



Vincent Albert G. Flores, MD*
Kristine Zillah O. Arroyo, MD*
Ma. Cecilia D. Alinea, MD*
Lorna R. Abad, MD*

* University of the Philippines- Philippine
General Hospital

Correspondence:
Dr. Vincent Albert G. Flores
Email: vincentalflores@gmail.com

The authors declare that the data presented are original material and has not been previously published, accepted or considered for publication elsewhere; that the manuscript has been approved by all authors, and all authors have met the requirements for authorship.

2ND PRIZE 2020 PIDSP RESEARCH CONTEST

ORIGINAL ARTICLE

VALIDATION OF THE FILIPINO TRANSLATED QUESTIONNAIRE ON PARENT ATTITUDES ABOUT CHILDHOOD VACCINES

ABSTRACT

Objective: To determine the content validity and test-retest reliability of the Filipino Translated Questionnaire on Parent Attitudes About Childhood Vaccines.

Methodology: Eligible parents of patients seen at the Pediatric Outpatient Department, Pediatric Emergency Room and Pediatric Wards of the Philippine General Hospital were recruited into the study. The original survey tool was translated to Filipino by the Sentro ng Wikang Filipino. A focus group of four experts in the field of vaccination rated the content of each item on the questionnaire based on its relevance. Ten Filipino speaking participants were then recruited to check its face validity. This was then implemented to 67 Filipino speaking participants to check its test-retest reliability.

Results: The overall item content validity index of the questionnaire was computed to be 0.95. All items had a 100% rating in terms of clarity and simplicity. The high intraclass correlation coefficient of 0.970 supports the tool's test-retest reliability. However, the test had a low Cronbach's α coefficient of 0.687 which could be increased to 0.711 with the removal of one item from the question pool.

Conclusion: The Filipino Translated Questionnaire on Parent Attitudes About Childhood Vaccines has face and content validity with an acceptable internal consistency. This can serve as a framework for future researches on vaccine hesitancy.

KEYWORDS: *immunization, vaccination, questionnaires, Filipino*

INTRODUCTION

Childhood vaccination is regarded as one of public health's groundbreaking accomplishments. Development of immunization policies have significantly decreased child morbidities and deaths related to certain diseases globally. The success of these programs relies heavily on vaccine compliance in lessening vaccine-preventable diseases (VPD). Immunized children benefit directly from vaccinations and significant community vaccination coverage rates have added protection via herd immunity.¹ Despite the proven efficacy of vaccination and its acceptance worldwide, a growing proportion of parents have refused vaccinating their children for different reasons.² Diminished trust in vaccination has led to outbreaks in diseases. This has put hindrances towards global elimination of diseases such as polio which have sparked political discussions in different nations worldwide.³ The World Health Organization (WHO) defined 'vaccine hesitancy' as the delay in acceptance or refusal of vaccination despite availability of vaccination services.⁴

Given the rising global issue of vaccine hesitancy, the WHO launched the Strategic Advisory Group of Experts (SAGE) Working Group on Vaccine Hesitancy. They were tasked to approach this problem and deliver evidence-based analyses and solutions.⁴ The SAGE Working Group saw the necessity to outline the reasons for vaccine hesitancy. Development of this matrix of determinants involved extensive review of literature.⁵ Factors were subdivided into different categories exploring the scope of vaccine hesitancy. The work of Opel *et. al.* was among the first to develop and validate a survey tool specific to vaccine hesitancy, the Parent Attitudes About Childhood Vaccines (PACV) survey. This tool was developed by

incorporating results from previous studies in order to add to the item pool. Screening and content validation were conducted by a group of experts in the field of immunization, and pre-testing the validated tool on a group of parents.⁶ A prospective cohort study on 437 parents of children under an integrated health care system based in Seattle showed that scores on the PACV predict childhood immunization status and have high reliability. It was recommended that results be validated in different geographic and demographic samples of parents.⁷

The Department of Health (DOH) of the Republic of the Philippines was alarmed that a significant number of parents refused to avail of the government's various vaccination programs following the issue regarding the newly introduced dengue vaccine.⁸ Several studies related to vaccine hesitancy, its determinants, and its impact in the different regions of the world are already available but there is a dearth of investigations done in the Philippines. With this in mind, efforts have been made to address the growing hesitancy and refusal of parents for vaccine administration to their child. To increase the possibility of success in this endeavor, the development of a means of measuring vaccine hesitancy in certain population groups is necessary to determine reasons contributing to it. This study was undertaken to determine the content validity, face validity and test-retest reliability of a Filipino Translated Questionnaire on Parent Attitudes About Childhood Vaccines.

MATERIALS AND METHODS

Description of the Study Setting

This is a tool validation study. Convenience sampling was done. Parents/legally authorized representatives of patients 15 months to 6 years seen at

the Outpatient Department or admitted at the Pediatric Wards and Emergency Room were enrolled in this study. The hospital has a 1,500-bed capacity with 200 patients admitted at the UP-PGH Department of Pediatrics. Each month, there are at least 600 new pediatric admissions and 1000 outpatient consults.

Participants

Tagalog-speaking parents of Filipino children aged 15 months to 6 years who consulted at the Philippine General Hospital Pediatrics Outpatient Department Section, Pediatrics Emergency Room and Pediatrics Wards 9 and 11 from July 2019 to August 2019 were eligible to participate in the study. The minimum age was set at 15 months as it is expected that a child would have been given all the vaccine doses prescribed in the National Immunization Program by that age if the parents are fully compliant. A maximum age of 6 years was set to account for catch-up immunization. Parents of patients requiring resuscitation, in cardiorespiratory distress, or were immunocompromised, were excluded from this study.

Potential respondents were identified through the census in the pediatric wards, emergency room and outpatient department. Available respondents were recruited into the study by the principal investigator. The age and clinical status of the child were identified during the recruitment of respondents. Among eligible subjects, only those who gave consent were included in this study.

Tool Validation and Data Collection

Approval from the main author of the PACV survey was sought before study initiation. The English questionnaire was translated into Filipino by a linguist from *Sentro ng Wikang Filipino-Manila*. This office located in the University of the

Philippines in Manila, undertakes translation, writing and publication of materials into Filipino. The translated questionnaire underwent assessment for content validity by 4 experts in the field of vaccination. Each of the non-demographic questions (15 items) were assessed using a 4-point ordinal scale: 1 = not relevant, 2 = somewhat relevant, 3 = quite relevant, 4 = highly relevant. Items with low content validity index (CVI) were revised based on comments or suggestions of the 4 experts. CVI was computed again for the revised items in the translated PACV survey.

The revised translated PACV survey were then administered to ten parents/legally authorized representatives to assess the face validity of each question based on clarity and simplicity. Agreement was assessed using yes or no responses and the level of agreement was computed.

The final translated PACV survey was administered using a test-retest design to a sample of parents/legally authorized representatives who consented for the study. The initial assessment was done right after the informed consent process. The second assessment was done during the next patient follow-up which was at least 2 weeks from initial assessment. Privacy was ensured for all respondents while answering the questionnaire and they were provided 10 to 15 minutes to answer all items. The responses of participants during the re-test assessment were used to determine the acceptability and internal consistency reliability of the translated PACV survey.

Sample Size

The minimum sample size needed was computed using an online software by Arifin (2018).⁹ Based on the expected test-retest reliability coefficient of 0.844 from the study of Opel et. al. 2011, a minimum acceptable reliability of 0.7, 80% power,

95% confidence interval, and an adjustment of 10% drop-out rate, the needed minimum sample size was 67.¹⁰

STATISTICAL ANALYSIS

The respondents' characteristics were described using frequencies and proportion. Content validity was determined using the item content validity index (I-CVI), based on the expert panel's rating on item relevance. A CVI greater than 0.78 per item was considered as acceptable.¹¹ Face validity was determined by computing for the level of agreement among the ten respondents based on clarity and simplicity. The level of agreement was computed by the proportion of "yes" response per item. Items with at least 75% level of agreement were considered acceptable.¹² Test-retest reliability was determined by computing for the Intraclass correlation coefficient. A cut-off value of 0.70 was considered evidence of acceptable reliability.¹³ Acceptability was determined by obtaining the percentage of no response per item. Finally, Cronbach's alpha was computed for the 10 items using 5-point likert scales to determine internal consistency. A value of at least 0.70 was considered acceptable.¹⁴ All analyses were done using Microsoft Excel and SPSS v23.

RESULTS

Population

A focus group of four experts in the field of vaccination rated the content of each item based on its relevance. Two of the experts are physicians who work in the field of public health while the other two are pediatricians, one of which is an Infectious Disease Specialist. Seventy-seven participants from the Pediatric OPD, Pediatric Emergency Room and Pediatric Wards who fulfilled the inclusion criteria were recruited. Ten of the participants

rated each item on the level of agreement based on its simplicity and clarity. The sixty-seven participants then answered the questionnaire for its test-retest reliability. Majority (70.12%) of participants were females. The mean age of participants was 34.5 years with 63% of participants aged 30 years and above. Thirty five percent of participants were married, while 66% were in a common law relationship. The highest educational status attained by majority of participants is secondary education at 66%. (See Table 1).

Table 1 Sociodemographic profile of respondents

Variables	Population n = 77	Percentage %
Parent of child		
No	1	1.2
Yes	76	98.8
Parent's age ≥30 years		
No	24	31.1
Yes	53	68.8
Parent's marital status		
Single, separated, widowed, or divorced	1	1.2
Married	25	32.4
Living with a partner	51	66.2
Household income		
< 10,000	46	59.7
10,000 – 20,000	23	29.8
20,000 – 30,000	3	3.8
>30,000	5	6.4
Parent's educational level		
≤High school graduate	64	83
Some college	13	17
No. of children in household		
1	14	18.1
≥2	63	81.9

Content and Face Validity

Table 2 shows that majority (3-4) gave a high content validity rating on all questions. The content validity index for each question is high at 0.75 to 1.0 and the overall CVI is 0.95 which supports the content validity of the questionnaire.

All questions had 100% rating in terms of clarity and simplicity which supports the face validity of the tool.

Table 2. Content validity indices of the items in the final translated PACV survey

Item #	Rater 1	Rater 2	Rater 3	Rater 4	CVI
1	2	4	4	4	0.75
2	4	3	4	4	1
3	1	3	4	4	0.75
4	3	4	4	4	1
5	4	4	4	4	1
6	1	4	4	4	0.75
7	3	4	4	4	1
8	4	4	4	4	1
9	3	4	4	4	1
10	3	3	4	4	1
11	4	4	4	4	1
12	4	3	4	4	1
13	4	4	4	4	1
14	4	4	4	4	1
15	4	4	4	4	1
S-CVI/AVE = 0.95					
Total agreement= 12					

Test-retest reliability

The questionnaire had a high test-retest Pearson's correlation (0.970) which supports the reliability of the tool. Cronbach's alpha is low at 0.687. Item number 5 can be removed to increase alpha to an acceptable rating of 0.711.

The fifteen non-demographic items with the corresponding responses are listed in Table 3. These 15 items were translated from the original PACV questionnaire which were developed from three domains. Items 1-3,11 and 12 were developed under the domain Immunization Behavior in the original study. These sets of responses are generally non-hesitant with percentage of answers ranging from 77.6 – 95.5%. In the domain, Beliefs about Vaccine Safety and Efficacy (Items 4-10), there is a higher percentage of hesitant responses per item ranging from 13.4 – 46.3 %. The Trust domain comprised the remaining items 13-15 which had the highest non-hesitant set of responses ranging from 88 -97%.

Table 3. Summary of responses to the final translated PACV survey

Item Number	Not hesitant (N;%)	Not sure (N;%)	Hesitant (N;%)
1. Nangyari na bang hindi mo pinabakunahan sa tamang oras ang iyong anak kahit wala siyang sakit o allergy?	52 (77.6)	2 (3.0)	13 (19.4)
2. May pagkakataon bang nagpasya ka na hindi pabakunahan ang iyong anak sa ibang kadahilanan maliban sa sakit o allergy?	56 (83.5)	6 (9.0)	5 (7.5)
3. Gaano ka kasigurado na ang ipinapayong iskedyul ng bakuna ay makabubuti sa iyong anak?	55 (82.1)	0 (0.0)	12 (17.9)
4. Ang mga bata ay nabibigyan ng bakuna na sobra sa kung ano ang makabubuti sa kanila.	27 (40.3)	15 (22.4)	25 (37.3)
5. Naniniwala ako na ang mga sakit na naagapan ng bakuna ay malulubhang sakit.	44 (65.7)	10 (14.9)	13 (19.4)
6. Mas mabuti na magkasakit sa natural na paraan ang anak ko kaysa sa magpabakuna	53 (79.1)	5 (7.5)	9 (13.4)
7. Mas maigi na mabigyan ang mga bata ng mas kaunting bakuna sa isang pagkakataon.	40 (59.7)	11 (16.4)	16 (23.9)
8. Gaano ka nag-aalala na maaaring magkaroon ng masamang epekto ang bakuna sa iyong anak?	35 (52.2)	3 (4.5)	29 (43.3)
9. Gaano ka nag-aalala na maaaring hindi ligtas ibigay ang bakuna sa iyong anak?	32 (47.8)	6 (8.9)	29 (32.3)

DISCUSSION

Vaccine hesitancy has context specific determinants which span different regions in the world. These sentiments have been extensively studied in other countries as mentioned by Larson et al.³ Tools have been created as a result of decreasing vaccination rates to identify such determinants. Tool development has since then helped understand the generally positive response of some regions toward vaccination. In the Philippines there is a looming need to address vaccine hesitancy from a public health perspective given the recent drops in vaccination rates.¹⁵ Despite the vast majority of studies done in this field, there are no tools developed to measure vaccine hesitancy in the Philippines. Translated from an accepted and validated PACV survey, this tool was validated with the goal of developing a means of assessing vaccine hesitancy in the Philippine setting.

In this study, the Filipino Translated Questionnaire on Parent Attitudes About Childhood Vaccines showed high content validity among the 4 experts with overall agreement in 12 of the 15 non-demographic items in the tool. The remaining three items were reworded to improve readability among laypeople. Upon administration to the first ten participants, there was a unanimous agreement among parents that the survey items were clear and simple to understand (N=10). This was then administered to the 67 participants which showed that the translated PACV has a high test-retest reliability as supported by a high intraclass correlation coefficient of 0.970.

The internal consistency however had a low Cronbach's α coefficient with an overall coefficient of 0.687. On review of responses and feedback of patients, some of the respondents' answers would have incongruences under similar domains. The

original validation study by Opel et. al. had three domains identified in its questionnaire.² These were Immunization Behavior, Vaccine Safety and Efficacy, and Trust. In this study, the internal consistency for individual domains were low ranging from 0.468-0.632. On data analysis, removal of item number 5 "Naniniwala ako na ang mga sakit na naagapan ng bakuna ay malulubhang sakit." would increase the overall coefficient to 0.711 (See Table 3).

LIMITATIONS

The team recognizes that this study has limitations. The test-retest phase of tool development was completed after the measles epidemic. The timing of the survey may have affected parents' responses to the questionnaire. In addition, all participants were derived from one institution in the National Capital Region limiting the generalizability of results. The sample population were obtained from convenience sampling. This questionnaire was translated to Filipino and will still bring about different contextual meanings. Although this test has been administered globally, the team understands the need for tools to be available in the native tongue. The study team attempted to preserve each item's readability and inherent meaning by having it officially translated by the Sentro ng Wikang Filipino as well as having it screened by both an expert panel and the target study population.

CONCLUSION

The translated Filipino PACV is a useful 21-item tool to identify possible reasons for vaccine hesitancy among Filipino parents. The remaining 14 non-demographic items on the Filipino Translated Questionnaire on PACV have face and content validity with an acceptable internal consistency.

RECOMMENDATIONS

Future studies can be done geared towards improving internal consistency in the questionnaire by adjusting item phrasing to improve readability. Expanding the study sites to include communities outside a tertiary hospital setting will also bring about a broader study population. The next phase of this study should test the tool's predictive and content validity. Focus should be placed on further psychometric evaluation to measure association of sociodemographic features and vaccine hesitancy. This is already being done globally in the original PACV survey. This study can serve as a framework for future studies in correlating behaviors affecting vaccine hesitancy. Original tool development should be contemplated by future researchers to uncover domains and behaviors towards vaccine hesitancy which are more appropriate to the Filipino context.

REFERENCES

- Dube, E. Vivion, M., MacDonald NE., Vaccine hesitancy, vaccine refusal and the anti-vaccine movement: influence, impact and implications. *Expert Review of Vaccines*. 2015 Jan;14(1):99-117.
- MacDonald NE; SAGE Working Group on Vaccine Hesitancy. Vaccine hesitancy: Definition, scope and determinants. *Vaccine*. 2015 Aug 14;33(34):4161-4.
- Larson HJ et al. The State of Vaccine Confidence 2016: Global Insights Through a 67-Country Survey. *EBioMedicine*. 2016 Oct;12:295-301.
- Dubé E, Gagnon D, Nickels E, Jeram S, Schuster M. Mapping vaccine hesitancy—Country-specific characteristics of a global phenomenon. *Vaccine*. 2014 Nov 20;32(49):6649-54.
- Larson HJ, Jarrett C, Eckersberger E, Smith DM, Paterson P. Understanding vaccine hesitancy around vaccines and vaccination from a global perspective: a systematic review of published literature, 2007–2012. *Vaccine*. 2014;32(19):2150–9. (15) The Vaccination Act, 1898: New Order of the Local Government Board, England. (1898). *British medical journal*, 2(1974), 1351-4.4 .
- Opel DJ, Mangione-Smith R, Taylor JA, Korfiatis C, Wiese C, Catz S, and Martin D. Development of a Survey to Identify Vaccine-Hesitant Parents: The Parent Attitudes about Childhood Vaccines Survey. *Human Vaccines* 2011; 7(4): 419-425.
- Opel DJ, Taylor JA, Zhou C, Catz S, Myaing M, and Mangione-Smith R. The Relationship between Parent Attitudes about Childhood Vaccines Survey Score and Future Child Immunization Status: A Validation Study. *JAMA Pediatrics* 2013; 167(11): 1065-1071.
- Department of Health. (2019). DOH IDENTIFIES VACCINE HESITANCY AS ONE OF THE REASONS FOR MEASLES OUTBREAK. Retrieved from Department of Health: <https://www.doh.gov.ph/node/16721>
- Wan Nor Arifin. A web-based sample size calculator for reliability studies. *Education in Medicine Journal*. 2018;10(3):67–76. Available from <https://doi.org/10.21315/eimj2018.10.3>.
- Opel DJ, Taylor J, Mangione-Smith R, Solomon C, Catz S, and Martin D. Construct Validity of a Survey to Identify Vaccine-Hesitant Parents. *Vaccine* 2011; 29: 6598-6605.
- Kim, Y., Evangelista, L. S., Phillips, L. R., Pavlish, C., & Kopple, J. D. (2010). The End-Stage Renal Disease Adherence Questionnaire (ESRD-AQ): testing the psychometric properties in patients receiving in-center hemodialysis. *Nephrology nursing journal : journal of the American Nephrology Nurses' Association*, 37(4), 377–393.
- Lam, K. W., Hassan, A., Sulaiman, T., & Kamarudin, N. (2018). Evaluating the Face and Content Validity of an Instructional Technology Competency Instrument for University Lecturers in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 8(5), 367–385.
- Strugnell, C., Renzaho, A., Ridley, K., & Burns, C. (2014). Reliability and validity of the modified Child and Adolescent Physical Activity and Nutrition Survey



- (CAPANS-C) questionnaire examining potential correlates of physical activity participation among Chinese-Australian youth. *BMC public health*, 14, 145. doi:10.1186/1471-2458-14-145.
14. Taber, K.S. The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Res Sci Educ* (2018) 48: 1273. Available from <https://doi.org/10.1007/s11165-016-9602-2>.
 15. Department of Health [2018]. Immunization from 2013 to 2018. Retrieved 2/14/2019.

Figure 1. Validated Filipino Translated Questionnaire on Parent Attitudes and Vaccine Survey

1. Siya ba ang panganay mong anak? Oo Hindi

2. Ano ang relasyon mo sa kanya? Ina Ama Iba: _____

3. Nangyari na bang hindi mo pinabakunahan sa tamang oras ang iyong anak kahit wala siyang sakit o allergy? Oo Hindi *Hindi ko alam*

4. May pagkakataon bang nagpasya ka na hindi pabakunahan ang iyong anak sa ibang kadahilanan maliban sa sakit o allergy? Oo Hindi *Hindi ko alam*

5. Gaano ka kasigurado na ang ipinapayong iskedyul ng bakuna ay makabubuti sa iyong anak? Sagutan ang panukatan na 0 hanggang 10, kung saan ang 0 ay *Hindi talaga sigurado* at ang 10 ay *Siguradong sigurado*.

Hindi talaga sigurado	Siguradong sigurado									
0	1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Mahigpit na sumasang-ayon	Sumasang-ayon	Hindi sigurado	Hindi sumasang-ayon	Lubos na hindi sumasang-ayon
6. Ang mga bata ay nabibigyan ng bakuna na sobra sa kung ano ang makabubuti sa kanila.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Mas mabuti na magkasakit sa natural na paraan ang anak ko kaysa sa magpabakuna	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

8. Mas maigi na mabigyan ang mga bata ng mas kaunting bakuna sa isang pagkakataon.

Hindi nag-aalala Hindi gaanong nag-aalala Hindi sigurado Medyo nag-aalala Sobrang nag-aalala

9. Gaano ka nag-aalala na maaaring magkaroon ng masamang epekto ang bakuna sa iyong anak?

10. Gaano ka nag-aalala na maaaring hindi ligtas ibigay ang bakuna sa iyong anak?

11. Gaano ka nag-aalala na maaaring hindi rin mapipigilan ng bakuna ang sakit?

12. Kung magkakaanak ka ulit ngayon, gugustuhin mo bang mabigyan siya ng lahat ng inirerekomandang bakuna?

Oo Hindi *Hindi ko alam*

13. Sa pangkalahatan, gaano ka nag-aalinlangan sa mga bakunang pambata?

Hindi Nag-aalinlangan Di masyadong Nag-aalinlangan Hindi sigurado Nag-aalinlangan Sobrang Pag-aalinlangan

14. Nagtitiwala ako sa mga impormasyong natatanggap ko ukol sa bakuna.

Lubos ayon sumasang ayon Sumasang-sigurado Hindi sumasang-ayon Hindi sumasang-ayon Lubos na sumasang-ayon Sobrang sumasang-ayon

15. Malaya kong nasasabi sa doktor ng aking anak ang mga bumabagabag sa akin tungkol sa bakuna.

16. Matapos isaalang-alang ang lahat ng bagay, gaano ka nagtitiwala sa doktor ng iyong anak. Sagutin ang panukatan na 0 hanggang 10, kung saan ang 0 ay *Hindi talaga nagtitiwala* at ang 10 ay *Tiwalang-tiwala*.

**Hindi talaga
nagtitiwala**

**Tiwalang-
tiwala**

0	1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ang mga susunod na katanugan ay tungkol sa'yo. Pumili lamang ng isang sagot at lagyan ito ng check mark.

17. Ilang taon ka na?

18-29 taong gulang

30 taong gulang o mahigiy

18. Ano ang iyong estadong sibil?

Walang asawa

Kasal

May kinakasama

Nabalo

Hiwalay

19. Ano ang pinakamataas na antas ng edukasyon ang natapos mo?

Elementarya

Hayskul, ngunit hindi nakapagtapos

Nakapagtapos ng hayskul

Nakatungtong ng kolehiyo ngunit hindi nakapagtapos o nakatapos ng 2-year degree

Nakapagtapos ng kolehiyo (4-year course)

Higit pa sa 4 na taong digri sa kolehiyo

20. Gaano kalaki ang kinikita ng inyong pamilya sa loob ng isang buwan?

P10,000 o mas mababa pa

P10,000-20,000

P20,000-30,000

P30,000 o mahigit pa

21. Ilan ang bata sa iyong sambahayan?

Isa

Dalawa

Tatlo

Apat o mahigit