

FOOD SAFETY AND NUTRITION STUDY OF LEFT-BEHIND CHILDREN

U-Corp @ Synear

Final report by Dong Ding, Jiayu Gao, Taya Rozenshteyn, Wenxin Dong



Duke Kunshan University
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Goals

- **To investigate** food safety and nutritional value of left-behind children in Chinese rural areas in the context of the Covid-19 pandemic.
Included: visiting schools; interviewing students, parents, grandparents, school workers, and shopkeepers in the rural area.
- **To report a fieldwork data analysis back to 思念 and propose future policy and product suggestions.**

Methodology

1. Desk Research



2. Interviews & Observations



3. Data Analysis





Field trip - Data Processing Method

1. Environment

- Overall environment
- Urban Area
- Schools
- Local markets and industries
- Other

2. Users (persona)

- Left-behind children
- Interviews with grandparents and teachers

3. Activities

- Students (left-behind children)
- Grandparents
- Parents
- Teachers

4. Objects

- Business and trade
- Internet and electronic devices
- Food and life

Insights and Suggestions

Desk Research - References

1. Left-Behind Children around the globe

Protecting the welfare of China's left-behind-children (Policy Forum, 2020)

Children "Left Behind" (UNICEF, 2019)

"Our Parents Are All Gone": Understanding the Impacts of Migration on a Generation of Chinese Children (Stanford)

China's Left-Behind Children: Impact of Parental Migration on Health, Nutrition, And Educational Outcomes (Zhou et al., 2015)

The health of families left behind (IOM)

The health of left-behind children in China: Evidence from mediation analysis (Lu et al. 2019)

2. China's left-behind children

Nutritional status of children during and post-global economic crisis in China (Biomed Environ Sci, 2011)

中国部分农村地区2—7岁留守儿童膳食营养现况研究 (中华流行病学杂志, 2011)

留守儿童、随迁儿童的饮食规律和荤素搭配更差吗?—来自青、陕、豫的证据 (农林经济管理学报, 2011)

中国农村留守儿童营养与生长发育现状及影响因素 (2018).

家庭因素对农村留守儿童饮食行为的影响 (中国学校卫生, 2020)

改革食品安全城乡分治, 保障食品安全国民待遇 (行政管理改革, 2012)

中国农村留守儿童营养改善: 现状与展望 (2017)

陕西省农村学龄前留守儿童饮食行为特征及影响因素 (公共卫生与预防医学, 2017)

关注留守儿童 绿色健康饮食 (新课程, 2019)

农村留守儿童食品安全问题探析 (邢台学院学报, 2016)

农村留守儿童安全问题研究——以江永县为例 (湖南师范大学, 2014)

Desk Research - Takeaways

Left-behind children around the globe

- **Current situation: global left-behind children issue.**
- **The reason: poverty and lack of jobs – migration – parent's inability for care**

China's left-behind children

- **Existing problems**
- **Food safety: Pirated food / Poor sanitary / Epidemic / Lack of hygiene resources**
- **Nutrition: Low standard of diet / Imbalance / Over-nutrition / Malnutrition / Irregular**
- **Causes**
- **Internal: Lack of education / mental vanity / physical and economic conditions of grandparents**
- **External: Insufficient funds / Lack of supervision and targeted laws / Inconvenient transportation**

Field Trip - Environment - Qianshan, Anhui



- Qianshan is a city in the southwest of Anhui Province.
- A very mountainous region to the north of Qianshan. Fresh air, beautiful scenery, and possible impact on farming conditions.
- The district's yearly temperature is 19.79°C and it is 5.17% higher than China's averages (It was very hot this summer).

Field Trip - Environment - Urban life



- Qianshan city is quite developed but there is a strong contrast between the downtown and rural areas.
- The architecture of Qianshan seems to be quite monotone. 单元楼 (Dānyuán lóu).
- Population of 570 thousand.

Field Trip - Environment - Schools



- Schools like 天柱山中心小学 and 黄柏镇中心小学 seem to be in a very good condition.
- Got funding from outside investors.

- The abandoned school was replaced by 天柱山中心小学, had a lot of drawings on the walls, broken glass and a lot of junk outside thrown away.

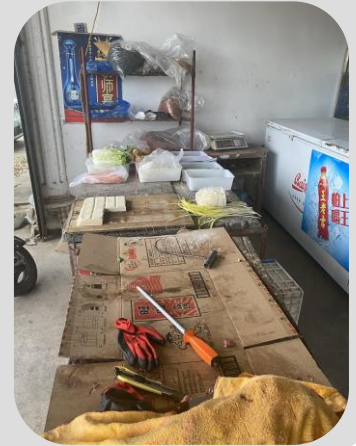
Field Trip - Environment - 杜埠中心小学

- The school is very old, built in 1949.
- Only has about 100 students but not that small compared to the overall condition.
- The canteen in this school is a separate building. Some of the schools don't have canteens. Some schools have small canteens that don't provide enough seats.
- The canteen doesn't have the best sanitary conditions.
- Most of the elementary schools come with kindergartens.
- All schools have sports fields and students have physical education classes twice a week.



Field Trip - Environment - Local markets and industries

- A lot of clothing industries; women using sewing machines to make clothes can be seen often.
- Sunflower seed industry is big as well.
- Pirated food in the markets is common, as well as self-made snacks of the region.
- No minimarts around the schools in the countryside.
- Sanitation is not the best there.



Field Trip - Environment - Other

- People in rural areas consume products that they grow such as chicken, geese, and pumpkins.
- Activity center for the elderly.
- Temple: seemed to be new, in a good condition.
- Abandoned building, potentially due to going bankrupt.
- No Covid-19 in the area.



Field Trip - Users - Persona



Zihan 10 years old

Grade 4 from Dubu Central Elementary School

Introverted ————— Outgoing

Thin ————— Heavy

Short ————— Tall

Family: Parents work outside,
live with grandparents.

- Preference: Food at home
- Protein intake: seldom eat eggs, drink milk
- Picky: a bit picky
- Snack: seldom eat snack

FOOD

- Miss his parents
- Quiet, timid
- Evidence of being bullied

MENTAL



Yuxuan 9 years old

Grade 3, Yujinzheng Central Elementary School

Introverted ————— Outgoing

Thin ————— Heavy

Short ————— Tall

Family: Father works outside,
live with mother

FOOD

- Preference: Food at school
- Protein intake: Seldom eat eggs or drink milk
- Picky: Very fussy. Only love potato.
- Snack: Love 辣条. Parents would buy for her

MENTAL

- Happy life
- Mentally healthy

Field Trip - Users - Persona



Anqi 10 years old
Grade 4 from Dubu Central Elementary School

Introverted ———○————— Outgoing

Thin ———○————— Heavy

Short ———○————— Tall

Family: parents working outside,
live with grandparents

FOOD

- Preference: food at home
- Protein intake: an egg every day
- Picky: love meat, dislike vegetable
- Snack: love 辣条. Grandparents would buy for her.

MENTAL

- Miss her parents very much.
- Upset because she is not allowed to call her parents by phone.



Yihang 12 years old
Grade 6 from Dubu Central Elementary School

Introverted ———○————— Outgoing

Thin ———○————— Heavy

Tall ———○————— Short

Family: Parents work outside,
live with grandparents

FOOD

- Preference: Food at home
- Protein intake: drink milk type of drinks, not real milk
- Picky: not very picky
- Snack: love 火鸡面 best

- Active, energetic, enthusiastic
- Has a good relationship with teachers and classmates

MENTAL

Field Trip - Users - Interviews

A Granny

60+ years old

generally reflect the situation
of the senior in Qianshan



Earns money by picking tea in the mountains, farms, and does part-time jobs.

Puts the **eating issue** of the child in the first place. Cooks whatever the grandchild likes, but pays less attention to nutrition due to the lack of knowledge.

Often leaves the **leftover dinner** for the next day by covering the dishes with a cover.

At a loss about the **mental issue** of the grandchild (missing parents & rebellion).

There are many **single-parent families** or even **non-parent families** in rural areas.

Almost every class has a student with a **physical or psychological defect**.

School **canteens** in the rural area provide **nutritional, fresh food**.

Schools regularly conduct **food safety publicity** for students.

Some **rebellious children** reject doing homework and have a bad relationship with their grandparents.

Miss Gui

21 years old

became a teacher in 2021

teaches Math in Huangbai Central Elementary School



Field Trip - Objects



Business and Trade 商业与贸易

- Many minimarts can be seen in both downtown and rural areas but most of the businesses are run by individuals; standardized chain minimarts are nowhere to find. 小型商店很多，但几乎没有规范化的连锁便利店。
- No big malls spotted in rural areas which leads to fewer customer choices. 农村地区无较大规模商超，造成选择少和小型超市垄断。
- Homemade foods gain more trust as snacks. 非购买的本地制造零食更多地被信任。

Field Trip - Objects



Internet and electronic devices 互联网和电子产品

- **Electronic devices are popular even in rural areas, online payment is accepted, though the network is not stable** 电子产品和线上支付流行，网络质量不佳（三毛超市，网络不好无法微信支付，但是展示付款码）
- **Some kids are addicted to video games** 沉迷游戏（杜埠中心小学四年级学生沉迷王者荣耀）
- **Internet is a way for people to get job opportunities and information from outside world.** 互联网帮助人们获得工作机会，是了解外界信息的窗口。（杜埠中心小学六年级学生询问关于俄罗斯的话题，课后喜欢刷短视频。）

Field Trip - Objects

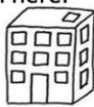


Food and life 食品与生活

- Food **produced originally** from home **is popular and fits most diets.** 原生态食材被更多地使用。
- **Freezers are only used during summer (there's nothing to keep in winter and are too costly)** 冰柜在冬天不使用，源于冬季需求小和花费高：（较少冷冻速食）
- **Lunch boxes are brought by students rather than provided by schools.** 学校不提供餐盘，需自带。

Field Trip - Activities

Students and teachers arrive at school in the morning and have lunch here.



School

Usually, female workers (mothers) sew clothes by semi-manual machine.



Workshop



Distant place

Grandparents find some part-time jobs. e.g. Picking tea, farming, decorating

Teachers have family visiting regularly.



Home

Students buy snacks and stationary here



Store



Chess room

Grandparents play mahjong here.



Restaurant

Parents and grandparents buy daily necessities here.

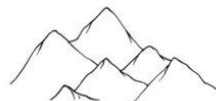
Students, teachers and parents have breakfast here sometimes.

Families also eat outside sometimes.



Covid test place

People do covid test once a week, Students and teachers do at school.



Out of Qianshan City

Parents work outside Qianshan for a higher salary. (usually one of them)

Insight - Rural areas have fewer food choices than in the cities.

Food choices compared with big cities. 与城市相比选择少

- In suburban areas of big cities residents can still get access to shopping markets for daily supplies. Yet in rural Qianshan, no such markets were observed. Besides, there are no chain stores even in downtown areas (all individual businesses).

乡村地区缺少商品种类多而适合比价的大型商超，而这种商超在大城市郊区也很常见。

Potential Consequences: 影响

- **Fewer food choice may lead to less attention paid to packaged food.** (When having many choices, people tend to take the ingredients and other factors into consideration but when fewer options are provided, they tend to pay less attention which is a bad habit.)

商品选择少导致对包装食品质量判断的意愿和能力降低。



Insight - Food quality concerns

Premiers:

- No or very few chain minimarts with the reliable quality of goods. Individual minimarts don't usually have a solid and unified standard of quality. Also, due to the fewer choices that they have, they may not care enough about food quality.

商超不规范化，缺少行业统一进货标准，更容易出现三无食品，假大牌，变质过期等食品问题。（三毛超市的台式小烤肠）

Consequences:

- Qianshan city doesn't have a lot of good quality foods and a unified standard hardly exists. This discourages residents to learn more about food quality and safety. 这种质量上的不规范化导致居民对于判定食品质量和维护自身权益都有消极作用。



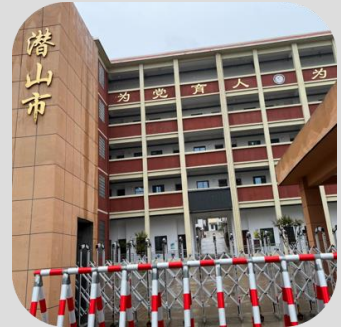
Insight - Food safety is not a big issue but what we should pay closer attention to is children's mental health.

1. A lot of children are **rebellious with their grandparents**. (Perhaps because of the generation gap or the specific traits of teens).
2. Children **miss their parents who have long been migrant workers outside the city**. The lack of parent-child interaction is not a problem that can be solved with voice or video phone calls. If parents could get jobs closer to the rural area, perhaps this could ease their hardships of not seeing each other.
3. Some children were born with **defects and they need help**. But they cannot be cured due to local medicine or poor economic conditions, which aggravate the psychological problems of these children.
4. Some children get **addicted to the Internet including short videos and video games**. This might be caused by the parents or grandparents inability to supervise their electronic device usage.

Insight - Qianshan is successful in poverty alleviation (脱贫) but there is room for improvement.

The government of Qianshan has done a good job in the poverty alleviation project.

- The government has provided a lot of subsidies (school canteen & lunch & redecoration)
- What the government has done was praised by teachers and families:
"The government is providing more money to schools in rural areas than last year."--Miss Gui, from Huangbai Central Elementary School.
"The government and the school have really done a lot for students"--
a teacher from Dubu Central Elementary School.
- Qianshan was successfully transformed into a city from a poor county in 2018 (mainly through tourism). (撤县设市)
- There is a shopping mall in the city center, just like the ones in the big cities.
- Downtown area had a good-rated hotel.



Insight - Qianshan is successful in poverty alleviation (脱贫), but there is room for improvement.

There is room for improvement due to the contrast between the city and the rural area.

- There are few people in the shopping mall.
- The surroundings in the city area are not in very good condition such as the bad sanitary situation.
- There are still low-income families in rural areas.
- One rural woman reported: "After the year 2021, some *previous* subsidy was canceled and life is tougher than before."
- The government should promote the balanced development of city and rural areas.



Insight - Migration to and from rural areas and its long-term consequences.

Higher grades have fewer students – 11 kids in the 6th and 21 in the 4th. One consequence for that may be that as the students get older, their families send them to better schools outside of Qianshan to pursue better life opportunities.



For China: The loss of a person from a rural area impacts the level of output and development of rural areas. The influx of workers in urban areas also increases competition for jobs, houses, school facilities, etc. Having a large population puts too much pressure on natural resources, amenities, and services (单元楼)

For individuals: Even though the migration to urban areas can increase one's income and living conditions, it might also lead to side effects such as family separation and the inability for one to adapt to city life which might lead to mental health issues (Ex: dialects lead to cultural condescension).

For students: Migration to and from rural areas can increase academic competition in schools putting more pressure on students as well as affecting their mental health.

In Qianshan, the exported labor force is mostly male, thus a lot of local industries are female-oriented (clothing). This might result in an uneven gender population in rural areas, and children growing up without fathers present.

Suggestions to Synear Charity

1. **Provide public activities on food safety and nutrition knowledge.** 开展更多亲民的宣传推广活动，介绍食品安全和膳食平衡，可以以老年群体为主要目标受众，开展提供免费食材（如免费拿馒头）的社区活动。
2. **Print information about food safety on products like fans and bags and give them out to the elderly in rural areas.** 将食品知识印在扇子或帆布袋上，免费发送给农村地区的老人。
3. **Directly reach out to low-income families to provide support/help.** 直接对接极度贫困的家庭提供帮助
4. **Start a new platform for Synear's job opportunities. The platform may be in-person with stations where villagers can go to search for job opportunities. The job opportunities on the platform can all fit villagers' abilities and needs and allow them to work from home.** 设立新的针对思念的招聘平台，一方面对接思念本部，获取适合村民能力和工资需求的工作机会，一方面定向为较贫困山区人群提供机会。平台可以有实体化站点，便于不常上网的村民接触到。

Suggestions to Syneer Group

1. **Provide longer paid maternity leave for Syneer workers who have left-behind children. (Maternity leave expanded to at least 6 months)** 为思念工厂中家里有留守儿童的员工提供更多带薪休假机会，如产假，育儿假等，提供更多亲子相处机会 (如产假至少延长到六个月)
2. **Provide additional accommodations for those parents who bring their kids to bigger cities. (e.g., cheaper house rent, education guarantee)** 思念公司可以为携带孩子进城打工的思念工人提供更好资源，如低价出租屋，教育保障等
3. **Provide free after-school hours in the factory for the children who wait for their parents to pick them up. (A space for them to study and play under the teachers' supervision).** 在工厂建立免费托管班，让孩子放学后可以去学习、活动，等待家长下班来接。
4. **More job opportunities targeted towards rural areas.** 提供更多针对农村地区的岗位。
5. **Create new products using feature ingredients from rural Chinese areas, such as dumplings with sunflower seeds from Qianshan and advertise those products in the name of rural revitalization.** 创新产品，研发新的“乡村振兴”系列食品，并从乡村地区购入原材料，如“潜山瓜蒌风味水饺”，并利用“乡村振兴”进行社会正能量产品宣传，增大影响力和利润

Conclusions

- Food safety and nutritional problems **still exist in rural areas (food choice & food quality)**.
- Grandparents **of left-behind children** lack knowledge **about food safety and nutritional diets**.
- Left-behind children **can use** electronic devices **to get access to the outside world**.
- **Children's** mental health **should be paid more attention to**.
- **The government** **should attach more importance to the** balanced development **of urban and rural areas**.
- **We hope** Synear **can** publicize food knowledge, create a better environment for left-behind children **(physically and mentally), and** help with the development of rural areas.

THANK YOU FOR LISTENING!

