkb4f3f99T_oU1n5diiPrvNOS7EKQ9Kvc&seq=1)

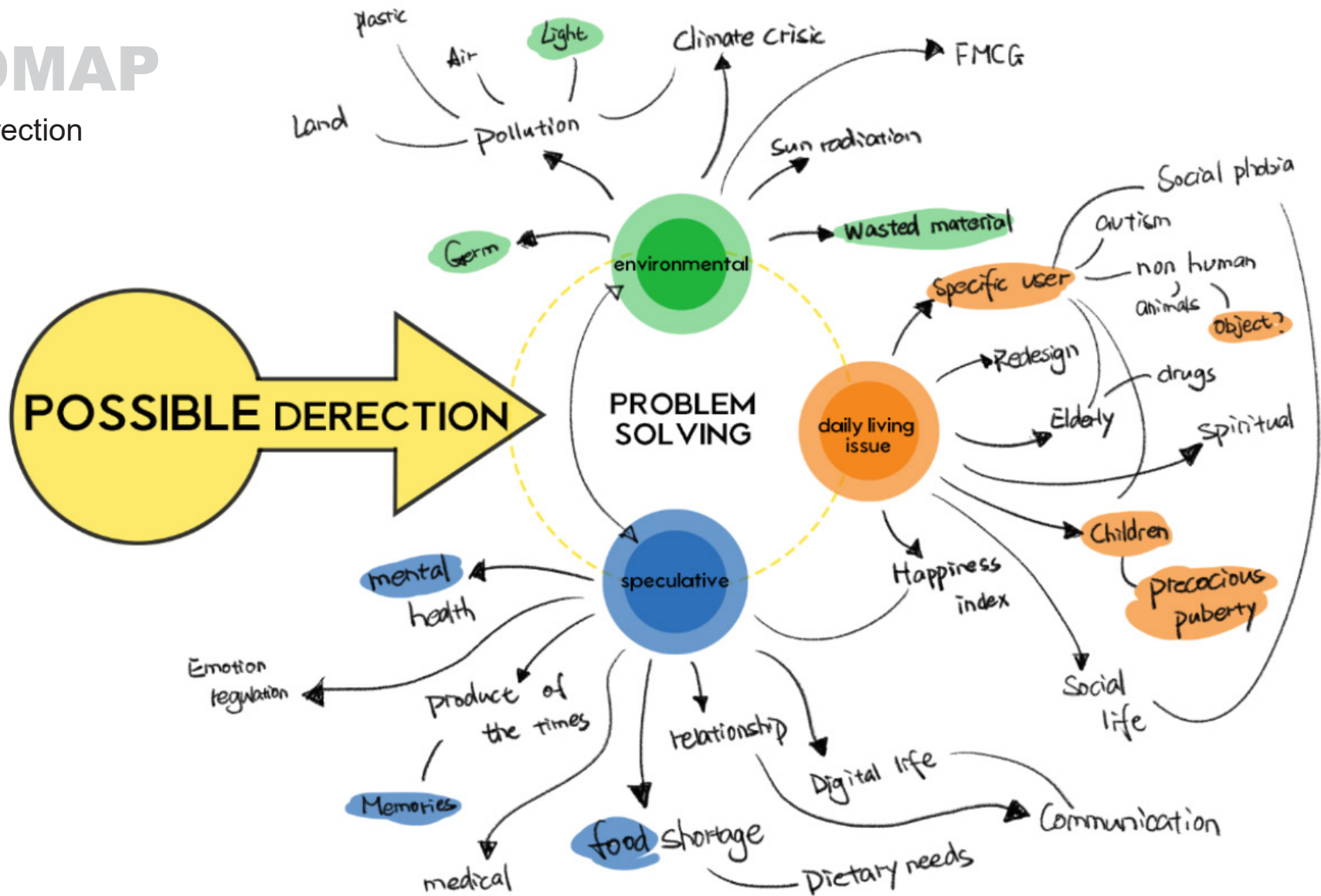
# WEEK 2

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- **Mindmap**
- **Value**
- **50 word lens**
- **New CDP case study card**
- **Final design practice map**
- **My position**
- **Final Breif**
- **Desk research**

# MINDMAP

Possible derrection



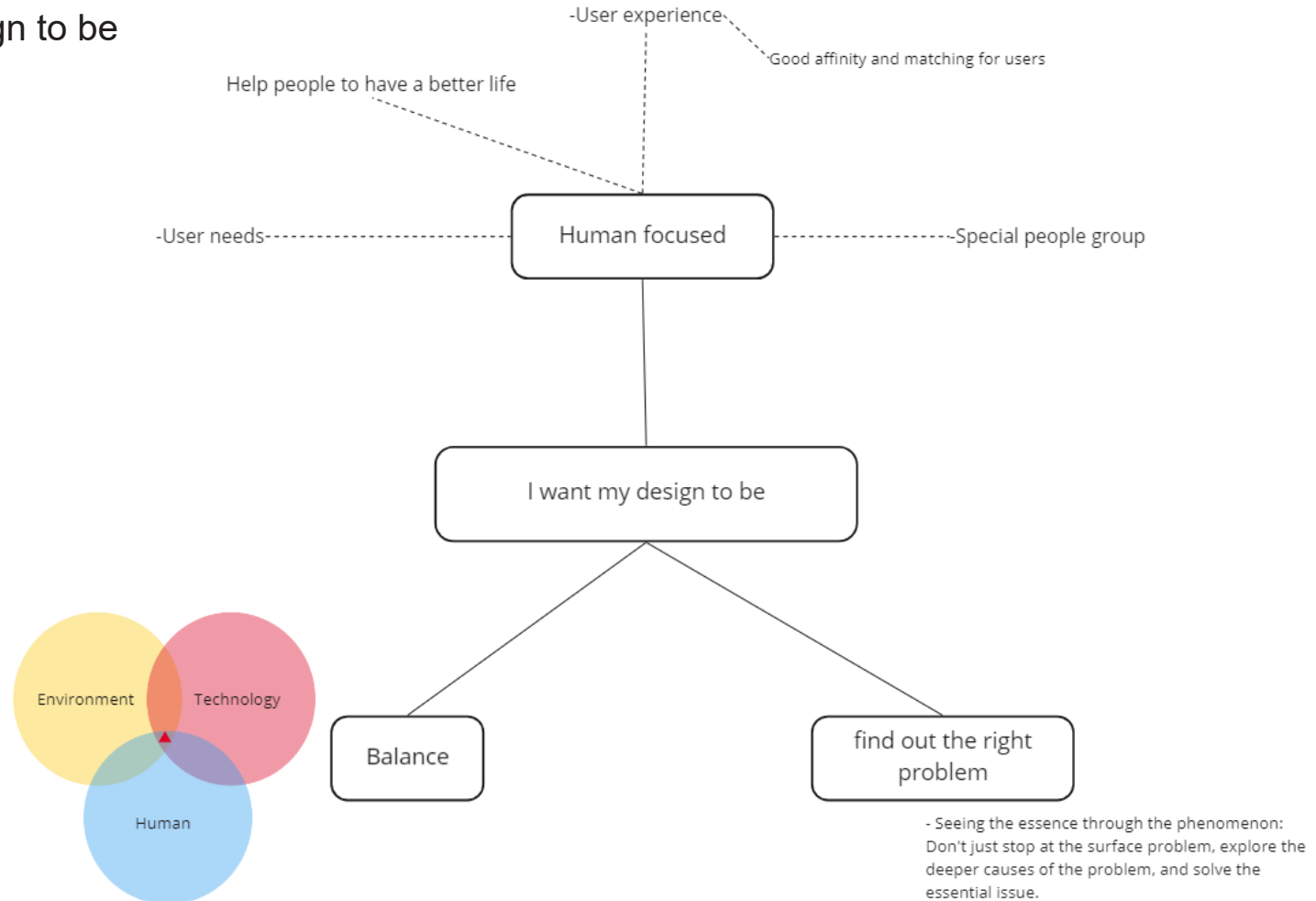


After mindmapping map I found out that there are so many other way that I can go and they are all much more interesting than my original idea, realise I was playing safe with the first breif so I began to change the breif by start thinking how do I want my design to be like.



# VALUE

How do I want my design to be



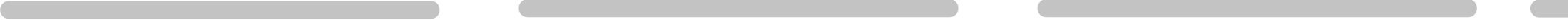


## "MY LENS"

I want my designs to be around people, to address the needs of special populations, to discover issues that are happening today but haven't been widely noticed.

Hope to better balance the relationship between people, environment and technology while designing

Find out the right problem : Seeing the essence through the phenomenon: Don't just stop at the surface problem, explore the deeper causes of the problem, and solve the essential issue.





# CDP CASE STUDY CARD

Final

## CDP Case Study

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<https://www.stirworld.com/see-features-ohmie-lamp-by-krill-design-is-the-world-s-first-3d-printed-lamp-made-of-orange-peels>



**Krill Design**

*Feed the change, shape the future*

Date:  
2018-present

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### Links

<https://big.dk/#about>  
<https://big.dk/#projects>

**Big**

*Pragmatic utopian*



Date:  
2005-present

## CDP Case Study

Since 2012, Little Sun has grown into a global project that has changed millions of lives through the distribution of over 1.4 million personal solar devices to students, refugees, teachers and community health workers. This has enabled 139 million additional study hours for children, and saved households \$175 million in expenses and helped reduce CO2 emissions by 1 million metric tons. By working with local entrepreneurs, Little Sun has also helped create thousands of local jobs, and generated local profits for rural communities in Sub-Saharan Africa, particularly for women.

### Values

1. problem solving
2. connection
3. motivation
4. spurs people thinking and action

### Why have you chosen this example?

1. Design thinking
2. Communication
3. "making our life better"

### Links

<https://littlesun.org/about/>  
<https://littlesun.org/culture/>



Date:  
2012-present

## Little Sun

*The power of sun for everyone*

## CDP Case Study

The hug chair has inner walls that can apply deep pressure on the chest or on the legs. This allows to feel the limits of your body and focus on sensory information and reduce tension to help people with autism feel better in their environment.

### Values

1. motivation
2. Problem solving
3. human based

### Why have you chosen this example?

1. Design Philoophy
2. Research
3. Way of solving problem

### Links

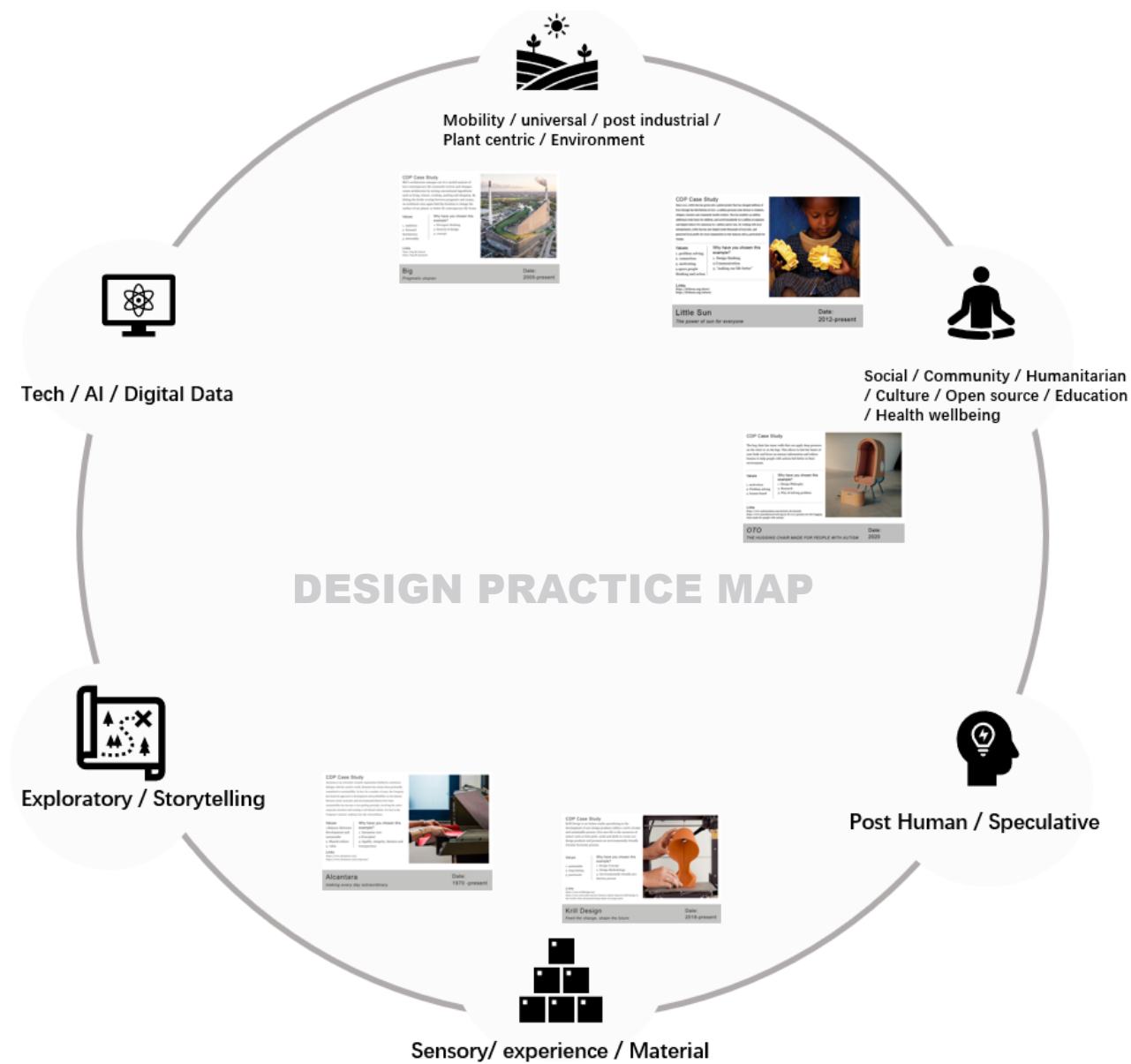
<https://www.audrainalexia.com/histoire-du-fauteuil/>  
<https://www.jamesdysonaward.org/en-IN/2021/project/oto-the-hugging-chair-made-for-people-with-autism/>

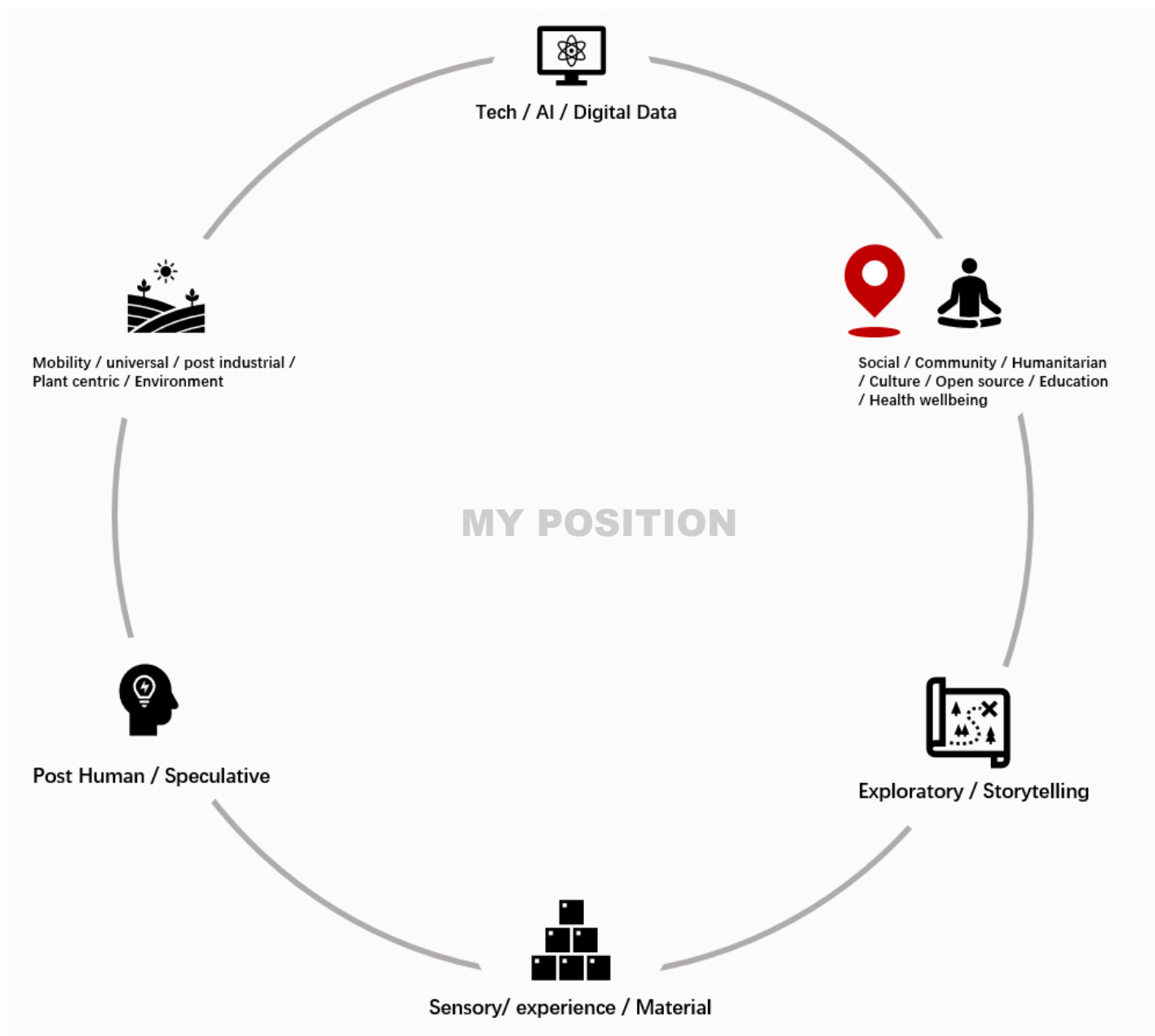


## OTO

*THE HUGGING CHAIR MADE FOR PEOPLE WITH AUTISM*

Date:  
2020







### LENS ON PRACTICE STUDENT BRIEF

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Xintong Guo (Mia)

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<https://www.sciencedirect.com/science/article/abs/pii/S0031395505703722>  
The Future of Children:  
[https://www.jstor.org/stable/3844795?casa\\_token=5IFop5yzWWoAAAAA%3Atig-jf87fF5Gw-wj1FmkY0d7Zg72Wx18lk1Ew8tX1XO3xVmsqf6Uw1gi6FyKS3D\\_D34LbKsYP9rbOnx9bIPkb4f3f99T\\_oU1n5dIlPrvNOS7EKQ9KVC&seq=1](https://www.jstor.org/stable/3844795?casa_token=5IFop5yzWWoAAAAA%3Atig-jf87fF5Gw-wj1FmkY0d7Zg72Wx18lk1Ew8tX1XO3xVmsqf6Uw1gi6FyKS3D_D34LbKsYP9rbOnx9bIPkb4f3f99T_oU1n5dIlPrvNOS7EKQ9KVC&seq=1)

# STEEPLE CARD

## Insight

-The age of puberty is dropping, and that pitches children into experiences they are unequipped for. But even after their brains catch up to their bodies, the early mismatch may alter their lives.

## Indicators

-Studies are showing that the onset of puberty for both boys and girls is occurring earlier and earlier, a phenomenon defined as precocious puberty.

A study published in Pediatrics in 2010 found that among a population of 1,200 American girls, about 23 percent of African-Americans, 15 percent of Latinas and 10 percent of Caucasian girls had begun puberty (marked by breast development) at age 7.

## Links

[https://scholar.google.co.uk/scholar?q=children%27s+early++puberty+nowadays&hl=zh-CN&as\\_sdt=0&as\\_vis=1&oi=scholar](https://scholar.google.co.uk/scholar?q=children%27s+early++puberty+nowadays&hl=zh-CN&as_sdt=0&as_vis=1&oi=scholar)



## Precocious puberty

*Increasing early puberty*

## Insight

-Most children grow up mentally healthy, but surveys suggest that more children and young people have problems with their mental health today than 30 years ago. -Alarmingly, however, 75% of children and young people who experience a mental health problem aren't getting the help they need.

## Indicators

-Rates of probable mental disorders have increased since 2017; in 6 to 16-year-olds from one in nine (11.6%) to one in six (17.4%), and in 17 to 19-year-olds from one in ten (10.1%) to one in six (17.4%). Rates in both age groups remained similar between 2020 and 2021.

-Nearly 5 million children in the U.S. have some type of serious mental illness (one that significantly interferes with daily life). In any given year, 20% of American children will be diagnosed with a mental illness.

## Links

<https://www.mentalhealth.org.uk/a-to-z/c/children-and-young-people>  
<https://www.cdc.gov/childrensmentalhealth/index.html>



## Children Mental Health

*Increasing mental illness*

## Insight

-Most people think of teenagers or young adults when they think of eating disorders, but they can affect young children as well. The rates of eating disorders among young girls and boys under 12 have been growing in recent years, so it is important for parents and anyone who works with young children to recognize the signs. Physical growth is such an important component of childhood, and eating disorders can cause significant damage to a child's body.

## Indicators

-Eating disorders can be heritable, so if a parent, sibling, or another relative of a child has an eating disorder, they are 7-12 times more likely to develop one than a child who does not. Children diagnosed with chronic illness are also at higher risk, particularly those diagnosed with insulin-dependent diabetes mellitus. Children who struggle with depression, anxiety, and other mental illness may also be at increased risk.

## Links

<https://www.psychom.net/eating-disorders-in-children>  
<https://www.mentalhealth.org.uk/a-to-z/e/eating-disorders>



## Eating Disorder

*Difficult relationship with food*

## Insight

-Down syndrome remains the most common chromosomal condition diagnosed in the United States. Each year, about 6,000 babies born in the United States have Down syndrome. This means that Down syndrome occurs in about 1 in every 700 babies.

## Indicators

-Down syndrome is a condition in which a person has an extra chromosome. Typically, a baby is born with 46 chromosomes. Babies with Down syndrome have an extra copy of one of these chromosomes, chromosome 21. This extra copy changes how the baby's body and brain develop, which can cause both mental and physical challenges for the baby.

-Even though people with Down syndrome might act and look similar, each person has different abilities. People with Down syndrome usually have an IQ (a measure of intelligence) in the mildly-to-moderately low range and are slower to speak than other children.

## Links

<https://www.cdc.gov/ncbddd/birthdefects/downsyndrome.html>  
<https://www.healthline.com/health/down-syndrome>



## Congenital Disease

*Down Syndrome*

## Insight

-Major depressive disorder is a common psychiatric condition in adolescence, but before adult criteria, it is called persistent depressive disorder. Although most children do not experience a first depressive episode, about 10% of children present with MDD.

## Indicators

-The rate of depressive disorders in adolescence and into adulthood is 12.8% of the US population. About 12.8% of the US population is diagnosed with at least one depressive episode as 8% of adolescents experience suicide by young adulthood, leading cause of death in this age group.

## Links

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6111111/>  
<https://www.verywellmind.com/child-depression-2785487>

## Mental Health

*Major Depressive Disorder*

## Insight

-Nearly 2 million new cases of major depressive disorder may be caused by a variety of factors, including particularly important ones like genetics, according to a new study. The first to estimate the impact of genetics was caused by this poll in Los Angeles to Munich.

## Indicators

-Out of the estimated 1.5 million cases of major depressive disorder globally in 2019, two-thirds are caused by a variety of factors, including particularly important ones like genetics, according to a new study. The first to estimate the impact of genetics was caused by this poll in Los Angeles to Munich. Anenberg, a co-lead author of the study, and occupational health and safety findings suggest that clean air is keeping children healthy.

## Links

<https://www.sciencedirect.com/science/article/pii/S0926641021000000>  
<https://blogs.gwn.edu/cities-worldwide/>

## Pediatric

*Traffic-related air pollution*

disorder (MDD) is one of the most common disorders of childhood and adolescence. The cause of symptom variation from the onset to adulthood is often unrecognized and untreated. Children and adolescents recover from their depressive episode, a large number will continue to experience it in adulthood.

Prevalence increases from childhood through adolescence to adulthood. In 2016, an estimated 10.4% of the population aged 12-17 years had been diagnosed with a major depressive episode. As many as 1 in 5 children diagnosed with MDD have completed suicide in adulthood, making suicide the second leading cause of death among adolescents 12-17 years of age.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6213890/>  
<https://www.mind.com/depressive-disorders-in-children-1066782>

## Major Depressive Disorder

Over 10 million new cases of pediatric asthma every year are attributed to traffic-related air pollutant, a problem that is most prevalent in big cities around the world, according to a study published today. The study is the first to show the burden of pediatric asthma cases is increasing in more than 13,000 cities from around the world.

Over 10 million new pediatric asthma cases attributed to traffic-related air pollutant, a problem that is most prevalent in big cities around the world, according to a study published today.

Nitrogen dioxide puts children at risk of developing asthma, and this is especially acute in urban areas," Susan Solomon, lead author of the article and a professor of environmental health at the George Washington University, said. "The study shows that clean air must be a critical part of strategies aimed at reducing asthma cases."

<https://www.who.int/news/releases/2022/01/220105202758.htm>  
<https://www.sciencedirect.com/science/article/pii/S1352231022000000>

## Pediatric asthma

Traffic-related pollution cause



## Insight

- Children worldwide are exposed to major environmental hazards affecting their health. More than 1 in 4 deaths of children under 5 are the result of unhealthy environments. In 2015, 26% of the deaths of 5.9 million children occurred before reaching their fifth birthday. Environmental risks, such as air pollution, unsafe water, lack of sanitation, second-hand smoke, and inadequate hygiene, kill 1.7 million children under 5 every year.

### Indicators

- Children are especially vulnerable in the early stages of development, and environmental hazards can lead to premature births and other complications. Millions of children are being exposed to traditional environmental hazards, including air pollution, chemicals, and electronic waste. Many children die from diarrhea, pneumonia, and malaria, among others illnesses that often can be prevented by providing clean cooking water and safe fuels. -According to WHO, polluted air is the main pollution problem. If a young child is exposed to outdoor air pollution, or second-hand smoke, they are at an increased risk for pneumonia, stunted brain development, or chronic respiratory diseases such as asthma. In the long term, air pollution can increase a child's risk of cancer or stroke. Household air pollution alone kills over half a million children under 5 every year.

### Links

<https://ceinternational1892.org/article/impact-of-the-environment-on-childrens-health/>

## Unhealthy environments

Unhealthy environments are affecting children's health

## Insight

- Prevalence estimates suggest male-to-female cases outnumber female-to-male cases, with 1 per 10,000 males and 1 per 27,000 females affected by gender dysphoria, although estimates vary depending on the setting. These rates would qualify for orphan designation status (defined by the European Union as less than 5 in 10,000 of the general population).

### Indicators

- According to an analysis by UCLA last year, about 1.4 million people in the United States identify as transgender, a growing number of whom are children. And there's no doubt the number of children diagnosed with "gender dysphoria" — described by clinicians as "incongruence between one's experienced/expressed gender and assigned gender" — has been on the rise. A gender identity clinic for children in the United Kingdom, for instance, received 94 referrals in 2009-10 and 1,986 referrals in 2016-17 — a 2,000 percent increase. Referrals for children under the age of 6 went from six to 32 in the same time period.

### Links

<https://blogs.bmj.com/bmj/bjbmjspotlight/2019/02/25/gender-affirming-hormone-in-children-and-adolescents-evidence-review/>

## Gender dysphoria

Traffic-related pollution cause



## Insight

- The most recent study of mental health in deaf children in England showed that 26% in a sample of 144 signing deaf children and young people not currently accessing child mental health services had a probable mental health problem and 57% had a possible mental health problem (Roberts et al, 2015). This is much higher than the general population of 11-16 year olds (Sadler et al, 2018) where approximately 14% are thought to have a mental disorder.

### Indicators

- From research that deaf children are more likely to be isolated, bullied or abused (Wolters et al, 2011; Kvam, 2004), which can impact upon mental health. There is a large literature on prejudice towards deaf children and their families and experiences of feeling stigmatised. -Over 90% of deaf children are born within hearing families and most of them are not expecting a deaf child. This leads to difficulties in adjusting to the new challenges of parenting and educational choices and can be complicated by very different views and/or advice about what the best approach to take is. Parents are almost always dedicated to their children, but may also struggle with anxiety, depression, over-protection, challenges with relationship and attachment, and rarely rejection of their child. All of these have mental health consequences for the child.

### Links

<https://www.yoursupportglasgow.org/directory/providerdetails/208614>  
<https://www.acamh.org/research-digest/mental-health-in-deaf-children/>

## Deaf Children

Mental health in Deaf Children

## Insight

- There is a growing recognition and acceptance in Africa that people with albinism should be considered disabled. Thomas's social-relational model of disability proposes it is essential to understand both the socio-structural barriers and restrictions that exclude disabled people (barriers to doing); and the social processes and practices which can negatively affect their psycho-emotional wellbeing (barriers to being).

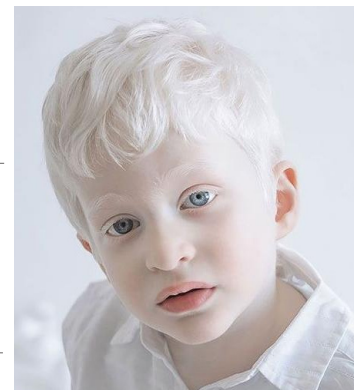
### Indicators

- Albinism is an inherited condition with a relatively high prevalence in populations throughout sub-Saharan Africa. People with oculocutaneous albinism have little or no pigment in their hair, skin, and eyes; thus they are visually impaired and extremely sensitive to the damaging effect of the sun on their skin. Aside from the health implications of oculocutaneous albinism, there are also significant sociocultural risks. The impacts of albinism are particularly serious in areas that associate albinism with legend and folklore, leading to stigmatization and discrimination. In regions of Africa, those with albinism may be assaulted and sometimes killed for their body parts for use in witchcraft-related rites or to make 'tucky' charms. There is a dearth of research on the psychosocial aspects of albinism and particularly on how albinism impacts the everyday lives of people with albinism.

### Links

[https://bitinternet.echr.org/Treaties/CRC/Shared%20Documents/TZA/INT\\_CRC\\_NGO\\_TZA\\_18032\\_E.pdf](https://bitinternet.echr.org/Treaties/CRC/Shared%20Documents/TZA/INT_CRC_NGO_TZA_18032_E.pdf)  
<https://hmcinthealthrights.biomedcentral.com/articles/10.1186/s12934-018-0144-8>

## Albinism



## badly affected

right

Children receive the most common chromosomal condition diagnosed in the United States. Each year, about 1 out of 1,000 babies in the United States have Down syndrome. This means that Down syndrome occurs in about 1 in every 1,000 babies.

**Indicators**  
Down syndrome is considered an extra genetic factor in some chromosomes. Typically, a child is born with an extra chromosome. Babies with Down syndrome have extra copies of about three chromosomes. The extra copy changes the body's look and how it works. Although people with Down syndrome might not feel bad about it, they often have problems with learning, speech, and growth. People with Down syndrome might have an IQ of around 50, although it is widely known that people with Down syndrome can learn and do many things.

### Congenital Disease

Down Syndrome



right

The first recent study of mental health in deaf children is reported in the first half of a report of 145 hearing deaf children and young people in currently emerging child mental health services. Half of participants reported health problems only 1% had a previous mental health problem (depression or anxiety). This result is higher than the general population of 10 to 15% who suffer at least one mental disorder. Approximately 14% are thought to have a mental disorder.

**Indicators**  
Deaf children and young people are more likely to receive verbal abuse than hearing children of the same age. This is because they are often misunderstood. They are also more likely to be bullied. They are also more likely to be excluded from social activities. They are also more likely to be excluded from social activities. They are also more likely to be excluded from social activities.

**Links**  
https://www.bbc.com/news/health-55555555

### Deaf Children

Mental health in Deaf Children



Children grow up mentally healthy, but surveys suggest that more children and young people have problems with their mental health today than 20 years ago. Alarmingly, however, 75% of children and young people who experience a mental health problem aren't getting the help they need.

**Indicators**  
Rates of particular mental disorders have increased since 2007. In 8 to 10-year-olds from one to nine (14% to 15% to 16%), and in 11 to 15-year-olds from one to nine (14% to 15% to 16%). (17%) 14% have in both age groups remained similar between one and nine.

**Links**  
https://www.bbc.com/news/health-55555555

### Children Mental Health

creasing mental illness



Major depressive disorder (MDD) is one of the most common psychiatric disorders of childhood and adolescence. It is often misdiagnosed and undertreated. Although most children and adolescents recover from their first episode of depression, a third will continue to experience MDD in adulthood.

**Indicators**  
The rate of depression increases from childhood through adolescence and into adulthood. In fact, an estimated 10% of all 12-year-olds and 15% of 17-year-olds have had at least one major depressive episode. In many cases, children diagnosed with MDD have experienced trauma by young adulthood, making it difficult for them to distinguish between childhood and adulthood. In fact, many children with MDD continue to experience MDD in adulthood.

**Links**  
https://www.bbc.com/news/health-55555555

### Mental Health

Major Depressive Disorder



Children and adolescents are exposed to major environmental stressors during their lives. When these stressors are persistent and severe, they can lead to mental health problems. For example, exposure to violence, poverty, and discrimination can lead to mental health problems. Children and adolescents who experience these stressors are more likely to develop mental health problems.

**Indicators**  
Children and adolescents who experience these stressors are more likely to develop mental health problems. Children and adolescents who experience these stressors are more likely to develop mental health problems.

**Links**  
https://www.bbc.com/news/health-55555555

### Unhealthy environments

Healthy environments are affecting children's health



right

Early onset of puberty is dropping, and that places children at greater risk of mental health problems. But even after they have reached up to their bodies, the early research may alter their lives.

**Indicators**  
Studies are showing that the onset of puberty for both boys and girls is occurring earlier and earlier, a phenomenon called precocious puberty.

A study published in Pediatrics in 2015 found that among a population of 1.5 million girls, about 1% of girls had precocious puberty. The study found that the onset of puberty was occurring earlier and earlier, a phenomenon called precocious puberty.

**Links**  
https://www.bbc.com/news/health-55555555

### Precocious puberty

creasing early puberty



## Congenital

right

Research indicates suggest made to female cases of gender dysphoria. In some cases, with gender dysphoria, a person may feel that their gender identity does not match their assigned sex. This can lead to mental health problems. Research indicates suggest made to female cases of gender dysphoria.

**Indicators**  
Research indicates suggest made to female cases of gender dysphoria. In some cases, with gender dysphoria, a person may feel that their gender identity does not match their assigned sex. This can lead to mental health problems. Research indicates suggest made to female cases of gender dysphoria.

**Links**  
https://www.bbc.com/news/health-55555555

### Gender dysphoria

related: related pollution cause



right

There is growing recognition and acceptance in Britain that people with albinism should be considered disabled. Britain's social inclusion model of disability promotes the view that people with albinism should be considered disabled. This is because they are often misunderstood. They are also more likely to be bullied. They are also more likely to be excluded from social activities.

**Indicators**  
Albinism is a genetic condition that affects the production of melanin. It is a rare condition that affects about 1 in 10,000 people. It is a rare condition that affects about 1 in 10,000 people. It is a rare condition that affects about 1 in 10,000 people.

**Links**  
https://www.bbc.com/news/health-55555555

### Albinism



## weakly affected

right

Although most children and adolescents recover from their first episode of depression, a third will continue to experience MDD in adulthood. This is because they are often misunderstood. They are also more likely to be bullied. They are also more likely to be excluded from social activities.

**Indicators**  
Children and adolescents who experience these stressors are more likely to develop mental health problems. Children and adolescents who experience these stressors are more likely to develop mental health problems.

**Links**  
https://www.bbc.com/news/health-55555555

### Eating Disorder

Weak relationship with food



right

Children and adolescents are exposed to major environmental stressors during their lives. When these stressors are persistent and severe, they can lead to mental health problems. For example, exposure to violence, poverty, and discrimination can lead to mental health problems. Children and adolescents who experience these stressors are more likely to develop mental health problems.

**Indicators**  
Children and adolescents who experience these stressors are more likely to develop mental health problems. Children and adolescents who experience these stressors are more likely to develop mental health problems.

**Links**  
https://www.bbc.com/news/health-55555555

### Pediatric asthma

related: pollution cause



## Insight

-The age of puberty is dropping, and that pitches children into experiences they are unequipped for. But even after their brains catch up to their bodies, the early mismatch may alter their lives.

## Indicators

-Studies are showing that the onset of puberty for both boys and girls is occurring earlier and earlier, a phenomenon defined as precocious puberty.

A study published in Pediatrics in 2010 found that among a population of 1,200 American girls, about 23 percent of African-Americans, 15 percent of Latinas and 10 percent of Caucasian girls had begun puberty (marked by breast development) at age 7.

## Links

[https://scholar.google.co.uk/scholar?q=children%27s+early++puberty+nowadays&hl=zh-CN&as\\_sdt=o&as\\_vis=1&oi=scholar](https://scholar.google.co.uk/scholar?q=children%27s+early++puberty+nowadays&hl=zh-CN&as_sdt=o&as_vis=1&oi=scholar)

## Precocious puberty

*Increasing early puberty*



## FINAL CHOOSE

I made some Steeple card by researching of existing child health issues and put them into this axis, chose out four that is related to the environmental impact, and I chose Precocious puberty as my final direction.

precocious puberty is basically that children are starting their puberty in a early age ( children's secondary sexual characteristic appear premature before year of 9) , early puberty can cause physical and emotional problems. usually they grow up fast earlier but they will also stop growing in a early age, so usually children with precocious puberty will end up short, it will also affect children's mental health, staring puberty before 9 means that children need to deal with the thing that is beyond their age. . Even when it's happening to average 12-year-olds, puberty can be a confusing time. So it is even more stressful for younger kids with early puberty. They might feel awkward about looking different from their peers. Early menstruation can be unsettling for girls who are age 9 or younger.

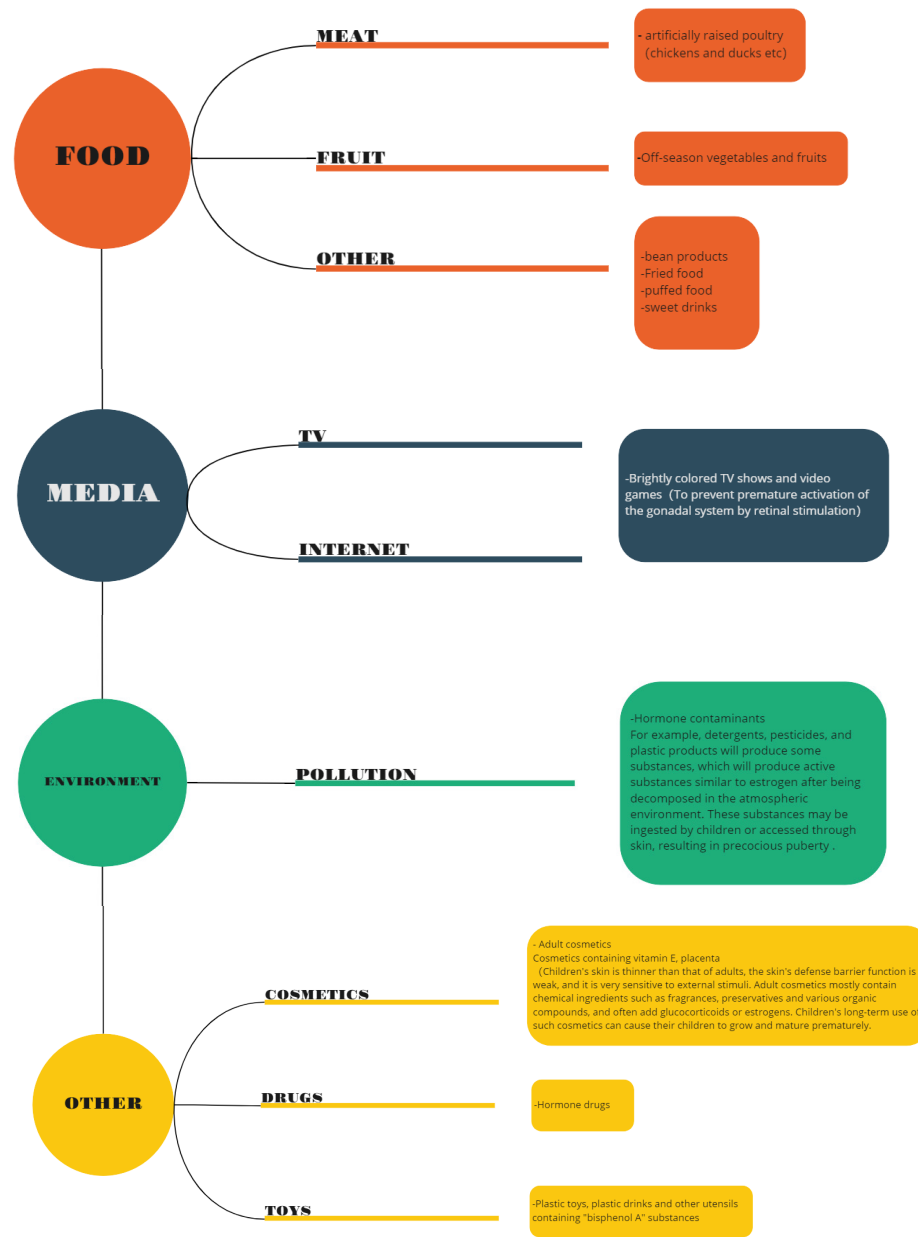
# WEEK 3

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- **Research**
- **Interview**
- **Further research**

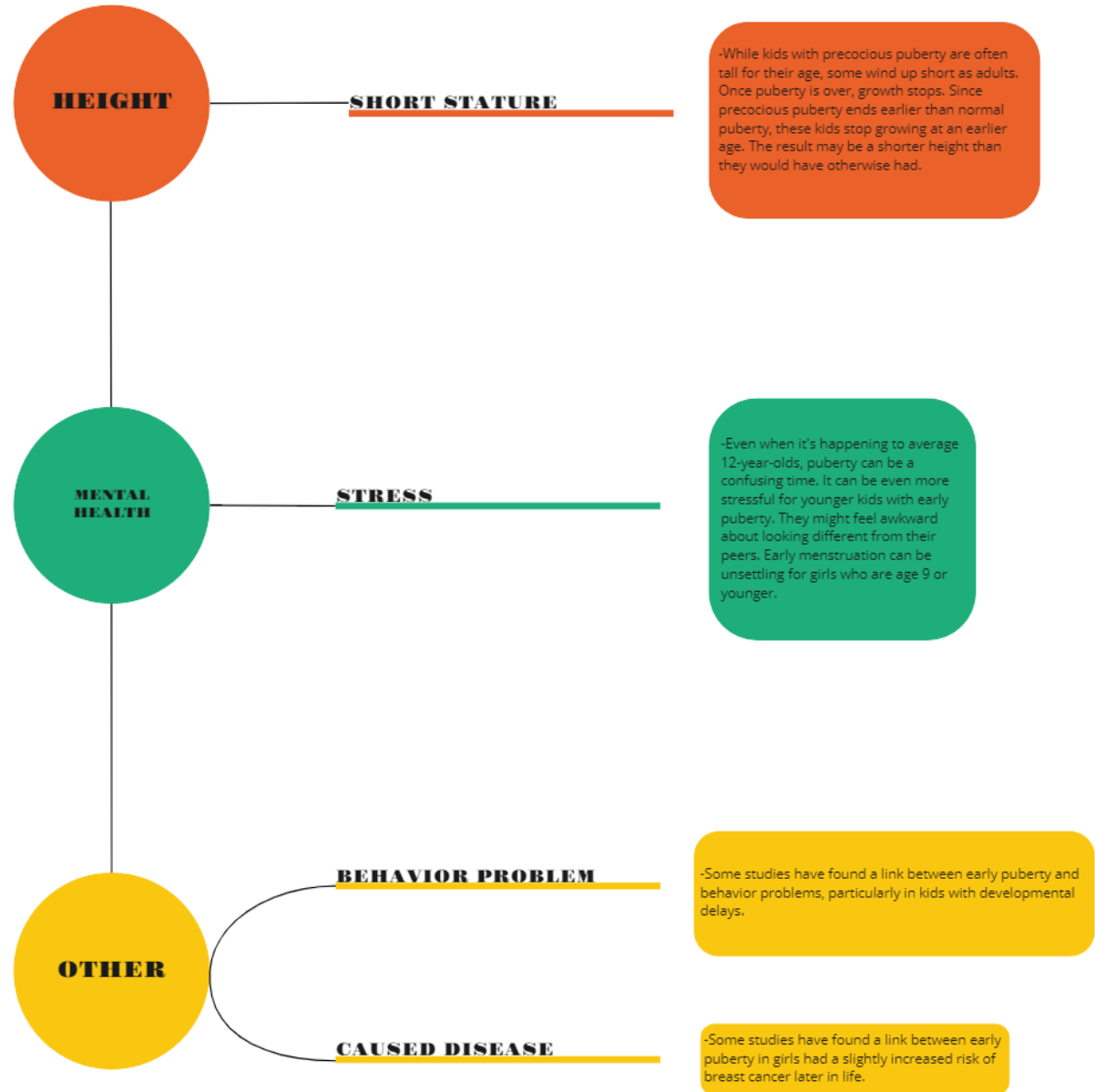
# RESEARCH

What will cause Precocious puberty



# RESEARCH

What will Precocious puberty cause





**XIAOHONG WU** (吴晓红)  
**Chief Physician of Pediatrics**

## INTERVIEW

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### SOME NOTES

"There are about 150 patients in our outpatient clinic every day, and one-third of the patients are precocious puberty." Chief physician Wu Xiaohong said that the incidence of precocious puberty outpatient clinics is second only to thyroid and short stature diseases. According to the current outpatient volume, the precocious puberty in children has an upward trend year by year.

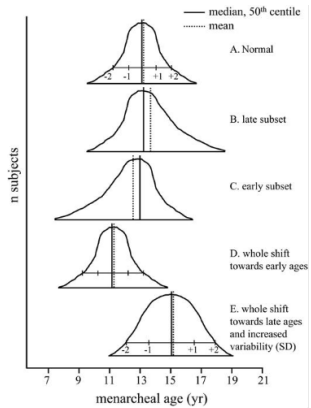
The influence of the environment causes precocious puberty. For example, children living in a state of severe environmental pollution for a long time, or the residues of pesticides and ripening agents on the fruits and vegetables they usually eat may lead to precocious puberty in children.

Many parents of patients who come for treatment choose drug intervention. These drugs might cause skeletal dyspepsia in children to have atypical lengths of legs. The effectiveness of drugs also depends on the individual. This medication takes a long time and is very expensive.

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From the interview I found out that there is an opportunity to look into the food safety issue, environment pollution problem and is precocious puberty a global happening issue. starting with doing more research.



academic.oup.com

## Timing of Normal Puberty and the Age Limits of Sexual Precocity: Variations around the World, Secular Trends, and Changes after Migration

Abstract. During the past decade, possible advancement in timing of puberty has been reported in the United States. In addition, early pubertal development and

<https://academic.oup.com/edrv/article/24/5/668/2424459>

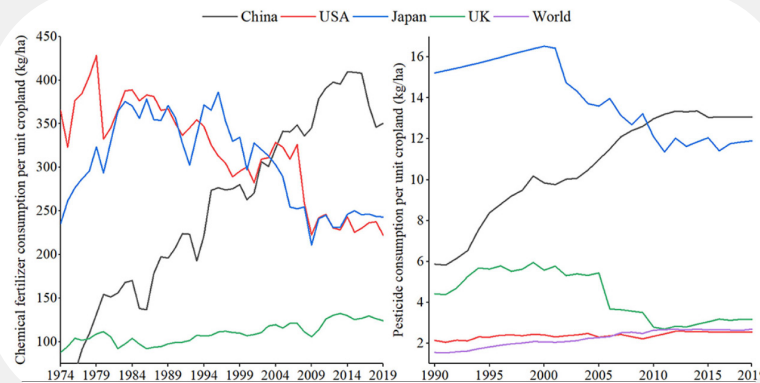


meridian.allenpress.com

## Climate Change and Emerging Food Safety Issues: A Review

ABSTRACT. Throughout the past decades, climate change has been one of the most complex global issues. Characterized by worldwide alterations in weather patterns, along with a concomitant increase in the temperature of the Earth, climate change will undo...

<https://meridian.allenpress.com/jfp/article/84/11/1884/467299/Climate-Change-and-Emerging-Food-Safety-Issues-A>



the consumption intensity of chemical fertilizer and pesticide in China has almost kept rising during the past two decades. As of 2019, the fertilizer consumption intensity of China was 350.5 kg/ha, which was about 1.5 times that of the United Kingdom and Japan, three times that of the United States and world average (122.01 kg/ha). The pesticide consumption intensity of China in 2019 was 13.07 kg/ha, which was about four times that of the United Kingdom, five times that of the United States and global average (2.69 kg/ha).

Found out that the food safety issue are rising in China seriously these days, and it is also the reason that cause children's early puberty.



geopolitique.eu

## The State of China's Environment: What Has Changed in the Past Few Years? - Groupe d'études géopolitiques

In 2014, the Chinese Prime Minister Li Keqiang announced that the country would go to "war on pollution with the same determination as the one waged against poverty" and, in 2017, President Xi Jinping declared that he wished to make the Chinese nation a...

<https://geopolitique.eu/en/articles/the-state-of-chinas-environment-what-has-changed-in-the-past-few-years/>

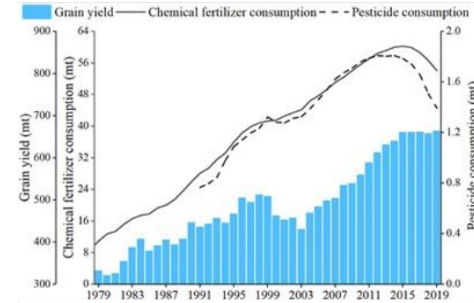
www.ncbi.nlm.nih.gov



## Food Safety Issues in China

As a global problem, food safety significantly affects the public health in both developed and developing countries, especially in countries with large populations, e.g. China. A 2011 survey reported that food safety was the most concerned issue in China...

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4500434/>



www.frontiersin.org

## Pollution-Induced Food Safety Problem in China: Trends and Policies

Based on systematic literature study and policy document analysis, this paper investigates the environmental pollution-induced food safety problem in China, including the impact of environmental pollution on food safety and the policy response of China...

<https://www.frontiersin.org/articles/10.3389/fnut.2021.703832/full>



link.springer.com



## Prevalence of precocious puberty among Chinese children: a school population-based study - Endocrine

**Purpose** To investigate the prevalence of precocious puberty in school-based population in Zhongshan, Guangdong, China. **Methods** We recruited a total of 4058 students in grades 1-3 using a multistage stratified cluster random sampling method in a population...

<https://link.springer.com/article/10.1007/s12020-021-02630-3>

Due to the research and interviews, I found out that the precocious puberty not an globally issue, although the overall phenomenon shows out that its globally on the rise, but currently it only seriously effect children in some country, and China is one of it.

So I decided to focusing on Chinese children under the age of 12 that are suffering precocious puberty.

# WEEK 4.

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- Survey
- Interview
- Inspiration
- Mindmap

## **SURVEY**

A decorative graphic consisting of a vertical grey bar with rounded ends and a horizontal grey bar with rounded ends, intersecting at a right angle.

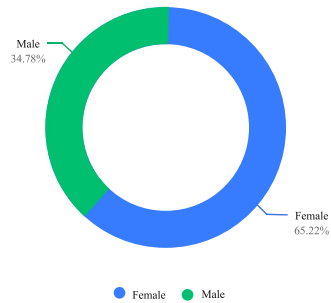
To understand parents' perceptions  
of precocious puberty and food safety  
by surveying parents of children  
under 12 in China

# RESULT

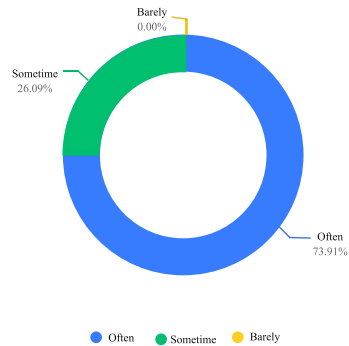
80 person has take part in this survey

Interesting point

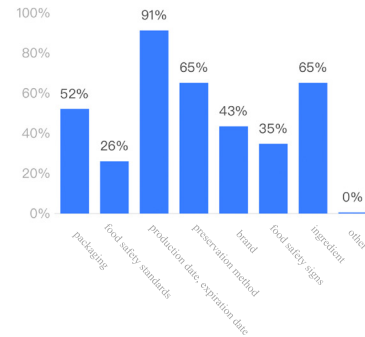
Q1. Your Gender is



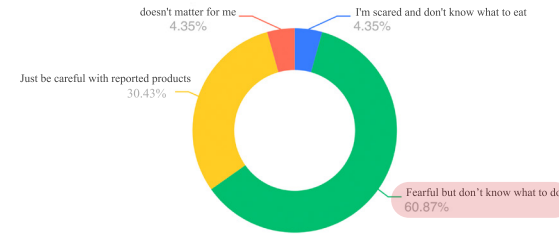
Q2. Will you pay attention on food safety issues in your daily life?



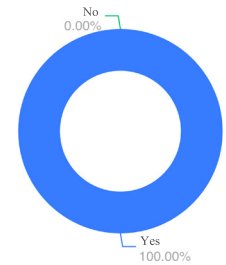
Q3. Which of the following will you pay attention to when shopping for food ?



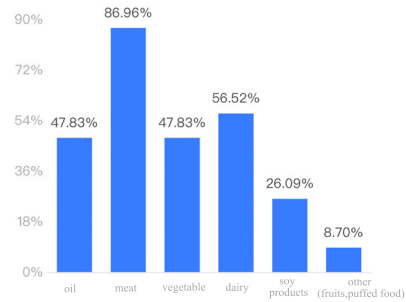
Q5. What is your current attitude towards the issue of food safety?



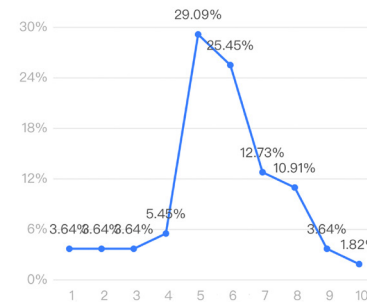
Q7. Do you think it is necessary to learn about food safety knowledge?



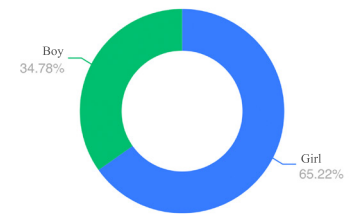
Q4. Which products worry you most in your daily life?



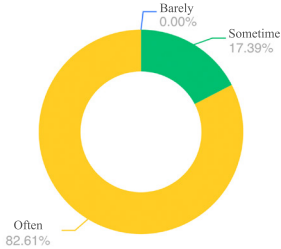
Q6. On a scale of 10 out of 10, how would you rate the current food safety situation?



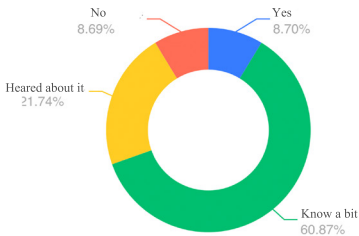
Q8. Gender of your child?



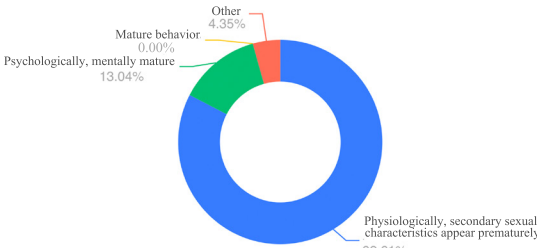
Q9. Do you usually pay attention to your child's growth?



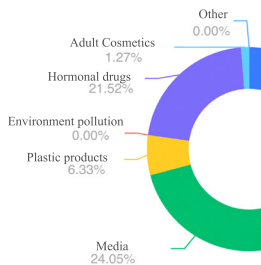
Q11. Do you know about children precocious puberty?



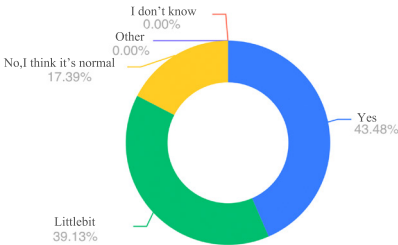
Q13. What do you think are the signs of precocious puberty?



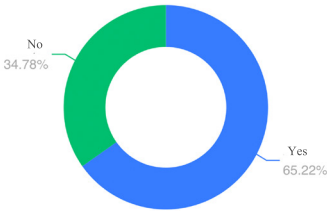
Q15. Which of the following do you think are the causes of precocious puberty?



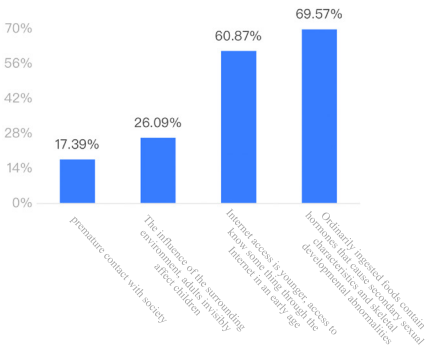
Q10. Do you think your children are precocious now?



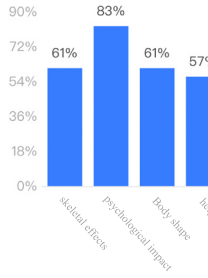
Q12. Has your child or any child around you are experiencing precocious puberty?



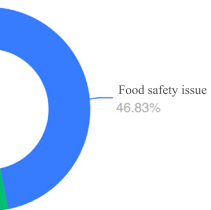
Q14. What do you think could lead to precocious puberty?



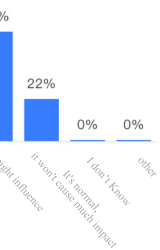
Q16. What impact do you think precocious puberty will have on children?



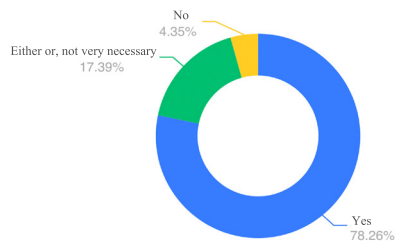
ou think is the main cause  
uberty?



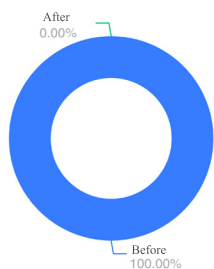
nk precocious puberty  
s growth?



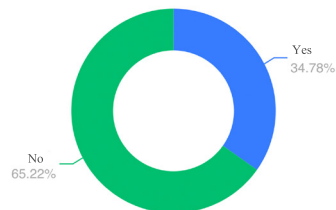
Q17. Do you think precocious puberty is necessary to intervene?



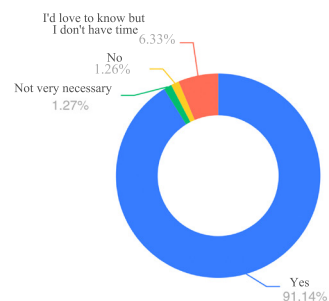
Q18. For precocious puberty, do you think it is more important to  
prevent early or to intervene after?



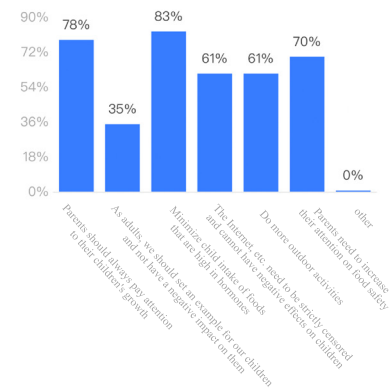
Q19. Do you know how to prevent precocious puberty?



Q20. Do you think it is necessary for parents to learn the relevant  
knowledge of precocious puberty?



Q21. What do you think we should do to improve this situation?



## INTERVIEW

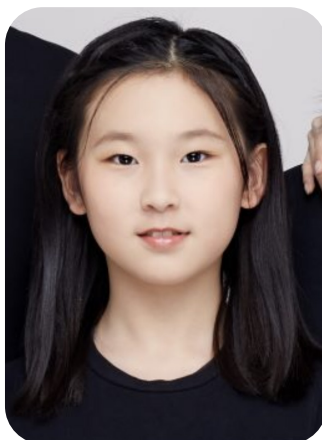
I got the inspiration ( precocious puberty) by my sister, cause she got it at 9, so after the desk research and the survey I interviewed my mom and my sister.



**Stakeholder 1**

"My daughter was diagnosed with precocious puberty around October last year. At first, she was taller than her peers and We were very happy. Later, she is inclined to grow fat and her breasts began to grow as well. We didn't pay attention to this problem until September last year. She had her period. We took her to the hospital, and the doctor said she had "precocious puberty". We did not choose to do drug intervention. Drugs are expensive and will also have negative effects, so we chose to improve it by control the food that she ate and do more exercise. I think the changes that she had are mainly emotional. her mood are very unsettle, We are very worried that she will have physiological and mental problems,so we are paying a lot attention on her. I think the problem of precocious puberty in China is on the rise. When we went to the hospital, the hospital was full of children with symptoms of precocious puberty. I think the main cause of precocious puberty is the food safety problem in our country, and the widespread use of pesticides and hormones.

I hope that parents can pay attention to this problem and effectively prevent their children from precocious puberty in advance"



**Stakeholder 2**

"Mom and dad will control me of eating, such as all the dairy products that I love, and I can't drink coke."

"I don't know when to change the pads, my mom need to keep reminding me."

"I don't like to wear bra, many other girls in the class haven't worn one yet."

"I think mum is too harsh sometimes, it will not have big issue to play games for a while."

"I feels a controlled life makes me tired"

One of the point that interested me which also lead me to the next step is, my mom was telling me through our interview that one of my sister's friend, when she first got period she can not accept the changes with her body, she cried hardly to her mom saying that " I don't want to get periord at this early age, I hope I can be a boy." But these did not happend on my sister, because my sister got me-her big sister, she can see what is going on on me every month so she knew this will happen on her one day and when things happened on her it did not terrified her.

I think the problem is children cannot handle the things that is beyond their age, they step into a unknown area unpreparedly, so the sudden changes with their body make them feel unacceptable which is also the main reason that leads to mental health issue.

# INSPERATIONS



## Ara Smartphone

by San Francisco studio Lapka

Lapka has created seven conceptual modules that would perform functions including monitoring air quality, UV levels and heart rate – all designed to fit onto the skeleton of the Project Ara smartphone.

You can place each component into the slots on the back and secured with magnets, each component would collect, store and relay data to the user via the phone's screen on the front.



## Solo, by Uniform

By Tom Barlow

Creative studio Uniform has made Solo, a device that tracks facial expression and plays music accordingly.

The “emotional radio” combines facial feedback with Spotify’s music valence ratings, linking moods to certain tracks. The wall-hung device has a camera at its centre, which takes a photo of the person’s face and sends the image to a Microsoft program that analyzes facial features. This calculates an “emotional barometer” of happiness, sadness and anger.



## Uniform

anks

o, a radio that reads your  
according to your mood.

eature recognition software  
which attribute different  
device has a circular screen  
erson standing in front of it  
gramme that analyses facial  
breakdown" with values of



## Synchrony

By Kenneth Tay

Synchrony is a therapeutic instrument designed to help parents and children with autism develop intimacy and promote understanding of each other through improvised music play.

A social-emotional barrier exists between parents and children with autism, often leading to dejection and decreased self-efficacy for both parent and child.

Improvised play in music therapy, a process that simulates mother/infant social play, helps to bridge that gap. However, the technical nature of improvised music play can intimidate parents from practicing it alone with their child.



## Alma - Therapy dolls

By YAARA NUSBOIM

Alma - Therapy dolls is a series of therapeutic toys designed for children who are dealing with emotional problems.

Each of the six Alma dolls corresponds to a different feeling – fear, pain, emptiness, love, anger and safety – and is designed to be used as part of play therapy.

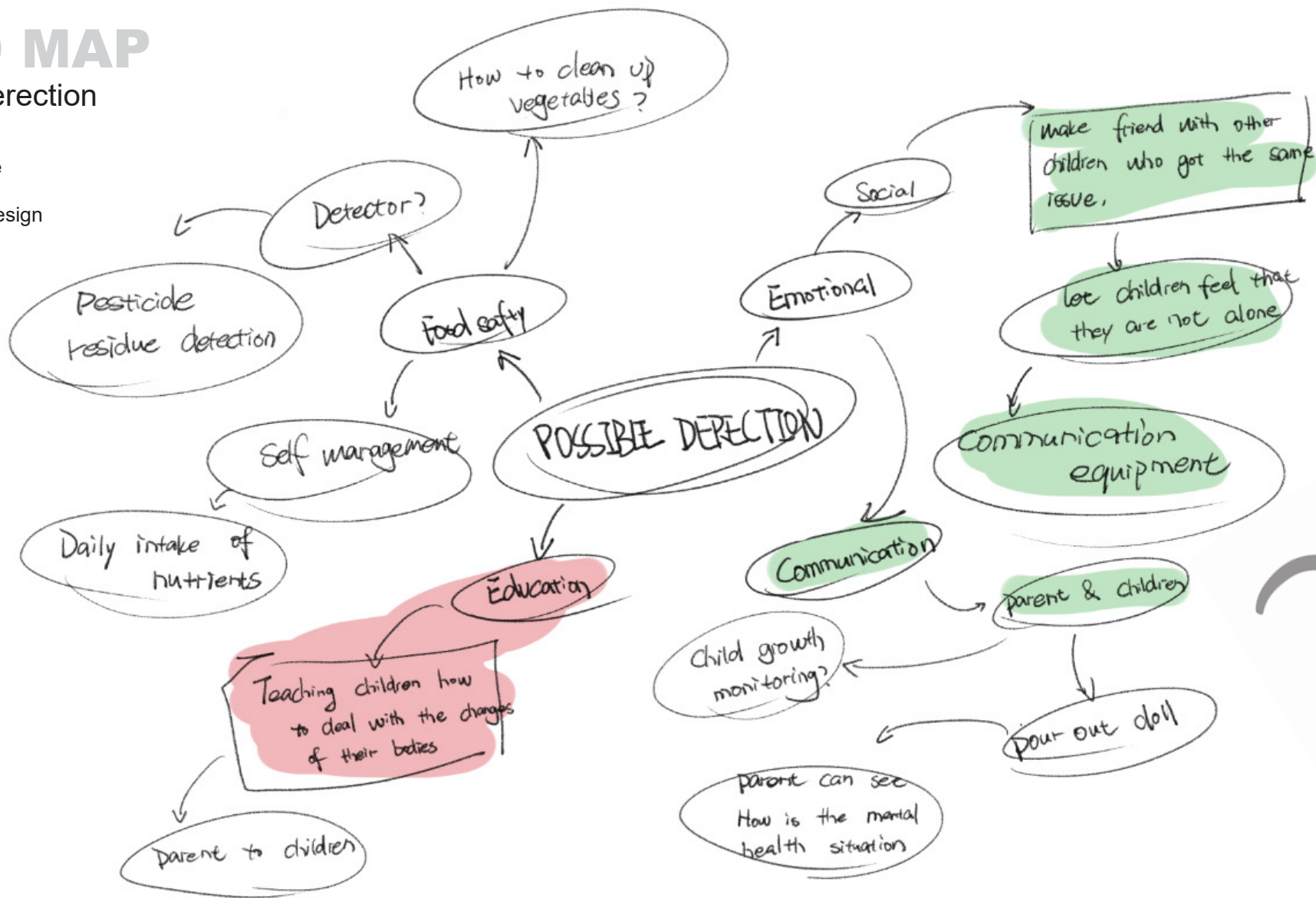
The dolls are meant to facilitate a child's connection to his inner world, and to improve and heal his condition.

# MIND MAP

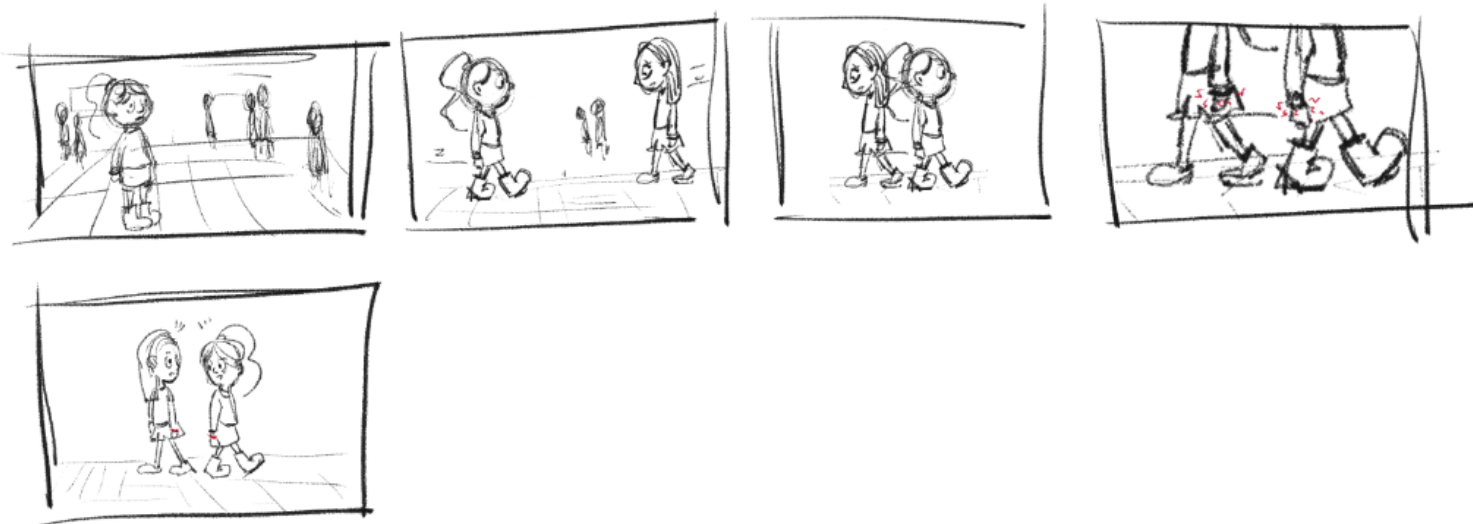
## Possible derrection

Final choose

Interested design moment



moment 1 feeling different from others



STORY  
BOARD

moment 2 parent are worried about children's mental health



# WEEK 5

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- Ideation
- Sketches
- Model making

Then I started to think about how can parent teach (educate) their children to better understand their body and let them feel acceptable to deal with the changes when things come.

I went back to my Skateholder 1 and shared this idea to her, she told me that in China most of the parent will shy away from sexuality education, they will always avoid answer these kind of questions.

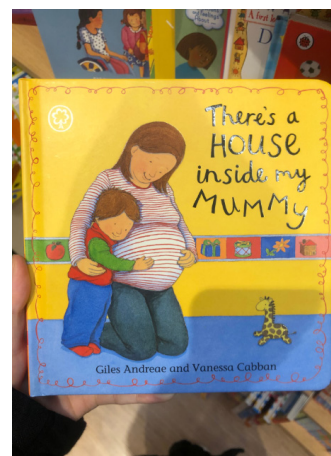
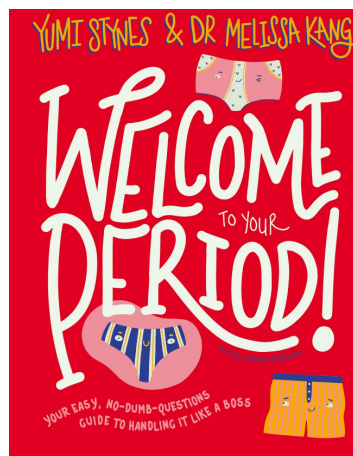
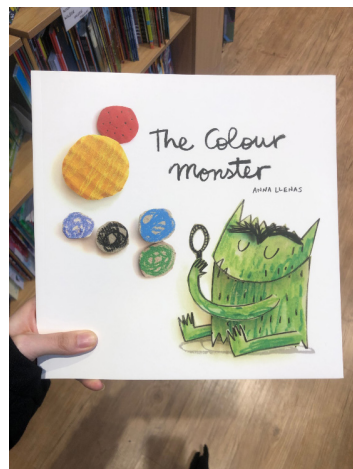
How can parent do comprehensive sexuality education to their kids in a better way?

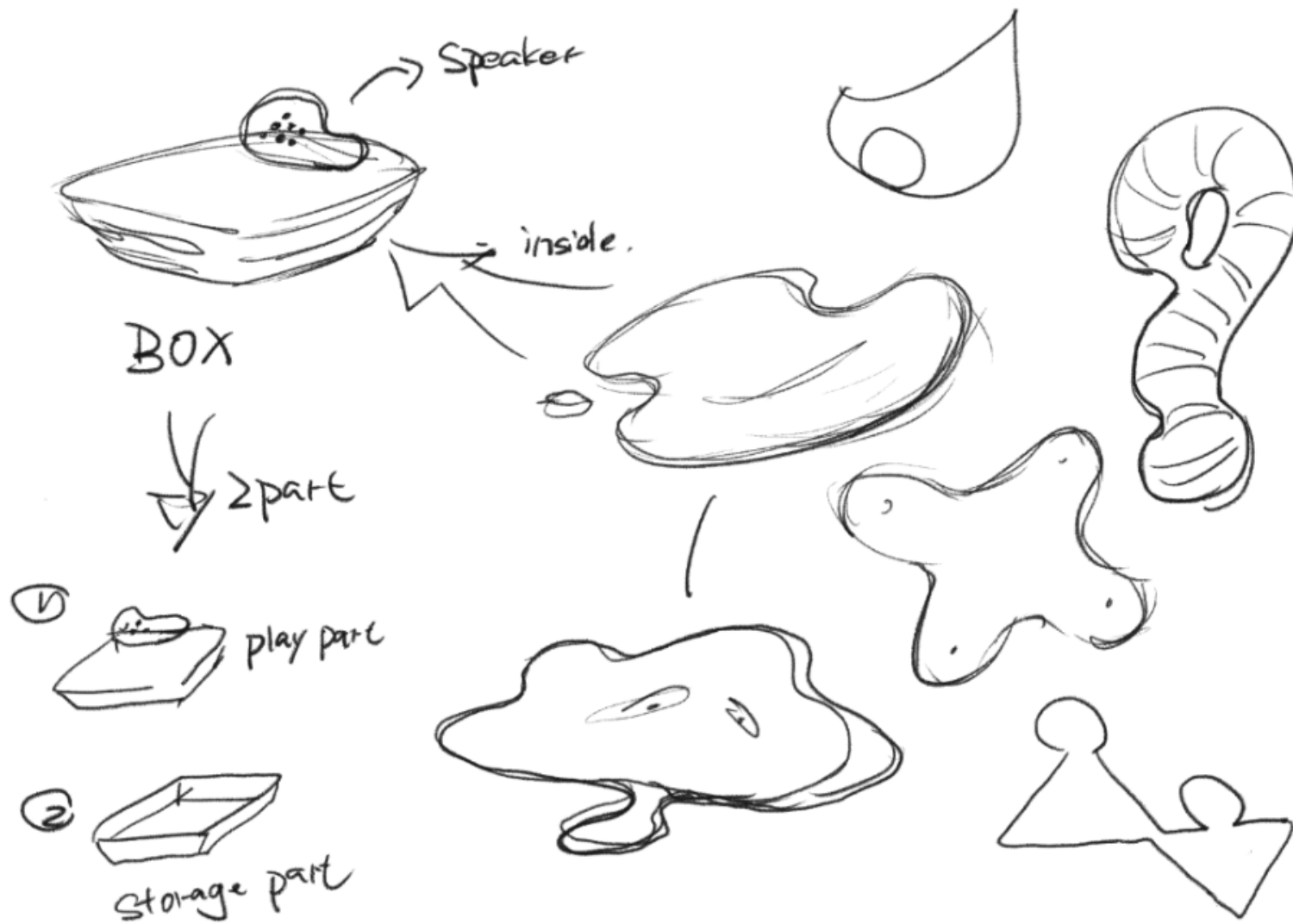
Through **STORIES**

# RESEARCH

## Story book hunting

Children can learn a lot of things through stories, and stories can also help children to have a better understand of things.



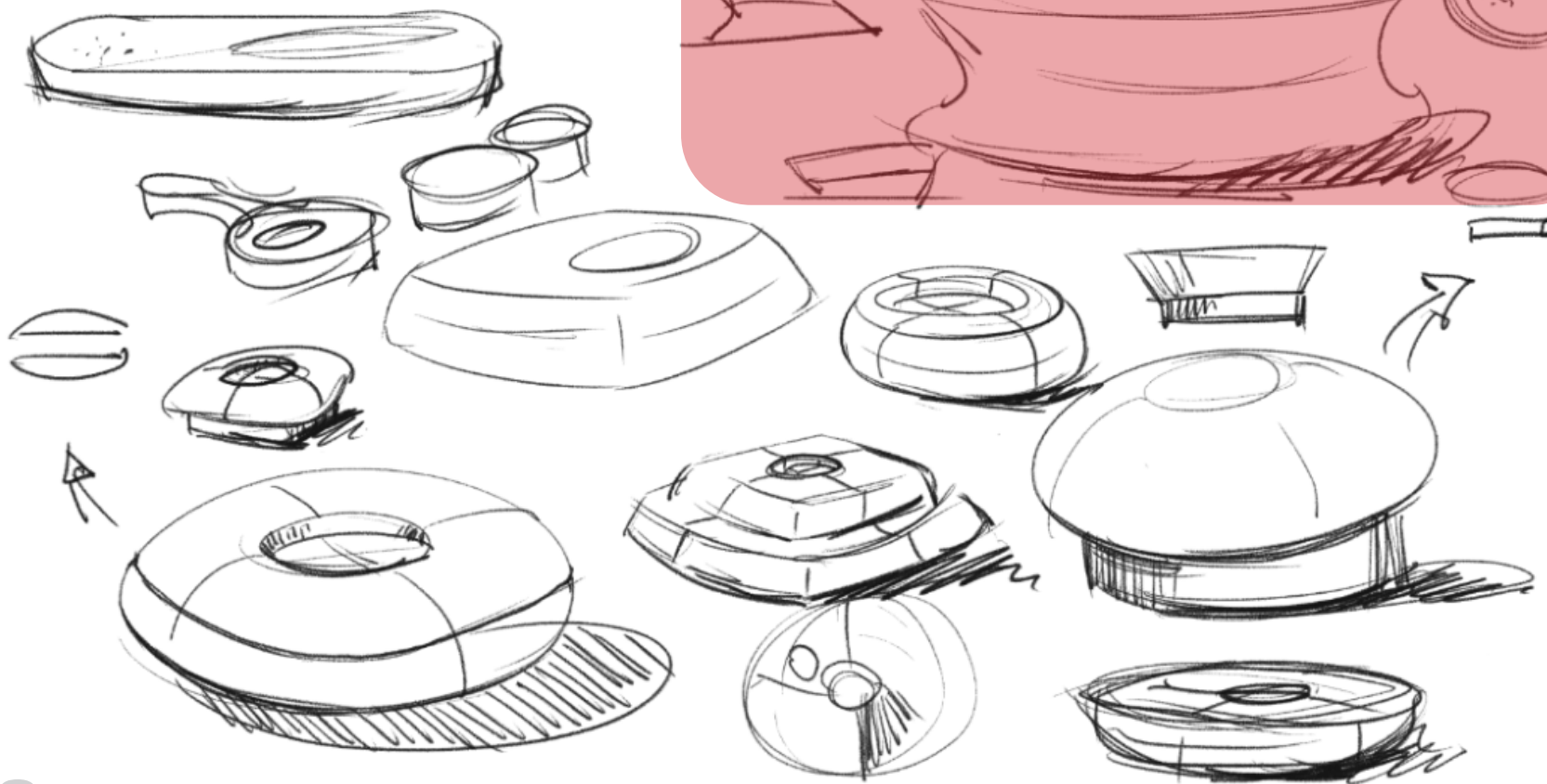
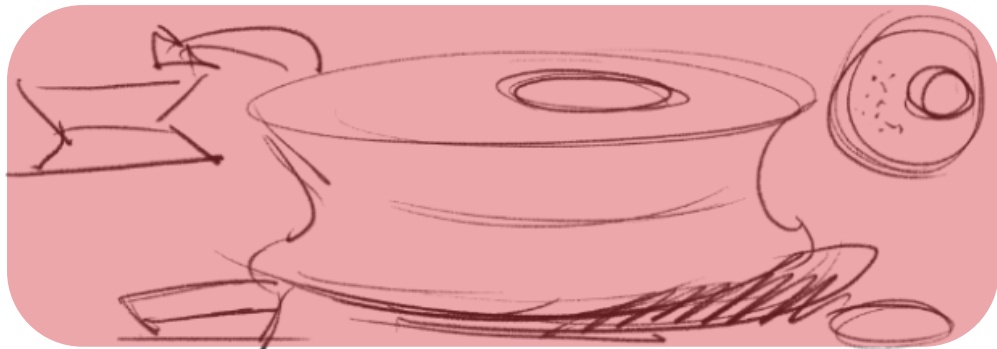


## IDEATION

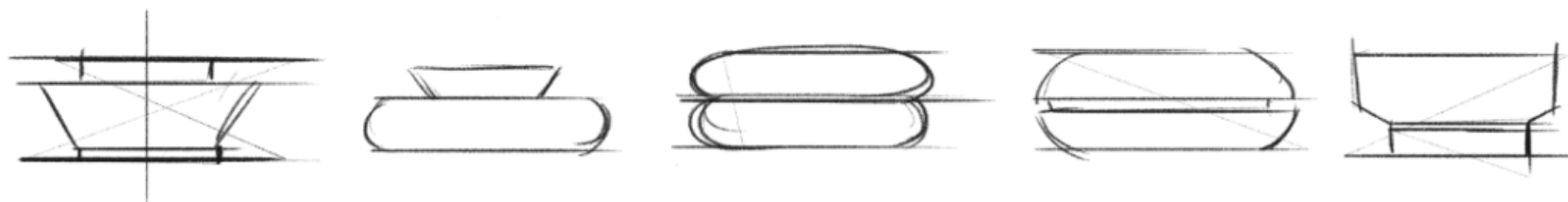
The product that I designed is a audio storytelling kit, use audio storytelling to properly guide children into their next step, the design will have two part, the top area will be playing part and it will have a storage area down bellow witch is the second part, in the storage area it will have different object ( will seems like toys) each one will lead to a different comprehensive sexuality education story.

the reason that I choose audio is because the using moment that I thought is children can use it before bed and fall asleep by lisening to the stories.

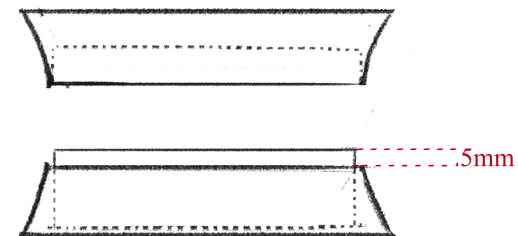
I do hope that it can help with the relations between children and parents by discussing what children can not understand in the stories, let parent not feeling awkward about discussing these questions.



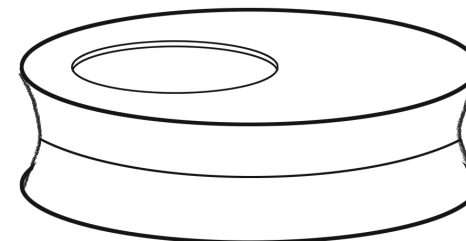
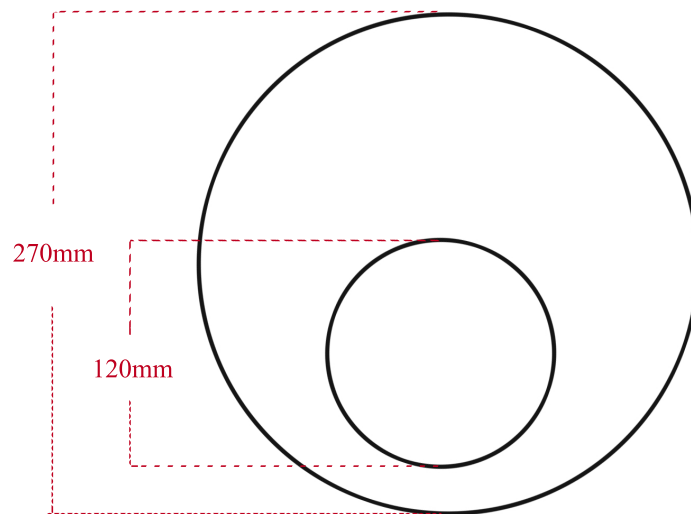
## SKETCHES



Final choose

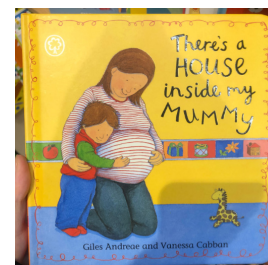
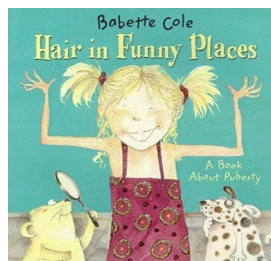


**MODEL  
SIZE**



# MODEL





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## REFLECTION

I like the topic of this project very much, but the final output is not very well presented, because it is a topic that I have never been exposed to, so I spend most of my time on research, survey and interview, and the idea is determined late. So I didn't focus more on the model and the final presentation, which is a shame. I hope that I can continue to complete this project and improve on the existing basis, such as what is the best way to present the product, whether the size is appropriate, the material can try to use recycled or biomaterial, and the material of the toy also needs to be comprehensively considered.

For this product, I also hope that it can be realized in the later stage. Parents can DIY stories for their children. This product will have many different story toys. Parents can choose stories for their children, so that each story is suitable for children.

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