



Human Capital Profile of Filipino Adolescents

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UNIVERSITY RESEARCH CONFERENCES



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Outline and Key Points

- Background of the LCSFC Human Capital Index
- Key Findings:
 - Adolescent girls, from ages 10-15, are starting out with better human capital foundation than boys their age.
 - Adolescents from Luzon generally have higher mean scores for human capital foundation and its sub-indicators.
- Summary and Recommendations



Background of the LCSFC Human Capital Index



Human Capital Index (HCI)

- Human capital is broadly defined as the **accumulation of knowledge, skills, and health throughout one's life** (World Bank, 2020).
- In 2018, World Bank developed the Human Capital Index (HCI), which measures the “**amount of human capital that a child today can expect to attain by age 18**”.
- The goal of the HCI is to illustrate the **key stages in the life trajectory of children born today** and their **consequences for the productivity** of the next generation of workers.



World Bank HCI

- The **World Bank's HCI** is composed of the following key indicators measured on a national scale:



1. **Survival** – measured using under-5 mortality rates from the UN Child Mortality Estimates



2. **Expected Learning-Adjusted Years of School** – measured as the expected years of school by age 18 and harmonized test scores.



3. **Health** – measured as adult survival rates and the rate of stunting for children under age 5.



World Bank HCI – Philippines (2020)



HCI = 0.52

Boys = 0.49

Girls = 0.54



Survival to Age 5 =
0.97



Expected Years of
School = **12.9**



Harmonized Test
Scores = **362**



Learning-adjusted
Years of School = **7.5**



Adult Survival Rate
= **0.82**



Not Stunted Rate =
0.70



LCSFC HCI version

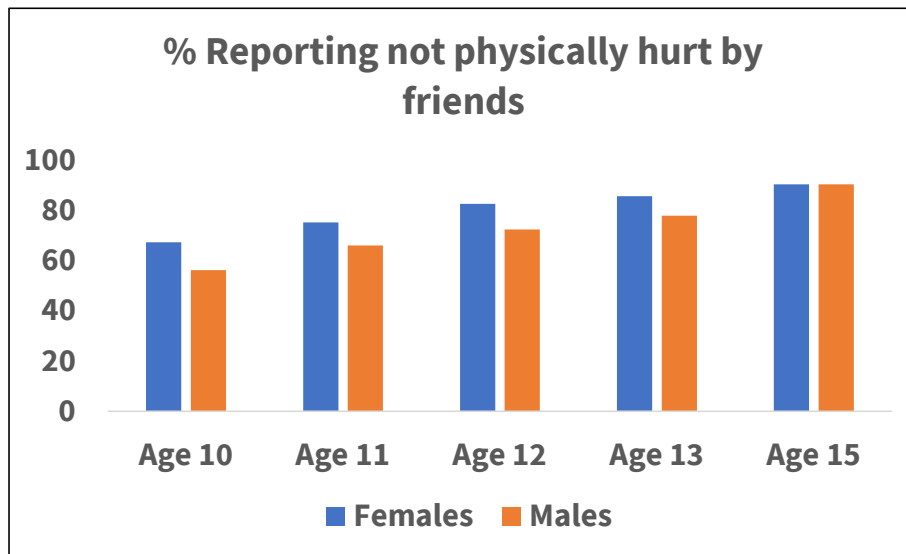
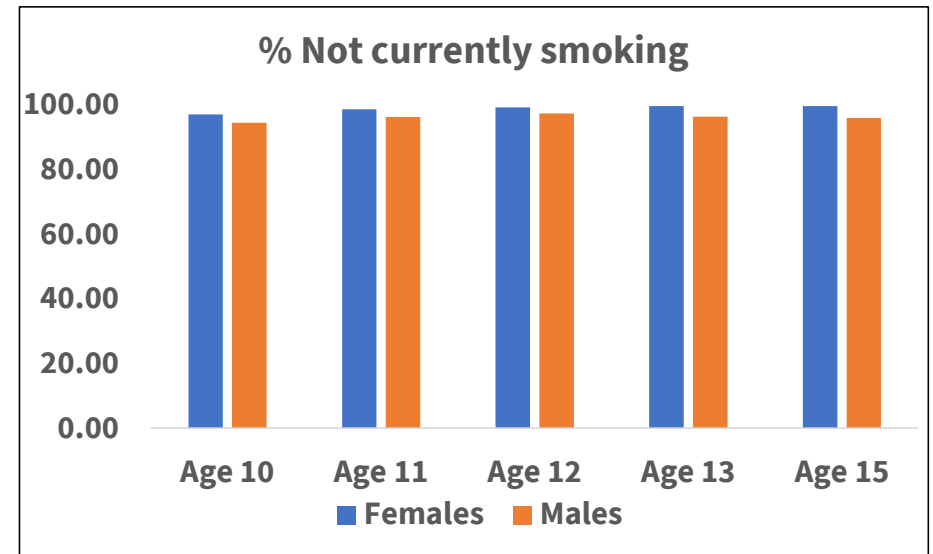
- The **LCSFC Human Capital Index (LCSFC HCI)** is constructed using indicators from the cohort study that correspond to the variables included in the World Bank's HCI.
- The index ($0 < HCI < 1$) quantifies the contribution of the following domains to human capital formation:
 - **Lifestyle** (smoking, drinking alcohol, exposure to violence)
 - **Health** (morbidity, stunting, wasting)
 - **School** (average grade, on track schooling, Raven's score)

World Bank and LCSFC HCIs

World Bank HCI Indicators	LCSFC HCI Indicators
<p>Survival</p> <p>Probability of Survival to Age 5</p>	<p>Lifestyle Index</p> <p>Exposure to Risky Lifestyle (Drinking and smoking); Exposure to Violence (witnessing violence at home, physically hurt by friends, adult, and parents)</p>
<p>Education</p> <p>Expected Years of School Harmonized Learning Outcome Learning-adjusted Years of School</p>	<p>School Index</p> <p>Average Grade Higher than 81; Being on Appropriate Grade/Year Level; Raven's Score (General Intelligence Test)</p>
<p>Health</p> <p>Adult Survival Rate Stunting Rate of Children Under Age 5</p>	<p>Health Index</p> <p>Morbidity; Stunting; and Wasting</p>

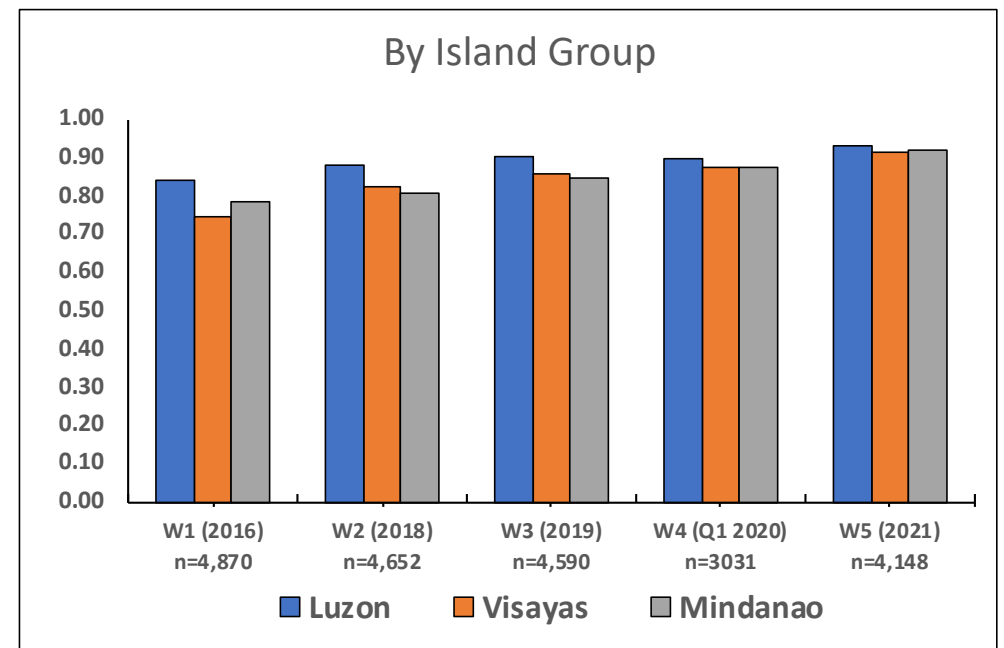
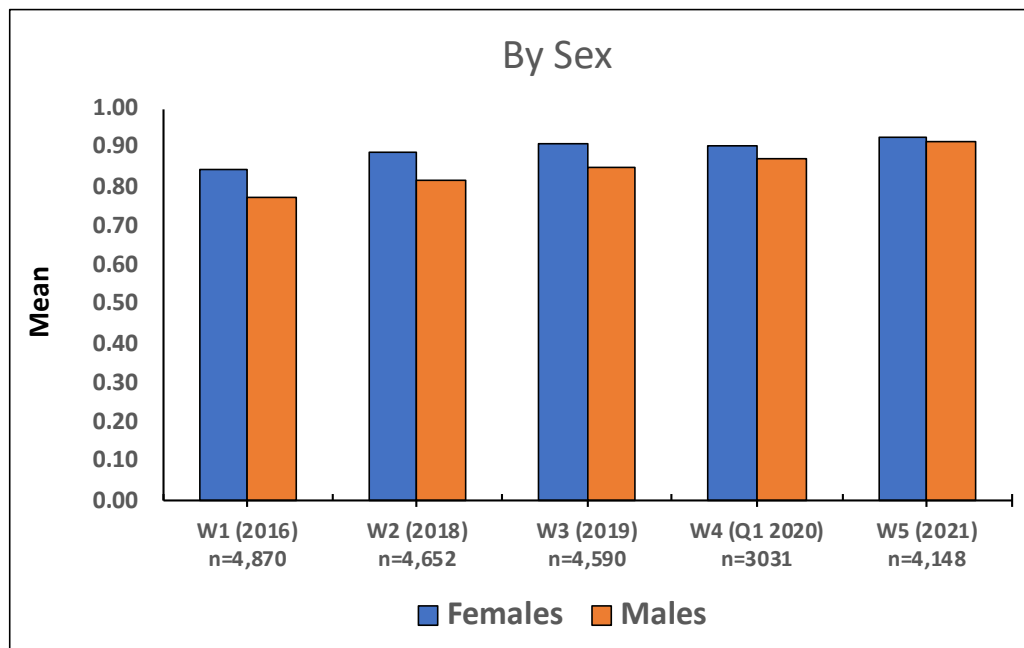
LCSFC HCI Component 1: Lifestyle Index

- Smoking
- Consuming alcoholic drinks
- Exposure to violence



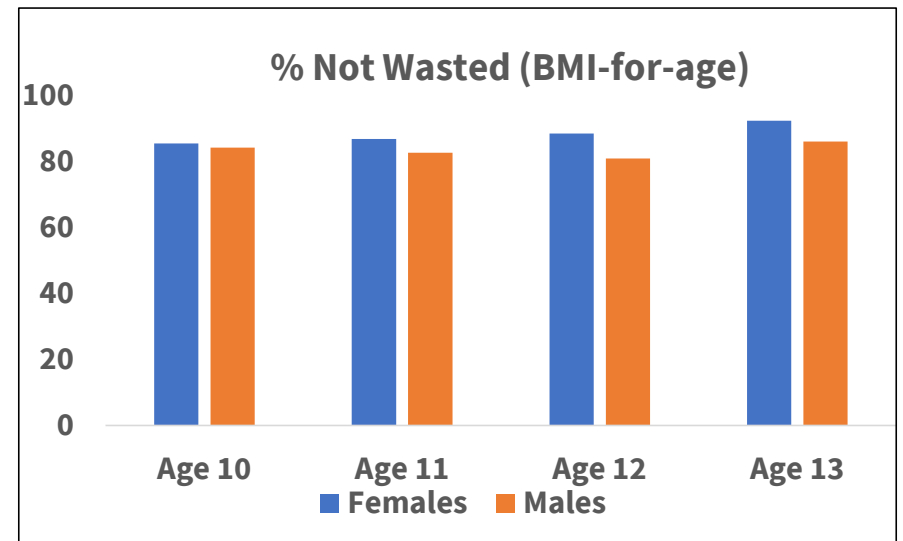
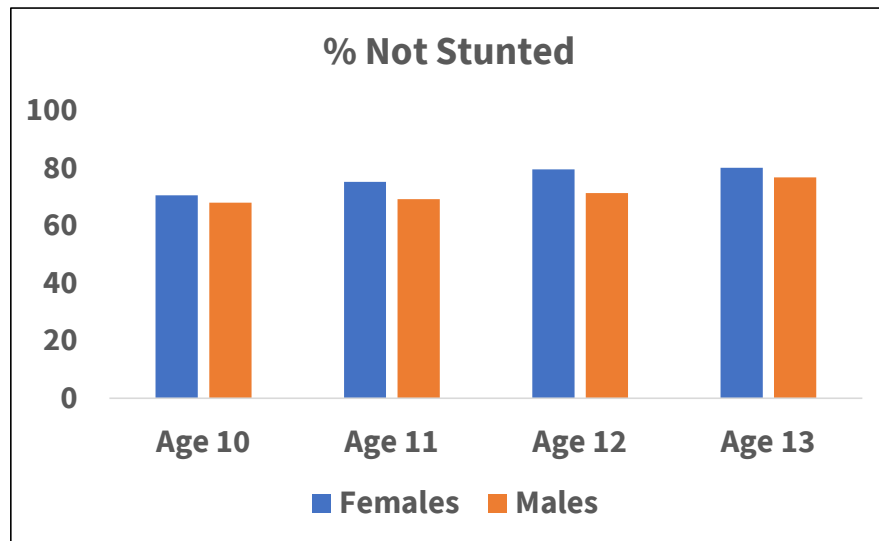
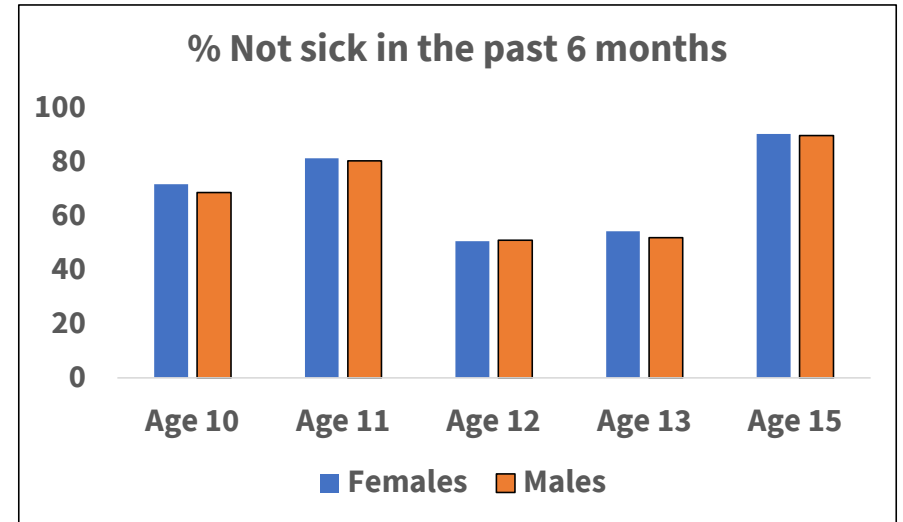
Lifestyle Index ($0 < LI < 1$): higher scores, better

- Girls significantly performed better across waves.
- In Waves 1-3 (ages 10-12), adolescents from Luzon had higher scores.



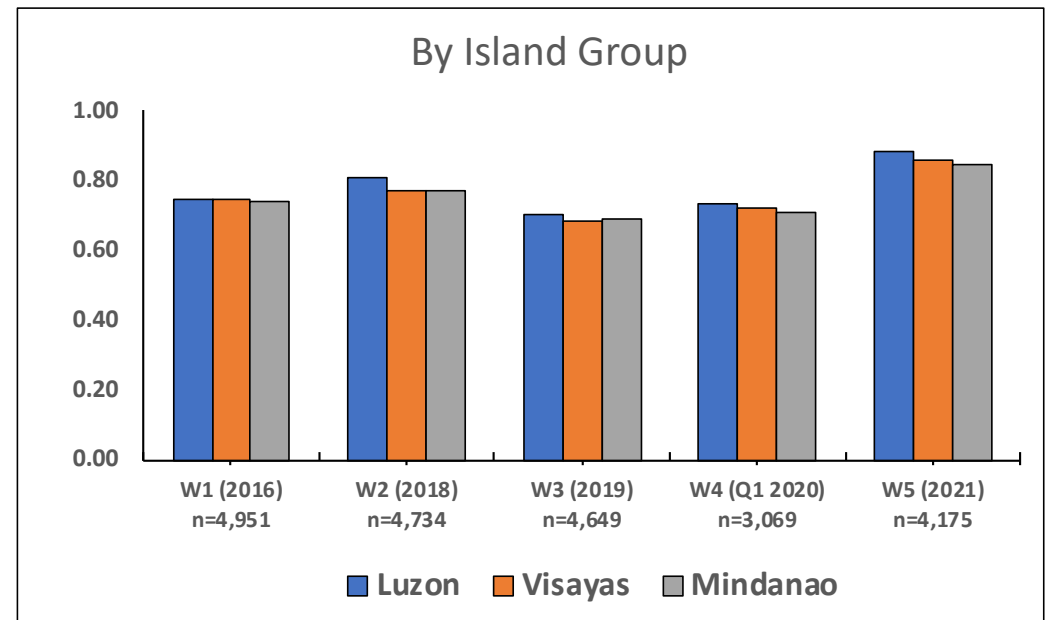
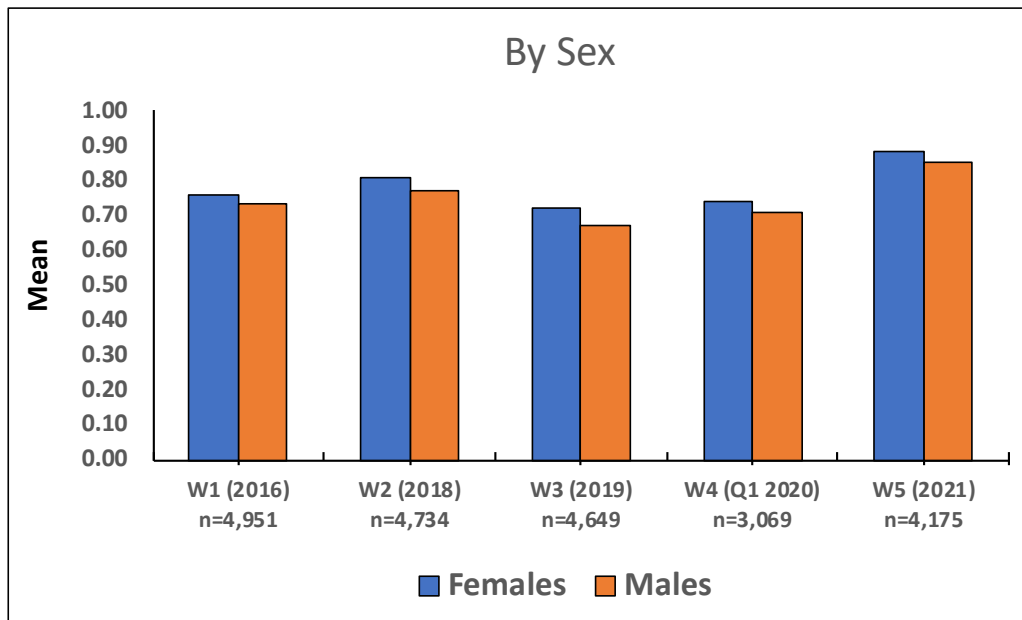
LCSFC HCI Component 2: Health Index

- Morbidity
- Stunting
- Wasting



Health Index ($0 < HI < 1$): higher scores, better

- Across waves, females had higher scores than males.
- In Waves 2 & 5, adolescents from Luzon had higher scores.

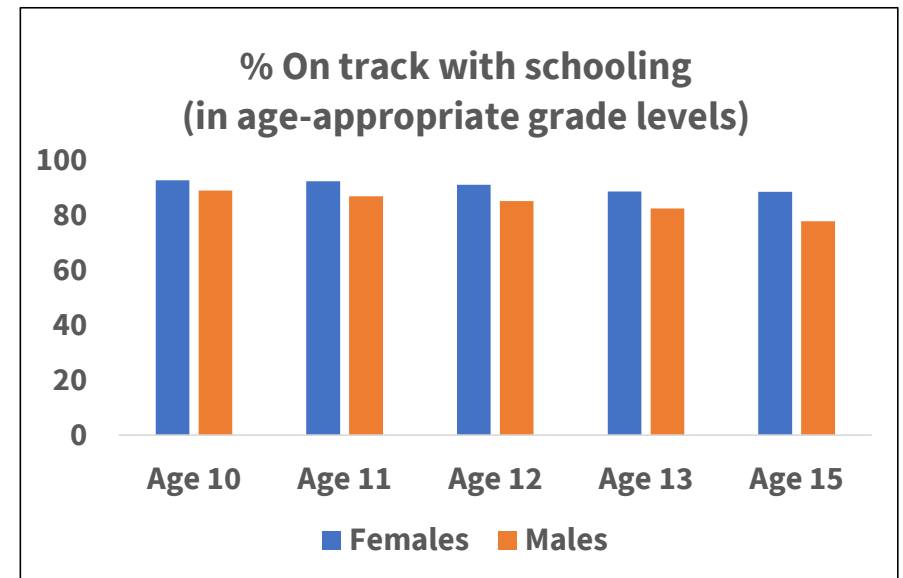
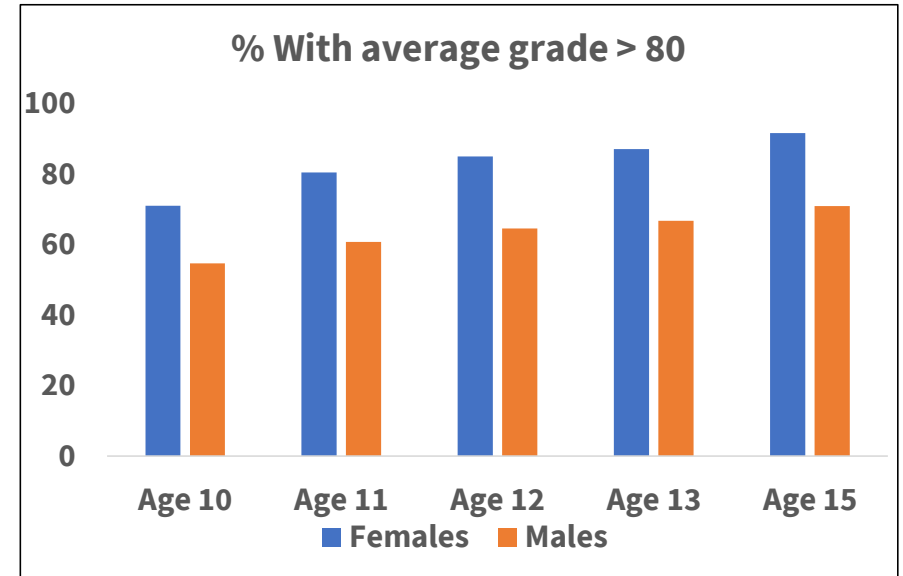


LCSFC HCI Component 3: School Index

- Average Grade
- Age-appropriate Grade Levels (on/off track schooling)
- Raven's Standard Progressive Matrix score (general intelligence/abstract reasoning)

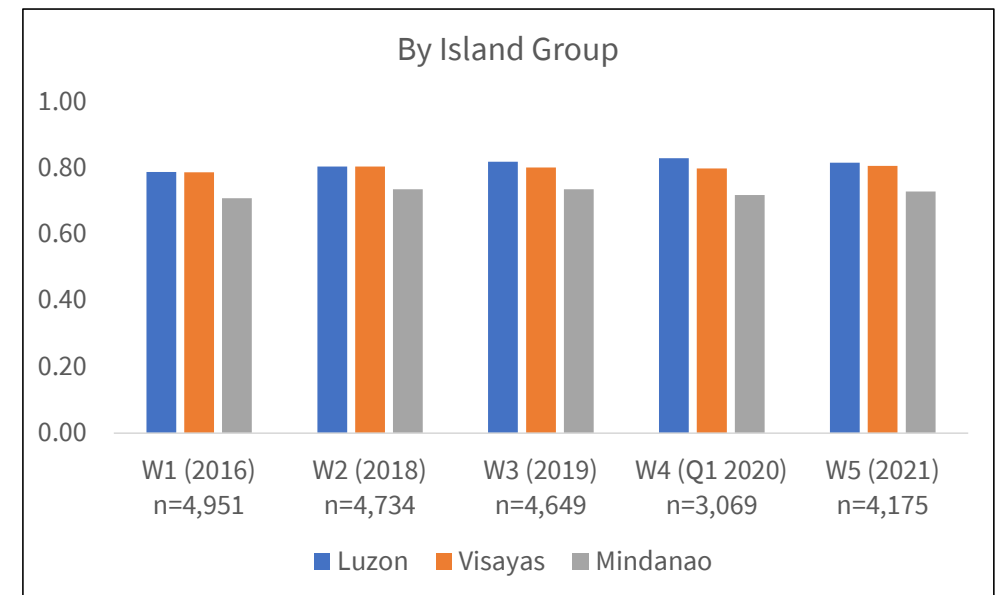
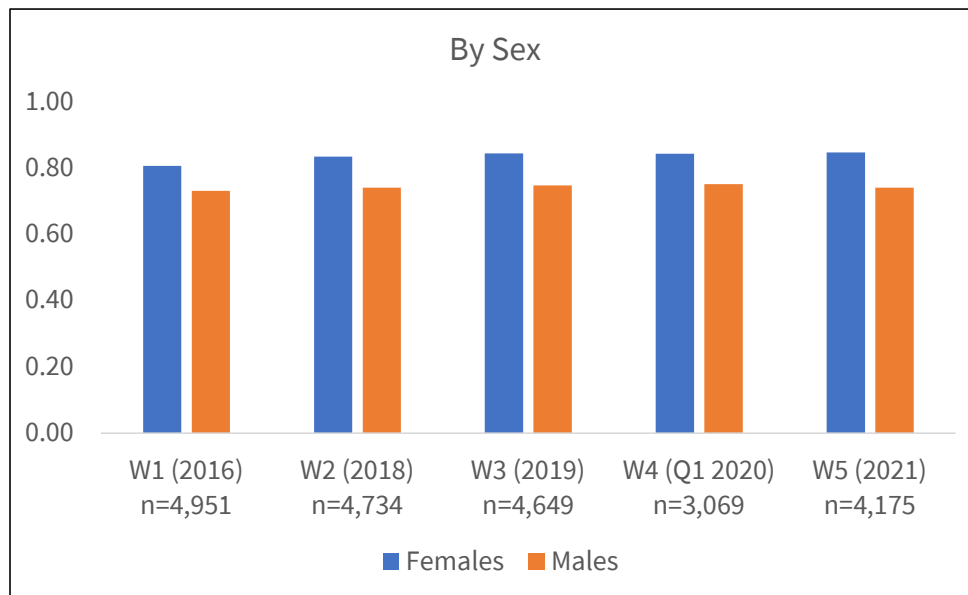
Ravens SPM Scores

	Females	Males	All
Mean	30.2	28.7	29.4
>25 pctile	78.7%	75.6%	77.1%



School Index ($0 < SI < 1$): higher scores, better

- Across waves, females had higher mean scores.
- By island group, those from Mindanao had lower mean scores across waves.

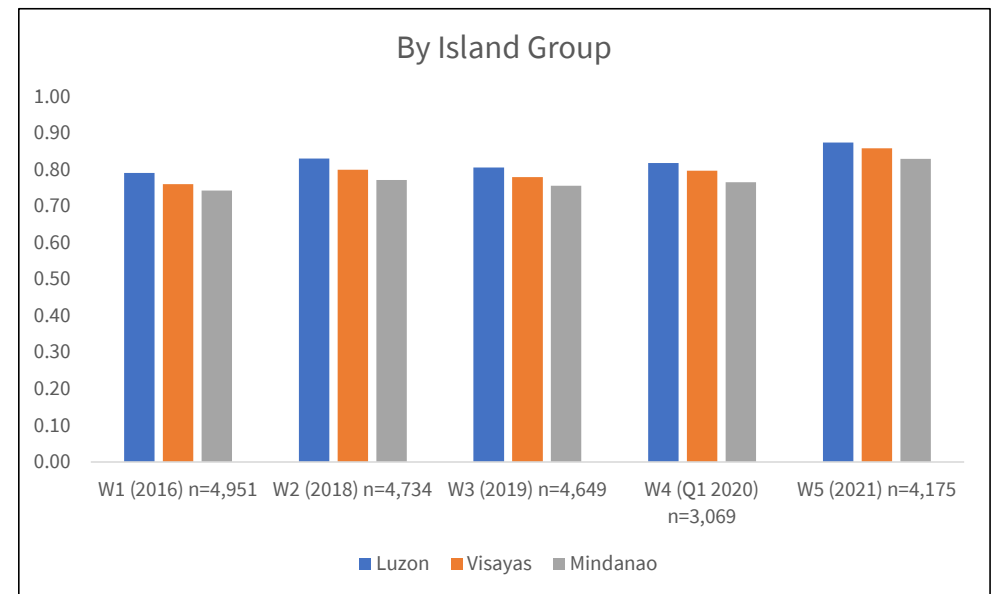
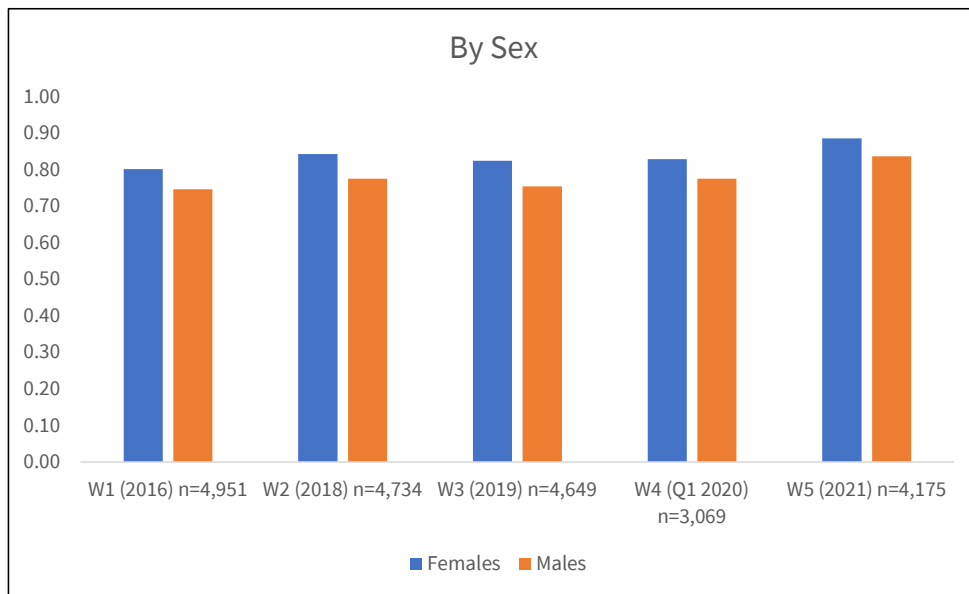


LCSFC Human Capital Index

- The index ($0 < HCI < 1$) quantifies the contribution of the following domains to human capital formation:
 - **Lifestyle** (smoking, drinking alcohol, exposure to violence)
 - **Health** (morbidity, stunting, wasting)
 - **School** (average grade, on track schooling, Raven's score)
- Higher scores: better chances of higher productivity come adulthood

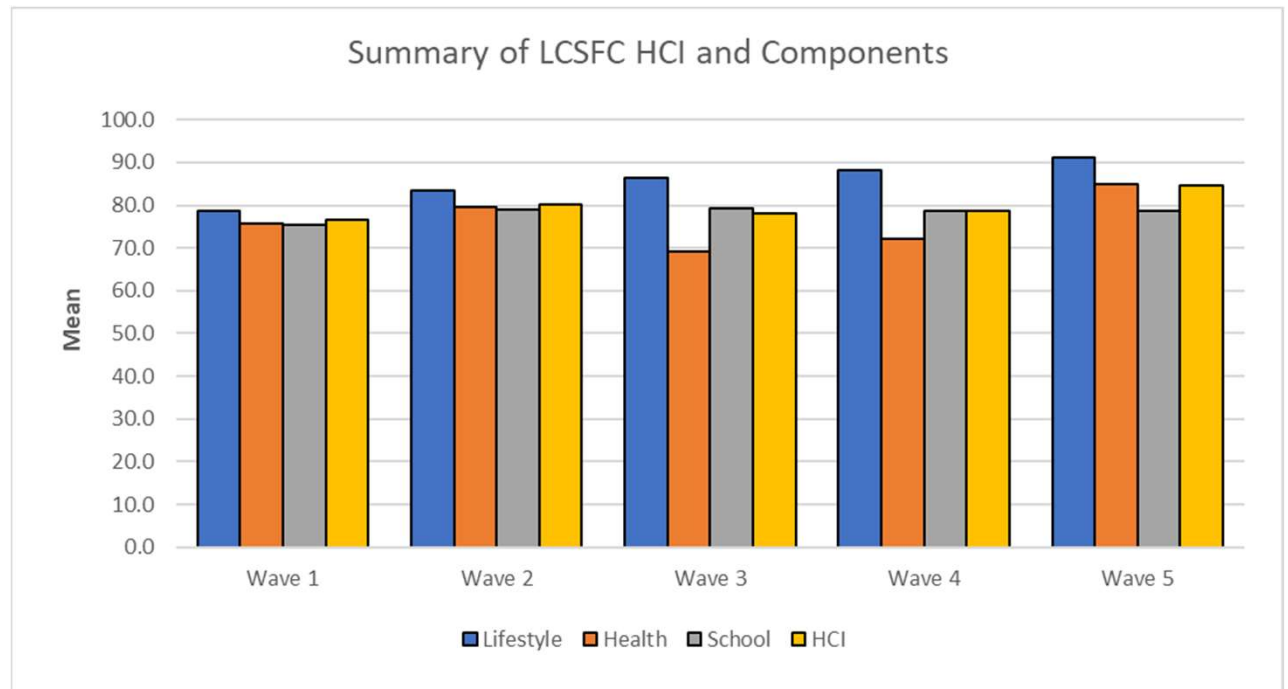
LCSFC HCI ($0 < HCI < 1$)

- Higher mean scores among females than males across waves
- Those in Visayas and Mindanao consistently had lower scores than those from Luzon.
- All groups had higher mean scores at age 15 (W5) vs. age 10 (W1)



LCSFC HCI: Summary

- **Lifestyle and Health Indices**– generally improving across waves
- **School index** has stayed constant from ages 11-15
- **HCI** generally improving over time, but mean score (age 15) remains at 0.86



Summary and Policy Recommendations



Summary of Findings

- Female adolescents have higher mean scores across waves than males in HCI and its components
 - Improvements in terms of gap between sexes are likewise observed.
- Luzon adolescents appear to have better human capital foundation than their Visayas and Mindanao peers.
 - Continue to provide programs strengthening youth capacity in more disadvantaged regions of the country



Recommendations

Using the evidence presented especially on the observed disparities across island groups, the following policies are recommended:

- Need to focus more on children and adolescents in areas where the proportions of stunting and wasting are greater (e.g., Visayas and Mindanao).
- Enhance any existing policies on restricting access to cigarettes and alcoholic drinks among adolescents.



Cont...Recommendations

- Evaluation of the **Basic Education Reform Act (K-12 Program)** to determine whether the required competencies are achieved by those who graduated from the program.
 - Consider the gender disparities between boys and girls and the observed disadvantages of males with respect to being on track in schools and other school outcomes.
 - Promote alternative learning models for out-of-school youths and for those with learning deficiencies.

