

USC-Office of Population Studies Foundation, Inc. University of San Carlos

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LONGITUDINAL COHORT STUDY ON THE FILIPINO CHILD (LCSFC) Terms of Reference (TOR) Data Collection Consultant (Project Coordinator for Visayas, Wave 6 Survey) Date: 10 August 2022

Please refer to the 2022 TOR Appendix 1 for an overview of LCSFC and its components. The data collection component for the LCSFC Wave 6 Survey referred to in this TOR is described in pages 8-10 of said appendix.

A. Objectives of Hiring a Project Coordinator for Visayas

The LCSFC needs a survey specialist who will assist the USC-Office of the Population Studies Foundation, Inc. (OPS) in the oversight of the entire data collection operations in the Visayas for the Wave 6 Survey, specifically to assist OPS in field personnel recruitment and compliance with employment requirements, monitoring data collection field operations and ensuring optimum quality of collected data.

B. Desired Qualifications

- 1. Must have at least a master's degree in social sciences
- 2. Must have extensive experience in conducting large-scale longitudinal surveys involving children
- 3. Must have extensive experience in recruiting, training and managing multiple data collection teams
- 4. Previous experience working with the OPS in implementing repeat surveys is highly preferable

C. Scope of Work

The work covered by this consultancy includes:

- 1. Works with OPS in planning and implementing data collection operations in the Visayas.
- 2. Assists OPS in recruiting and screening qualified field personnel to carry out data collection and monitoring activities in the Visayas.
- 3. Assists OPS in preparing for the Visayas field personnel training and ensuring that all hired personnel complete the required data collection training.
- 4. Performs overall supervision and monitoring of data collection operations in the Visayas from initiation until completion. Ensures that the field teams conduct the following:
 - 4a. Track and recruit cohort participants for the Wave 6 survey as described in the 2022 TOR Appendix 1
 - 4b. Screen eligible household respondents and administer the consenting protocol to respondents
 - 4c. If consent is obtained, administer the household and index child questionnaire survey modules and measurements.
- 5. Conducts oversight of all computer-assisted survey data uploads and ensures that proper upload procedures are observed by the field teams.
- 6. Ensures that all survey equipment released by OPS to the Visayas field personnel are returned to OPS in good working condition.
- 7. Ensures that all Visayas data collection personnel complete the debriefing sessions at the end of data collection.
- 8. Prepares the required reports for submission to OPS such as monthly/quarterly data collection progress reports.
- 9. Participates in the dissemination of project information and results.
- 10. Performs other tasks deemed necessary to achieve the study objectives.

D. Consultancy Contract Period: August 25, 2022 to December 31, 2022

E. Deliverables

The consultant is expected to provide the following deliverables on the corresponding completion dates:

1. Inception report (Visayas field personnel training and data collection activities)

Target Submission Date: on or before August 29, 2022

2. Data collection and monitoring status report

Target Submission Date: on or before October 31, 2022

3. Data collection reports

3a. Final data collection report

3b. Evidence of participation in study dissemination activities (as needed)

Target Submission Date: on or before December 31, 2022

G. Allowed charges:

1. Consultancy fee

2. Cost of travel (as justified; which includes air/boat/ground transportation, accommodation and meals) for data collection monitoring

F. Application Procedure

Qualified candidates are hereby requested to send their 'Expression of Interest' letter indicating a financial proposal for this engagement, along with a personal CV to **opsfoundation@opsusc.org** not later than **24 August 2022**, indicating "Visayas Project Coordinator" in the Subject line of the email. Any applications received after the deadline will not be considered.

Note:

All training and data collection supervision materials will be provided by OPS.



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LONGITUDINAL COHORT STUDY ON THE FILIPINO CHILD (LCSFC) Study Description

Overview

In 2015, the United Nations formally launched the 17 Sustainable Development Goals (SDG)¹ building upon and aiming to sustain the progress achieved by the 2000 Millennium Development Goals (MDG)². The SDG agenda aims to finish the job started by the MDG: end extreme poverty, fight inequality and injustice, and ensure environmental sustainability for all.

In the Philippines, the SDG implementation period (2015-2030) falls within the window (2015-2050) when the demographic phenomenon called the "youth bulge" is expected to occur^{3,4}. This phenomenon, marked by a historic increase in the proportions of the population between the ages of 15-29, is more prominent in low-middle income economies as they transition to lower fertility rates. This appears to be a window of opportunity as more young people could potentially reach working age, thereby increasing the country's capacity for economic growth alongside the subsequent decline in dependency ratio^a.

An important response to this phenomenon is to ensure that these young people are able to reach working age physically and mentally healthy, sufficiently educated, empowered and ready for work. Correspondingly, necessary infrastructures need to be in place to meet the needs of this growing sector, particularly the increasing number of job seekers. A number of factors threaten the Philippines' claim to the first "demographic dividend" or the potentials for increased per capita income given the increase in labor force³. Among these are the relatively high rates of stunting⁵ which is associated with poor human capital in adulthood⁶⁻⁷, high prevalence of risky sexual behavior among adolescents⁸, and increasing rates of adolescent pregnancy particularly among the poor⁹.

To understand how the SDG agenda contributes to the welfare of the young population in the course of its 15-year implementation, the United Nations Population Fund (UNFPA) conceived a survey that puts a human face to the development goals, particularly from the perspective of a cohort of 10-year-old Filipino children as they transition to working age. The objective of this study is to determine how the lives of these ten-year-old boys and girls change as our government implements the SDG agenda in the next 15 years. Designed as a 15-year prospective cohort study (with the baseline survey in 2016/17 and endline in 2030/31) on a nationally representative sample, repeat survey rounds are scheduled covering significant milestones in the lives of the cohort participants from age 10 thru 24-25 (i.e., puberty, school completion, entry into labor force, sexual activity initiation, and marriage) as well as various stages of the SDG agenda implementation. The 2015 Census data show that about 30% of Filipinos are aged 10-24 (PSA 2017)¹⁰. It is therefore crucial that key program intervention points are identified to ensure that children at age 10 are primed to reach young adulthood healthy and equipped with high social and human capital.

a

^a ratio of dependents, 0-14, >65 to working age 15-64

The study collects multi-level data [individual (cohort and their mothers), household and community] using mixed methods (survey, focus group discussions, in-depth interviews). Key outcome variables (corresponding to SDG indicators) have been identified. The main analytical objectives are a) to identify individual-, household- and community-level factors that significantly influence the key outcomes directly and synergistically, and b) to understand the mechanisms through which exposure to programs and interventions influence these outcomes over time. Study results will be used by government agencies in their policy planning and in evaluating currently implemented programs. The UNFPA intends to release data from each survey wave to the public domain as soon as available.

The USC-Office of Population Studies Foundation, Inc. (OPS) is the implementing agency for this study in collaboration with the following research institutions, which are based in the country's three main island groups:

Luzon: Demographic Research and Development Foundation (DRDF)

Visayas: Center for Social Research and Education (CSRE) Mindanao: Research Institute for Mindanao Culture (RIMCU)

Longitudinal study design and sampling design

This is a 15-year prospective longitudinal cohort study with the cohort participant or index child (hereinafter referred to as IC) and his/her household as the main unit of analysis. The Baseline Survey was conducted in 2016 (IC age: 10) and the Endline Survey will be conducted in 2030 or 2031 (IC age: 24-25).

Sampling Scheme. The survey sample was selected to be nationally representative of 10-year old Filipinos, from the country's three main island groups of Luzon, Visayas, and Mindanao and the sampling design implicitly included marginalized children (specifically from indigenous peoples (IP) and households with disabilities). This 15-year prospective study aims to retain an endline sample of about 2,000 from the cohort participants recruited at baseline. Given projected attrition rates at each survey round (increasing as the cohort reaches college age), we estimate that we need to initially recruit 5,000 10-year old girls and boys, equally distributed across the three island groups or domains: Luzon, Visayas and Mindanao. The sampling frame was based on the 2010 Census (PSA 2010)¹¹ using data on 4-year old children expected to be age 10 in 2016. We used a two-stage sample selection scheme. Barangays were selected using probability proportional to size systematic sampling. In each sample barangay, sample children were selected using equal probability systematic sampling. Implicit stratification was used to ensure selection of urban-rural sample barangays with children considered as vulnerable [indigenous peoples (IP) and persons with disabilities]. The final sampling draw yielded 345 barangays. We aimed to enroll 15 households per barangay, or a maximum of 5,175 households to provide enough margin to get at the desired sample size of 5,000 across all domains.

<u>Data collection venue and survey respondents</u>: All data collection will be done at the cohort participants' homes. In survey waves where the cohort participants are below the age of 18, the main survey respondents will be the participants' mothers (or main caregivers if the mothers are not home at time of visit). The cohort participants will be briefly interviewed by the interviewers and will also be asked to complete a self-administered questionnaire. At age 18 and thereafter, the cohort participants will be the main survey respondents.

At the completion of the home visit protocol at each survey, the respondents are given small tokens of appreciation for allocating time for the interview and assessments. For cash tokens, the amount given corresponds to the amount the person would have earned for the time he/she spends participating in the home visit protocol. The same tokens are provided for all participants across domains for standardization and to avoid potential participation bias that may be attributed to the tokens.

<u>Consenting process</u>: In survey waves where the cohort participants are below the age of 18, a written consent for participation will be obtained from the mothers/caregivers and a verbal assent or a simplified assent form will be administered to the cohort participants. At age 18 and thereafter, the cohort participants themselves will be consented directly. At the Baseline Survey, consent to participate in future waves were obtained from the main household respondents.

<u>Variables of interest</u>: The study will collect the same core questionnaire sections in all levels [individual (ICs and their mothers/main caregivers), household and community] at repeat survey rounds, adding questions and modules relevant to each milestone reached by the cohort.

The following core questionnaire sections will be administered at each level, in each survey round:

Household Questionnaire:

IC household contact information

Household composition (sex, age, education, work status of household members and relationship to IC

Overseas work experience of IC's immediate family members

Language used in household, ethnicity and religion of IC's mother/caregiver

Household utilization of social services and poverty alleviation programs

Basic utilities available in household

Household and neighborhood sanitation and air quality assessment

Household and neighborhood hazard/disaster exposure and experiences

Distance of homes to nearest roads, transportation

Household assets and Internet connectivity

Household sources of income, farming and fishing activities

Food insecurity experience

Household's access to facilities and commercial establishments

Household morbidity and health care utilization

Pregnancy history and family planning behaviors of mothers of ICs

Violence against women

Perceived stress and depressive symptoms

<u>Index Child (IC) Interviewer- and Self-administered Questionnaires:</u>

Schooling and schooling-related aspirations

Work history

Health status

Diet diversity

Weight and height

Activity diaries

Social networks and internet utilization

Experiences with violence (within and outside home)

Perceptions about dating, sexuality, family planning and reproductive health

Baseline Survey only: IC infant feeding and health history

In later surveys: sexual practices, family planning, pregnancy history and reproductive health care utilization and behavior

Community Questionnaire:

General barangay characteristics
Educational facilities
Health and social services
Barangay community organizations
Commercial establishments and entertainment facilities
Available jobs and prevailing wage rates
Disaster risk reduction management
Peace and order
Price survey

SURVEYS CONDUCTED:

1. Wave 1 (Baseline) Survey

Mean age (in years) of cohort participants: 10.5

Data collection period: November 2016 to January 2017

Sample size: 4,952

Data recording method: Pen-and-paper interviews (PAPI)

Baseline Survey data collection statistics

	Luzon	Visayas	Mindanao	TOTAL
No. of households screened	26,729	12,763	21,491	60,983
No. of households interviewed	1,618	1,639	1,695	4,952
No. of cohort participants (index) interviewed	1,600	1,639	1,688	4,927
No. of barangays enumerated (community surveys)	115	115	115	345
No. of barangays replaced	16	2	17	35
Expected households to be interviewed (15/barangay)	1,725	1,725	1,725	5175
Percent of expected households to be enumerated	94%	95%	98%	96%

At the end of the home visit, the study respondents were given:

- a) Flat bed sheets or malongs for the household respondent
- b) Pencil box with pencils and ballpens for the index child

2. Baseline Qualitative Study (on marginalized children)

Data collection period: August 2017 to October 2017 Total number of 10-year old children interviewed: 50 Total number of 15-19 year old FGD participants: 116 To get deeper insights into what life must be like for marginalized Filipino children (listed in Table C below) and to complement the Baseline quantitative data on these children, qualitative data on a non-probability sample of children and youth were collected across the domains (Luzon, Visayas and Mindanao). We gathered narratives that would help put a human face to marginalized children and reveal information on their prevailing concerns, and what conditions work against them or to their favor.

Focus group discussions (FGDs) were held in rooms which ensured privacy (no other people in the room except for the study personnel and participants) and security of participants' responses (this was usually in a room in the barangay hall). In-depth interviews (IDIs) were held in the respondents' homes.

At the end of the home visit, the study respondents were given:

- a) Flat bed sheets or malongs for the household respondent
- b) Pencil box with pencils and ballpens for the index child

Table C. Qualitative Research Components

Sector	Method (Age)	Sub-groups	No. per
	(.90)	and groups	domain/TOTAL
1. LGBTQIA (Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual) [only among Non- Muslims]	FGDs (aged 15-19)	Urban/rural; poor/non- poor	8/24
2. Persons with disability (PWD)	IDIs (age 10); and their mothers	Urban/rural; poor/non- poor; male/female	16/48
3. Indigenous peoples (IP)	IDIs (age 10)	Urban/rural; male/female	4/12
4. Children in geographically isolated and disadvantaged areas (GIDA)	IDIs (age 10)	Male/female	4/12
5. Children in armed conflict areas (AC) [Mindanao only]	IDIs (age 10)	Male/female	8

The overall qualitative data collection plan is to conduct follow-up IDIs on the baseline PWD, IP, GIDA and AC respondents in future years and compile longitudinal case studies on each, from age 10 through 24. Data from the LGBTQIA FGDs will inform the study on the appropriate age when baseline IDIs can be done on this sector.

3. Wave 2 Survey

Mean age (in years) of cohort participants: 11.8 Data collection period: February to May 2018

Sample size: 4,735

Data recording method: PAPI

Recruitment strategy: We enrolled index children who remained in the baseline municipality or city and those who moved to adjacent areas where follow-up is logistically feasible.

In addition to the core baseline sections, the following new assessments were also administered:

- a) Raven's Standard Progressive Matrices (Raven's SPM) which is a non-verbal test measuring fluid intelligence and abstract reasoning
- b) Child Behavior Checklist for Ages 6-18 (CBCL 6-18) which tests for emotional and behavioral problems
- c) Sexual Maturity Ratings (SMR) or Tanner stages for pubertal assessment.

At the end of the home visit, the study respondents were given:

- a) P200 in cash for the household respondent
- b) Pack of gel pens for the index child worth P100
- c) IC weight and height card. Measurements at previous visit were printed on colorful cards along with a simple explanation on how the child's weight and height compared to that of a typical child his/her age. Measurements taken at the visit were hand-written on the card.

4. Wave 3 Survey

Mean age (in years) of cohort participants: 12.8 Data collection period: January to May 2019

Sample size: 4,663

Data recording method: Mostly PAPI with trial runs done using computer-assisted personal interviews

(CAPI) in the IC self-administered sections

Recruitment strategy: We enrolled index children who remained in the baseline municipality or city and those who moved to adjacent areas where follow-up is logistically feasible.

The same Wave 2 components and questionnaire modules were administered except for Raven's SPM and CBCL. The IC's photo was also taken using a secured photo capture module on CAPI. Given that subsequent waves will now be done via CAPI, IC photos will be taken at each wave from hereon.

Respondent tokens: At the end of the home visit, the study respondents were given:

- a) P200 in cash for the household respondent
- b) P100 in cash for the index child
- c) IC weight and height card (see Wave 2 for details)

5. Wave 4 Survey (in-person)

Mean age (in years) of cohort participants: 13.7 Data collection period: January to March 2020

Sample size: 4,947 (3,079 were interviewed; 1,868 attrited)

Data recording method: CAPI except for the Community Surveys which were done on PAPI.

Recruitment strategy: We enrolled index children who remained in the baseline municipality or city and those who moved to adjacent areas where follow-up is logistically feasible.

Due to increasing risk of exposure to Covid-19, and area boundary lockdowns, the Wave 4 field operations were stopped on March 15, 2020, covering 62.2% of the target recruitment households.

In addition to the core survey modules, the Youth Self Report (YSR) was administered in Wave 4. The YSR tests for children's emotional and behavioral problems and is the child-respondent counterpart to

CBCL (which was administered to mothers/caregivers).

Respondent tokens: At the end of the home visit, the study respondents were given:

- a) P200 in cash for the household respondent
- b) P100 in cash for the index child
- c) IC weight and height card with IC photo

6. Wave 4 Supplemental Data Collection (2020 Phone Survey)

Mean age (in years) of cohort participants: 14.4

Data collection period: November 2020

Sample size: 4,946 (3,182 were interviewed; 1,744 attrited)

Data recording method: CATI (phone calls)

Recruitment strategy: We enrolled index children with available phone contact information. There were 63 IC households without such information.

To document the effects of the pandemic on the sample households, a brief supplementary survey round was conducted through phone interviews. Specific pandemic-related questions were asked in this survey. Mainly due to difficulties in establishing phone connection with the respondents, the survey covered 64.3% of the target recruitment sample.

Respondent tokens: At the end of the phone, the study respondents were given P150 cell phone load or cash thru money transfer.

7. Wave 5 Phone Survey (2021)

The Wave 5 Phone Survey protocol adopted the 2020 Phone Survey Protocol with few modifications.

Estimated mean age (in years) of cohort participants: 15.4

Date of field personnel training: April 6-29, 2021

Data collection period: May – July 2021

Data recording method: Computer Assisted Telephone Interviewing (CATI)

No. of households in sampling frame: 4,944

Recruitment strategy: The study samples were recruited by phone, following the protocol observed in the 2020 Phone survey and using the latest masterlist of respondent contact numbers.

Both the Index Child's caregivers and Index Child's themselves were interviewed in this survey. The core survey modules were asked but some modules were modified for brevity and clarity considering the mode of data collection (phone). The Youth Self Report (YSR) was also administered but no IC self-administered interview was conducted.

At the completion of the phone interview, the interviewer gives the respondents tokens as cellphone load or in cash thru money transfer:

- a) P300 for the household respondent
- b) P200 for the index child

8. 2022 Community Survey and Cohort Tracking Operations

Date of field personnel training: March 1-18, 2022 Data collection period: March 21, 2022 – June 6, 2022

Data recording method: Computer Assisted Personal Interviewing (CAPI)

No. of barangays in sampling frame: 345

No. of households tracked: 561

Recruitment strategy: Index Children whose households were not interviewed in the two phone surveys (Wave 4 & Wave 5) were enrolled in the cohort tracking. For the Community Survey, we enrolled the 345 baseline barangays.

At the completion of the household visit or phone interview, the respondents were given P100 for the 15-minute interview.

9. Wave 6 Survey – NEW SURVEY

The Wave 6 Survey protocol will adopt the 2020 Wave 4 Survey Protocol with few modifications.

Estimated mean age (in years) of cohort participants: 16.4 Date of field personnel training: August to September 2022 Data collection period: September to December 2022

Data recording method: Computer-Assisted Personal Interviewing (CAPI)

No. of households in sampling frame: 4,943

Recruitment frame: In Wave 6 we will continue to use the Baseline sample as recruitment frame (N=4,943 excluding 8 ICs who died and 1 who requested to be dropped from study) to re-enroll those we may have missed in prior waves.

Recruitment strategy: The study sample will be recruited by phone, following the protocol observed in the 2020 Wave 4 survey and using the latest masterlist of respondent contact numbers.

We will enroll index children who remained in the baseline municipality or city and thosewho moved to adjacent areas where follow-up is logistically feasible.

The households that are tracked and interviewed in each survey are those where the IC is a household member. A household where the IC is temporarily away (not currently in the household but expected to return to the household within 6 months) is still eligible for interview.

If the IC will be away from the household for more than 6 months, the household where he/she is currently residing will be considered the eligible household.

<u>Respondent masterlist.</u> In view of the study's longitudinal design, a masterlist of all cohort participants and main respondents is maintained after each survey. This file contains the names of the cohort participants and the household respondents, and the household's contact information (phone numbers and addresses) obtained at each survey. The information in the respondent masterlist is critical in

tracking the study participants through the years. The main masterlist is kept confidential at OPS and is stored in password-protected computers located in rooms accessible only by OPS researchers. Electronic files are password protected and stored in password-protected field laptops and office computers. All field research personnel are also made to sign the OPS confidentiality agreement to commit to the OPS data confidentiality and security protocols.

Coordinators and team leaders will have access to the Masterlist and will assign respondents to the interviewers. Interviewers will only be able to access the information of the respondents assigned to them.

<u>Tracking protocol.</u> Prior to starting any data collection, the mothers and caregivers interviewed in the 2021 Phone Survey or in Wave 5 (or in prior waves if missed in Wave 5) will be contacted as follows:

Calls will be made to all 4,943 respondents using the cell phone numbers they provided in the 2021 Phone Survey or in Wave 5. If contact is not established using these numbers, phone numbers provided in prior surveys are used. Assistance from barangay (government) workers who are familiar with the study may be sought in tracking and/or contacting the households in some cases (i.e., no or intermittent signals).

Once contact with the household respondent is made, the whereabouts of the index child is determined and verified. If the previous household respondent is no longer available and the IC is indeed a household member, a new household respondent is selected.

Criteria for household respondents: must be the mother, or in the absence of the mother, an adult (age 18 or older) household member who mainly takes care or in charge of the IC.

If the IC is indeed a household member whether currently living in the household or temporarily away (expected to return within 6 months) AND the mother or caregiver has been screened, verified and is available: the interviewer proceeds with the consenting process then conducts the interview.

Wave 6 survey components:

a. Consenting process.

In the consenting process, the consent form (which contains vital information about the Wave 6 survey and the household and IC's participation in the survey) is read to the household respondents (either the IC's mother or main caregiver). The interviewer enters data on the data collection tablet indicating that the consent form has been read and that consent to be interviewed and to interview the IC was either obtained or denied.

- b. Household Respondent interview (with either the index child's mother or main caregiver as respondent). If caregiver, some sections specific to the IC's mother will be skipped.
- c. IC components data on the ICs will also be collected. Prior to conducting any IC component, the interviewer reads the IC Consent or Assent Form to the IC aged at least 15 years and IC aged younger than 15 years, respectively. Only components that the IC provides consent to are administered. The interviewer enters data on the data collection tablet indicating that the consent or assent form has been read and that consent or assent to be interviewed was either obtained or denied.
- d. At the completion of the interview, the interviewer gives the respondents tokens in cash.

- a) P300 for the household respondent
- b) P200 for the index child

Ethics Approval: Protocols, including all instruments, for all prior survey rounds were approved by Ethics Review Boards (University of San Carlos Research Ethics Committee (USC REC) and the Single Joint Research Ethics Board (SJREB)). Approval of the current Wave 6 Protocol will be obtained from the SJREB prior to data collection. Survey instruments have been used in prior waves and have been previously reviewed and approved by the SJREB, with few deletions and additions as suggested by the National Steering Committee.

¹United Nations. (2017). *The Sustainable Development Goals Report 2017*. New York, New York: Department of Economic and Social Affairs.

²United Nations. (2015). The Millenium Development Goals Report 2015. New York, New York: Department of Economic and Social Affairs.

³ Mapa, D.S., (2015). *Demographic sweet spot and dividend in the Philippines: The window of opportunity is closing fast*. [Powerpoint presentation]. Retrieved from http://www.bsp.gov.ph/events/pcls/downloads/2015/BSP_2b_mapa_presentation.pdf

⁴ CNN Philippines Staff. (2015, Sept 30). Economic officials discuss PH growth. Retrieved from http://cnnphilippines.com/business/2015/09/30/economic-officials-discuss-ph-growth.html

⁵ Food and Nutrition Research Institute. Department of Science and Technology (DOST) (2013). 8th National Nutrition Survey. Manila, Philippines: DOST

⁶Adair, L.S., Fall, C.H.D., Osmond, C., Stein, A.D., Martorell, R., Ramirez-Zea, M.... COHORTS Group. (2013). Associations of linear growth and relative weight gain during early life with adult health and human capital in countries of low- and middle-income: findings from five birth cohort studies. *Lancet*, 382 (9891), 525-34.

⁷Carba, D.B., Tan, V.L., & Adair, L.S. (2009) Early childhood length-for-age is associated with the work status of Filipino young adults. *Economics & Human Biology*, 7(1):7-17

⁸ Bongolan, H.R., (2013). More Pinoy youth engage in risky sexual activity, survey confirms. Retrieved from http://www.pchrd.dost.gov.ph/index.php/news/3896-more-pinoy-youth-engage-in-risky-sexual-activities-survey-confirms

⁹ Philippine Statistics Authority (PSA) [Philippines], and ICF International. (2014). *Philippines National Demographic and Health Survey 2013*. Manila, Philippines, and Rockville, Maryland, USA: PSA and ICF International.

¹⁰ Philippine Statistics Authority (2017). 2015 Census of Population Report No. 2. Demographic and Socioeconomic Characteristics Philipppines, June 2017. Retrieved from https://psa.gov.ph/sites/default/files/2015%20CPH_REPORT%20NO.%202_PHILIPPINES.pdf

¹¹ Philippine Statistics Authority (2010). 2010 Census of Population (raw data).