

## INTRODUCTION

This paper is based on the Young Lives Project, an innovative long-term project that shows how the nature of child poverty is changing in four developing nations (Ethiopia, India, Peru, and Vietnam). These nations demonstrate a spectrum of cultural, geographic, and social changes as well as a number of problems that face developing nations, including unforeseen natural events like drought and flooding as well as a heavy debt load. In order to better guide the formulation of future policies and more effectively target child welfare interventions, this project aims to increase understanding of the causes and effects of childhood poverty and investigate how policies affect children's well-being. So, using Microsoft Report Builder and Power BI, the Child Well-Being Monitor reporting tool is created. Users may extract data and show it as graphs, tables, and other forms of visualization. This tool's goal is to transform data into useful knowledge to comprehend child poverty in lower-income nations. We initially registered with the UK data service to obtain data for the assignment, and then we used the URL provided to obtain the data.

(<https://beta.ukdataservice.ac.uk/datacatalogue/series/series?id=2000060#!/access>)

## EXPLORING THE DATA

### Downloading the dataset

We signed in to the UK Data Service interface and finished the username registration procedure. We were given permission to access the UK Data Services, which allowed us to get the dataset "International Study of Childhood Poverty: Rounds 1-5 Constructed Files, 2002-2016." The username and password we generated during the UK Data Service login allowed us access. We successfully logged in and obtained access to the platform, and then we went on to import the needed dataset into our account. The next step was to create an abstract outlining the purpose and scope of our work. After finalizing the abstract, we had to submit it as part of the procedure. After submitting the abstract, the procedure was finished, and we were given permission to obtain the requested dataset.

## **Importing the dataset to SQL Server**

To use the SQL Server Import and Export Wizard, simply right-click on the target database, select "Tasks," and then select "Import Data." Select the appropriate data source—for example, a "Flat File Source" for CSV files—and specify your SQL Server database as the destination when using the wizard. Working your way through the wizard's steps allows you to precisely specify source file attributes, effortlessly translate them to the appropriate table columns, and set up necessary parameters. After configuring the system, the import procedure simplifies data transfer. To ensure the process's efficacy, run queries to confirm successful data import and carefully go over a selection of records to confirm accuracy.

We chose Vietnam and India as our focus countries from the YoungLives database, and then we systematically polish the data. This procedure entails methodically removing blank and null values from India and Vietnam respective tables.

In these circumstances, this improves data quality, providing a solid foundation for perceptive analysis and informed decisions.

After any null values have been removed from the data, View tables are created using the improved tables for Vietnam and India. This procedure entails the creation of organized views that offer tailored views on the data to facilitate effective analysis and well-informed decision-making.

We generate the view tables without blank values and convert the numeric data to their specific data label using the SQL codes below.

### **Creating view tables**

Education view table

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```

CREATE VIEW EDUCATION_IV AS
SELECT *
From[dbo].[India_Education]
Union
SELECT *
From[dbo].[Vietnam_Education]

```

82 %

Results    Messages

	childid	chsex	hschool	hstudy	preprim	agegr1	levlread	levlwrit	literate	COUNTRY
1	IN010001	1	7	4	1	5	4	3	1	india
2	IN010002	1	8	1	1	4	4	3	1	india
3	IN010003	1	7	1	1	5	1	1	0	india
4	IN010004	2	9	1	1	5	4	3	1	india
5	IN010005	2	8	2	1	4	4	3	1	india
6	IN010006	1	7	1	1	4	4	3	1	india
7	IN010007	2	7	1	1	5	3	3	0	india
8	IN010008	2	10	1	1	7	4	3	1	india
9	IN010009	2	8	3	1	3	2	2	0	india
10	IN010010	2	7	3	1	6	2	3	0	india
11	IN010011	2	8	1	1	3	1	1	0	india
12	IN010012	2	7	2	1	6	3	3	0	india
13	IN010013	2	8	3	1	4	4	3	1	india
14	IN010014	2	8	3	1	4	4	3	1	india
15	IN010015	2	8	4	1	5	4	3	1	india
16	IN010016	1	8	1	1	5	2	2	0	india
17	IN010017	2	8	2	1	5	4	3	1	india

✓ Query executed successfully.

Health viewtable

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```

CREATE VIEW HEALTH_IV AS
SELECT *
FROM [dbo].[India_Health]
Union
SELECT *
FROM [dbo].[Vietnam_Health]

```

82 %

Results    Messages

	childid	yc	inround	dint	chsex	chweight	chheight	bmi	agemon	tetanus	bog	chhrel	bwght	COUNTRY
1	IN010001	1	1	11/2/2002	1	7.599999905	69.19999695	15.87089565	6	1	1	2	3500	india
2	IN010002	1	1	10/30/2002	1	8.300000191	72.19999695	15.92222453	15	1	1	2	2500	india
3	IN010004	1	1	11/2/2002	2	7.199999809	69.59999847	14.86325828	10	1	1	2	3500	india
4	IN010006	1	1	11/1/2002	1	7.900000095	74.69999695	14.15747907	16	1	1	1	2250	india
5	IN010007	1	1	10/25/2002	2	9.399999619	76.19999695	16.18892191	12	1	1	2	3000	india
6	IN010012	1	1	10/29/2002	2	8.399999619	71.40000153	16.47717765	10	1	1	2	2750	india
7	IN010015	1	1	10/29/2002	2	7.400000095	71.30000305	14.55635466	11	1	1	1	2500	india
8	IN010016	1	1	10/26/2002	1	10.19999981	75.30000305	17.98913065	14	1	1	2	2500	india
9	IN010017	1	1	10/19/2002	2	8.5	77.5	14.15192508	15	1	1	2	2500	india
10	IN010018	1	1	10/30/2002	2	7	66	16.0697888	16	1	1	2	2500	india
11	IN010019	1	1	10/30/2002	1	8.300000191	77.30000305	13.89053843	16	1	1	1	3000	india
12	IN010020	1	1	11/2/2002	1	8.5	75.90000153	14.75486895	12	1	1	2	3000	india
13	IN010021	1	1	10/25/2002	2	7	68.30000305	15.00571155	10	1	1	2	2500	india
14	IN010022	1	1	11/1/2002	2	8.899999619	77.5	14.81789739	14	1	1	2	2700	india
15	IN010023	1	1	11/1/2002	1	10.19999981	80.59999847	15.70110061	16	1	1	2	2750	india
16	IN010025	1	1	11/1/2002	1	10.19999981	81.5	15.35624195	16	1	1	2	3000	india
17	IN010029	1	1	11/2/2002	2	7	62.09999847	18.15159784	6	1	1	2	3000	india

Query executed successfully.    DESKTOP-VBCH1LS (15.0 RTM)

# IMPLEMENTING THE DATASET TO THE SQL AND DESIGNING THE DATABAS

## 01. HEALTH OF CHILDREN IN INDIA AND VIETNAM

childid	yc	inround	dnt	chsex	chweight	chheight	bmi	agemon	tetanus	bcp	chhrel	bwght	COUNTRY
IND10001	1	1	11/2/2002	1	7.599999905	69.19999995	15.87009565	6	1	1	2	3500	india
IND10002	1	1	10/30/2002	1	8.300000191	72.19999995	15.9222453	15	1	1	2	2500	india
IND10004	1	1	11/2/2002	2	7.199999909	69.99999847	14.86326228	10	1	1	2	3800	india
IND10006	1	1	11/1/2002	1	7.600000095	74.69999995	14.15747907	16	1	1	1	2250	india
IND10007	1	1	10/25/2002	2	9.399999919	76.19999995	16.18892191	12	1	1	2	3000	india
IND10012	1	1	10/29/2002	2	8.399999919	71.40000153	16.47717785	10	1	1	2	2750	india
IND10015	1	1	10/29/2002	2	7.400000095	71.30000305	14.59635486	11	1	1	1	2500	india
IND10016	1	1	10/26/2002	1	10.19999991	79.30000305	17.58913065	14	1	1	2	2500	india
IND10017	1	1	10/19/2002	2	8.5	77.5	14.15182508	15	1	1	2	2500	india
IND10018	1	1	10/30/2002	2	7	66	16.0697888	16	1	1	2	2500	india
IND10019	1	1	10/30/2002	1	8.300000191	77.30000305	13.89033843	16	1	1	1	3000	india
IND10020	1	1	11/2/2002	1	8.5	75.90000153	14.75496895	12	1	1	2	3000	india
IND10021	1	1	10/29/2002	2	7	68.30000305	15.0571155	10	1	1	2	2500	india
IND10022	1	1	11/1/2002	2	8.899999919	77.5	14.61789739	14	1	1	2	2750	india
IND10023	1	1	11/1/2002	1	10.19999991	80.59999847	15.70110061	16	1	1	2	2750	india
IND10025	1	1	11/1/2002	1	10.19999991	81.5	15.35624195	16	1	1	2	3000	india
IND10029	1	1	11/2/2002	2	7	62.99999847	18.15197974	8	1	1	2	3000	india
IND10030	1	1	10/31/2002	1	10.19999991	77.5	16.8623070	14	1	1	1	3000	india
IND10031	1	1	11/2/2002	2	8.600000381	73.5	15.91593959	12	1	1	1	3000	india
IND10032	1	1	11/2/2002	1	10.18899981	80.5	15.74013319	16	1	1	1	3000	india

childid	yc	inround	dnt	chsex	chweight	chheight	bmi	agemon	tetanus	bcp	chhrel	bwght	COUNTRY
VN050097	1	1	11/3/2002	2	7.800000191	64.89999995	18.63314247	9	1	1	3	2200	vietnam
VN050100	1	1	11/3/2002	2	8	70.19999995	16.23963495	7	1	1	1	4000	vietnam
VN050102	1	1	11/7/2002	1	10.60000038	74.19999995	19.25369591	10	0	1	1	3200	vietnam
VN050103	1	1	11/6/2002	2	9.300000191	72.40000153	17.74213219	9	1	1	2	3700	vietnam
VN050107	1	1	11/4/2002	2	7.800000191	72.59999847	14.79862595	10	1	1	2	3800	vietnam
VN050108	1	1	11/5/2002	2	7.199999809	68	15.5709343	8	1	1	2	2700	vietnam
VN050109	1	1	11/5/2002	2	6.5	66.90000153	14.52315903	7	1	1	3	3500	vietnam
VN050115	1	1	11/9/2002	1	8	71.19999995	18.78033706	11	1	1	1	3300	vietnam
VN050118	1	1	11/10/2002	1	7.300000191	73.80000305	13.40324974	14	1	1	3	3200	vietnam
VN170022	1	1	9/23/2002	1	8.399999919	74.40000153	15.17516327	13	1	1	2	3400	vietnam
VN170024	1	1	9/23/2002	1	10.69999981	79.40000153	16.97237068	17	1	1	2	3700	vietnam
VN170025	1	1	9/23/2002	1	10.89999992	79.5	17.24615288	15	1	1	1	3700	vietnam
VN170026	1	1	9/23/2002	1	8.600000381	78.30000305	14.02732658	16	1	1	3	2800	vietnam
VN170027	1	1	9/23/2002	1	8.100000381	73.80000305	14.87209688	13	1	1	1	3000	vietnam
VN170028	1	1	9/23/2002	1	10.80000019	76.40000153	18.50278091	12	1	1	2	3200	vietnam
VN170029	1	1	9/23/2002	2	9.399999919	77.59999847	15.61005402	14	1	1	1	2500	vietnam
VN170030	1	1	9/23/2002	2	10.19999981	83.09999847	14.77099937	17	1	1	1	3000	vietnam
VN170032	1	1	9/23/2002	1	10.10000038	75.5	17.71652112	11	0	1	1	2900	vietnam
VN170033	1	1	9/23/2002	1	7.599999905	68.30000305	16.29191589	7	1	1	2	3700	vietnam
VN170034	1	1	9/23/2002	1	8.800000191	74	17.89672457	11	0	1	2	2800	vietnam

A person's health is a state of physical, mental, and social well-being. Childid, foodsec, chweight, chheight, bmi, underweight, stunting, thinness, chhealth, and country are chosen to measure children's poverty in India and Vietnam in health.

- Childid- Child ID
- Foodsec- household's food situation in the last 12 months
- Chweight- child's weight (kg)
- Chheight- child's height (cm)
- Bmi- calculated  $bmi = \text{weight} / \text{squared}(\text{height})$
- Underweight- low weight for age
- Stunting- short height for age
- Chhealth- child's health in general
- Country

- Birth Weight: A child is considered healthy if their birth weight is greater than 2.5 kilograms. This indicates that the child was born at a healthy weight.
- Low Birth Weight: If a child's birth weight is less than 2.5 kilograms, it indicates that the child's body may struggle to maintain temperature, making them more vulnerable to cold and malnutrition. This condition has the potential to cause serious health problems or even death.
- Vaccinations: A child is considered healthier if they have received all of their vaccinations. A child is considered healthier if they have received all three required vaccinations. Vaccinations are essential for protecting against various diseases and ensuring the child's well-being.

Body Weight and BMI: Additionally, a child's health can be assessed by considering their body weight and Body Mass Index (BMI). Having the right body weight and a healthy BMI indicates that the child is in good physical health.

These factors collectively help determine the overall health and well-being of a child, with proper birth weight, vaccinations, and appropriate body weight and BMI being key indicators of a child's health status.

## 02. EDUCATION OF CHILDREN IN INDIA AND VIETNAM

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```
select
from [dbo].[India_Education]
```

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	childid	chsex	hschool	hstudy	preprim	agegr1	levlread	levlwrit	literate	COUNTRY
1	IN010001	1	7	4	1	5	4	3	1	india
2	IN010002	1	8	1	1	4	4	3	1	india
3	IN010003	1	7	1	1	5	1	1	0	india
4	IN010004	2	9	1	1	5	4	3	1	india
5	IN010005	2	8	2	1	4	4	3	1	india
6	IN010006	1	7	1	1	4	4	3	1	india
7	IN010007	2	7	1	1	5	3	3	0	india
8	IN010008	2	10	1	1	7	4	3	1	india
9	IN010009	2	8	3	1	3	2	2	0	india
10	IN010010	2	7	3	1	6	2	3	0	india
11	IN010011	2	8	1	1	3	1	1	0	india
12	IN010012	2	7	2	1	6	3	3	0	india
13	IN010013	2	8	3	1	4	4	3	1	india
14	IN010014	2	8	3	1	4	4	3	1	india
15	IN010015	2	8	4	1	5	4	3	1	india
16	IN010016	1	8	1	1	5	2	2	0	india
17	IN010017	2	8	2	1	5	4	3	1	india
18	IN010018	2	8	2	1	5	4	3	1	india
19	IN010019	1	11	1	1	4	4	3	1	india
20	IN010020	1	11	0	1	5	4	3	1	india

Query executed successfully.

SQLQuery2.sql - D...\VBCH1LS\User (60))\* X yngn.sql - DESKTOP...\VBCH1LS\User (58)) yonglin

```
select
from [dbo].[Vietnam_Education]
```

82 %

Results Messages

	childid	chsex	hchschool	hstudy	preprim	agegr1	levlread	levlwrit	literate	COUNTRY
1	VN050095	2	4	1	1	6	4	3	1	vietnam
2	VN050096	2	6	4	0	4	4	3	1	vietnam
3	VN050097	2	4	1	0	5	4	3	1	vietnam
4	VN050098	2	5	1	1	5	3	2	0	vietnam
5	VN050100	2	6	1	1	6	4	3	1	vietnam
6	VN050102	1	4	3	1	5	4	3	1	vietnam
7	VN050105	2	6	2	1	6	4	3	1	vietnam
8	VN050107	2	4	2	1	5	4	3	1	vietnam
9	VN050108	1	4	4	1	6	4	3	1	vietnam
10	VN050109	2	6	1	1	6	4	3	1	vietnam
11	VN050114	2	4	1	1	5	4	3	1	vietnam
12	VN050115	1	6	1	1	5	4	3	1	vietnam
13	VN050117	1	6	1	1	6	4	2	0	vietnam
14	VN050118	1	0	0	0	6	1	1	0	vietnam
15	VN170022	1	7	1	1	6	4	3	1	vietnam
16	VN170024	1	5	3	0	6	4	3	1	vietnam
17	VN170025	1	8	2	1	6	4	3	1	vietnam
18	VN170026	1	8	2	1	6	4	3	1	vietnam
19	VN170027	1	7	1	1	6	4	3	1	vietnam
20	VN170028	1	6	1	1	5	4	3	1	vietnam

Query executed successfully.

Education is the process of integrating children into society by teaching and imparting knowledge, skills, values, and norms. We created SQL table views using childid, hghgrade, dadedu, momedu, levlread, levlwrit, and country to measure children's education levels in India and Vietnam.

- Childid- Child ID
- Hghgrade- Highest grade achieved at time of interview.
- Dadedu- Father's level of education
- Momedu- Mother's level of education
- Levlread- Child's reading level
- Levlwrit- Child's writing level
- country

A child who begins grade one at the age of five is perceived to have a higher level of intelligence than a child who begins grade one at the age of six or seven. It is implied that starting school earlier may provide some benefits.

Starting school later (at age 6 or 7) may delay the child's entry into the labor force and earning money in the future. It appears to be drawing a link between early school enrollment and potential career advantages.

More school time is associated with a higher level of education, whereas starting school later may result in a lower level of education. It implies that people with lower levels of education may need to take action

## PowerBI illustrations

Dashboards are frequently used to track and illustrate critical metrics and performance indicators relevant to the aims and objectives of a company. Data from sales, income, customer satisfaction, marketing initiatives, and other sources can be included in business dashboards. A dashboard's principal aim is to give a clear and structured manner for people to engage with data or information in order to obtain insights or act on the displayed material. A dashboard's content and style can vary greatly based on the individual use case and the sort of data or information being shown. Dashboards can show critical performance indicators, real-time statistics, charts, graphs, widgets, and other visual components to assist users in making rapid choices.

The dashboard collects information from the Child Well-being Monitor in this section.

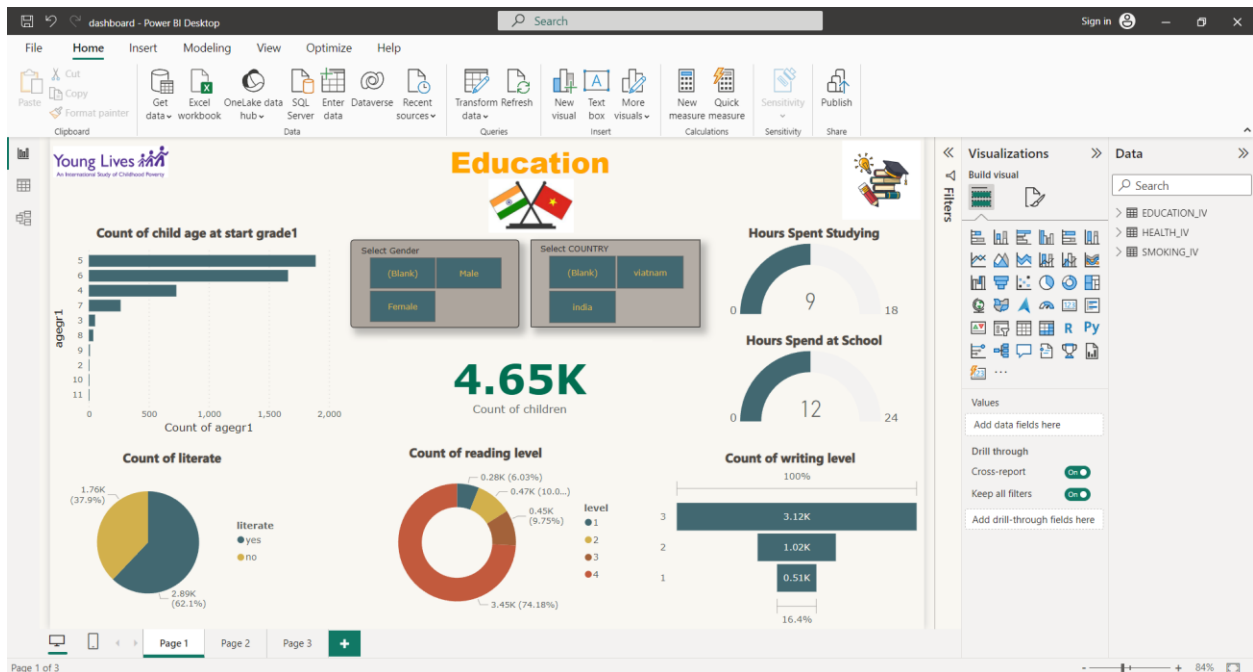
This is the dashboard for health for the INDIA and VIETNAM.





This PowerBI dashboard is about the health of children and how the each variables are changing accordingly. As you can see there are many different categories and some buttons also used to get a live dashboard display to the user

This is the dashboard for the education for India and Vietnam



This dashboard represent the education background of children in both Vietnam and India here also by selecting buttons a live action dashboard is visible

This dashboard for alcohol and smoking

