

Validation of the Filipino Translation of the Impact of Vision Impairment for Children (IVI_C) Questionnaire among School Children

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ABSTRACT

Background. Quality of life questionnaires provide valuable information in assessing the effects of health interventions and public health campaigns. In the Philippines, we only have a few validated questionnaires targeted specifically for children.

Objective. To translate to Filipino and validate the translated Impact of Vision Impairment for Children Questionnaire (IVI_C).

Methods. This is a translation and validation study of the IVI_C. The IVI_C was translated following international guidelines of forward-translation and back-translation methods. After completion of the Filipino IVI_C version, pretesting was performed on school-aged children 8 to 18 years old through convenience sampling in the outpatient department and Pediatric Ophthalmology and Motility Clinic at *Sentro Oftalmologico* Jose Rizal, Philippine General Hospital from January 1 to August 31, 2018.

Results. We included 130 participants in the study. The calculated Cronbach's alpha coefficient of 0.88 for the translated Filipino version of the IVI_C suggested high reliability and internal consistency. Rasch analysis showed comparability of the Filipino translation to the original English version of the questionnaire.

Conclusion. Our study showed that the Filipino version of IVI_C questionnaire was of high reliability and validity.

Keywords: *Quality of life questionnaire, visually impaired children, Filipino children, Vision-specific questionnaire*

INTRODUCTION

Visual impairment is a global concern on a social, economic, and personal level.¹ It has a lifelong implication that can affect the development, education, social interaction, and behavior, especially in children. Globally, 90% of children with vision impairment do not get access to education despite existing global policies.²

In 2002, the world prevalence of blindness in children was about 4%.³ The World Health Organization (WHO) estimated 19 million visually impaired children in 2014. Of those affected, over 12 million were due to refractive errors - a condition that could be easily diagnosed and corrected. A total of about 1.4 million children who were irreversibly blind needed visual rehabilitation interventions for full psychological and personal development.⁴



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Vision 2020: The Right to Sight, a joint program of the WHO and the International Agency for the Prevention of Blindness (IAPB), recommended avoidable blindness elimination by the year 2020 through the development of sustainable comprehensive health care reform locally to improve the quality of life of the people and to ensure the best possible visual acuity state.⁵

Visual impairment is defined as visual acuity (VA) of the better eye of 20/60 to 20/400.⁶ The WHO classifies a patient to have a mild visual impairment when the best corrected VA of one eye was 20/50 to 20/125 with VA of 20/20 to 20/40 in the better eye; moderate visual impairment is considered when both eyes had VA of 20/50 to 20/125; severe visual impairment, when the best corrected VA of one eye is 20/200 or less while the better eye has 20/50 to 20/125 vision; and severe bilateral visual impairment when the best corrected VA for both eyes is 20/200 or less.

Early detection of visual impairment leads to early detection of treatable conditions, preventing subsequent blindness and improving the quality of life of patients. Numerous studies have shown that vision-specific assessment tools can detect sight problems in children. The Cardiff Visual Ability Questionnaire for Children (CVAQC), the Children's Visual Function Questionnaire (CVFQ), and the LV Prasad Functional Vision Questionnaire (LVP- FPQ) are among the available vision-specific pediatric scales and quality of life (QoL) tools. The reliability of these tools was proportional to the level of understanding of the child being evaluated.

Utilization of the standardized assessment tools becomes a challenge in the Philippines because it is an archipelago of 7,604 islands with over 182 varied dialects.⁷ In 2004, Filipino was listed in the International Organization for Standardization (ISO) registry of languages as it is the commonly spoken language in Metropolitan Manila and other urban centers where different ethnic groups interact. It remains one of the languages used by the national mass media. It is therefore imperative that a visual assessment tool to be used in the Philippines be in Filipino because the language is familiar and common to multi-ethnic children consulting in tertiary centers.

To address the call of Vision 2020, programs for early detection of visual impairment must be in place in tertiary centers such as the Philippine General Hospital (PGH). As one of the centers catering to different ethnic groups and servicing the needs of pediatric ophthalmology in the country, steps must be in place to detect visual impairment at its earliest stage through an effective screening tool to prevent blindness in children.

The use of screening tools is difficult in children if not understood in a language familiar to them. Most of the available psychometric tools are in English but not all children are well-educated or familiar with that language. This situation calls for a validated Filipino visual impairment tool that can evaluate children's visual levels and make it

familiar and understandable to inter-ethnic interpretation to make a more accurate assessment of a child's visual condition.

In 2016, Lee and Pajarillo translated to Filipino and validated the Children's Visual Function Questionnaire for children ages 3 to 7 years (CFVQ3plus). Parents of children with a visual impairment aged 3 to 7 years old answered the questionnaire on behalf of their children. The study produced a highly reliable Filipino version of the CVFQ3plus with high internal consistency, helpful in accurately assessing the quality of life of children in the Philippine setting.⁸

The use of patient-reported outcomes (PROs) to assess the impact of vision impairment from the patient's perspective, is now common in clinical practice and ophthalmic research.⁹ PROs defined and assessed the benefits of treatment or intervention on the patients' overall QoL. Cochrane et al, deriving answers from the children themselves and their support providers, showed a QoL scale-the IVI_C, to assess the needs of children with low vision and outcomes of interventions. Validation of the IVI_C began in Australia and became the most validated and translated tool in other countries including Fiji, India, Malawi, and even in the United States.¹⁰ It is used for school children aged 8 to 18 years with no other impairments. Studies assessing the effectiveness of special support interventions had used the IVI_C, as well as the overall QoL resulting from drug intervention on visual acuity.¹¹

This vision-specific pediatric QoL instrument has identified interaction (how the child interacts with non-vision impaired peer groups and people in the broader community), mobility (travel and access to the environment), emotion (the emotional impact of visual impairment on day-to-day life), and school (aspects of school-life and classroom activity), as useful domains in detecting problems in children with visual impairment.¹²

Lamaurex et al. emphasized the need for a local version of the IVI_C questionnaire that is reproducible and clinically significant for the local population.¹³ However, there is no locally validated assessment tool for the visual impairment of children questionnaire for school-aged children (8 to 18 years old).

The objective of the study was to translate the Impact of Vision Impairment for Children (IVI_C) Questionnaire into Filipino and to test its validity when used locally to assess the self-reported vision-specific QoL of Filipino school children 8 to 18 years old with visual impairment.

An effective intervention on visual impairment requires an efficient assessment tool that can be understood by the patients being evaluated. The use of the Filipino IVI_C patient-reported outcomes (PROs) simply breaks the barrier of misinterpretation of children during their learning years, effectively detecting visual problems, therefore leading to prompt intervention.

Early detection of conditions that could lead to irreversible blindness requires tools whether innovative, novel, or standardized. IVI_C is one of those tools that has

garnered significant clinical use and adaptation in different countries around the world. Several problems, however, were encountered in its implementation on children. The language barrier is challenging in assessing dimensions that required understanding at the level of a child. This study addressed the challenge of using a Filipino tool to gather data from the perspective of local visually impaired children. The IVI_C is a vision-specific pediatric QoL instrument that was found to be suitable for use in schoolchildren aged 8 to 18 years with no other impairments. This instrument was used to measure the impact of vision impairment on specific aspects of patients' QoL from their perspective.

METHODS

The study conducted was a translation and validation study. The process of developing the Filipino-translated version of the IVI_C (Appendix 1) was based on the WHO forward-translation and back-translation method. During the forward translation, the original version of IVI_C in English (Appendix 2) was translated to Filipino by an independent bilingual expert. The translation process was undertaken at the Sentro ng Wikang Filipino, University of the Philippines-Manila. For the backward translation, a second translator from the College of Arts and Sciences of the same university, who was also proficient in both English and Filipino language, translated the questionnaire from its Filipino version back into English.¹⁴

The original English version of the IVI_C 24-item questionnaire and the back-translated English version were compared item by item. The identified discrepancies between the two questionnaires were revised and resolved by the said experts. Only minor revisions of some items were deemed necessary during the translation. The question that required modification was related to transportation. Rephrasing was required for a better understanding by local children. The IVI_C question on transportation enumerated buses, trains, and ferries as a mode of transportation, some of which were not common in the Philippine setting. When rephrased to include jeepneys and tricycles, it became easily understood and answered appropriately by the child being assessed. The resulting Filipino translation of the IVI_C was then pre-tested among patients who fulfilled the inclusion criteria through an interviewer-administered questionnaire.

The inclusion criteria for participants were children 8 to 18 years of age, whose best-corrected vision was worse than or equal to 20/50 in both eyes, with no other sensory, physical, and intellectual comorbidity, and should be able to converse in either English or Filipino. Participants were recruited through convenience sampling in the outpatient department and Pediatric Ophthalmology and Motility Clinic at the Sentro Oftalmologico Jose Rizal, Philippine General Hospital from January 1 to August 31, 2018.

Informed consent was secured from the parent or caretaker of the children while assent forms were obtained

from the children. The informed consent and assent forms, in English and/or Filipino, were administered by the primary investigator. Aside from the name, age, current educational level, the patient's visual impairment level, best-corrected visual acuity, and ophthalmologic diagnosis were also obtained. Children were asked to answer the Filipino-translated IVI_C questionnaire. Each child was assessed for about 10-15 minutes during their consult visit in the OPD.

Statistical analysis

The validation of the Filipino IVI_C version required a minimum sample size of at least 130 children based on the NCSS- PASS 2013 to target Cronbach's alpha = 0.80 for the 24-item questionnaire with a margin of error of 0.10 and confidence level of 95%.

The Cronbach's alpha was used to determine the reliability and internal consistency of the Filipino version of the IVI_C questionnaire. Data were analyzed using the Stata SE version 13 and to help avoid generating untrustworthy results concerning internal consistency, a test of homogeneity or uni-dimensionality was done using the Rasch model. The Rasch model assumed that the probability an individual will respond to an item was a logistic function of the difference between the individual's level of functional ability and the item's level of functional difficulty. Thus, as this scale is linear, a higher score represented better QoL and with less difficulty on the parameter being assessed.

The combination of Cronbach's alpha and Rasch analysis on the modified 24-item IVI_C vision impairment assessment tool validated the translated questionnaire. Furthermore, the questionnaire's reliability as a tool was shown through its uni-dimensionality and internal reliability indices.

Validation

Content validity was reviewed and evaluated by an expert bilingual translator to ascertain that the revised version still reflected the original intent of the questionnaire and that the content was relevant to the Filipino culture.

Ethical Considerations

The study was conducted as approved by the University of the Philippines Manila Ethics Research Board (UPMREB). Data Privacy Act of 2012 requirements was also fulfilled. All the parents or guardians and eligible participants were oriented.

RESULTS

Patient Demographic Data

The demographic data of participants are summarized in Table 1. A total of 130 participants with an age range between 8 to 18 years were included in the study. Among the main causes of visual impairment in children in this study were sensory deprivational amblyopia 15% (20/130),

Table 1. Demographic and clinical characteristics of the study sample (N = 130)

Variables	No (%)
Age (years), mean \pm SD	10.9 \pm 2.35
Gender	
Male	71 (54.6)
Female	59 (45.4)
Visual Impairment	
Mild	69 (53.0)
Moderate	33 (25.4)
Severe unilateral visual impairment	12 (9.2)
Severe bilateral visual impairment	16 (12.3)
School status	
Public	116 (89.2)
Private	14 (10.8)

developmental cataract 13% (18/130), and pathologic myopia 12% (16/130).

Reliability Testing

The translated Filipino version was found to be highly reliable (computed Cronbach's alpha = 0.88) (Appendix 3). The translated Filipino version was also validated using a Rasch model to make it comparable with other languages. The entire 24-item questionnaire showed a mean square value ranging from 0.5 to 1.5 and was therefore appropriate for use (Appendix 3).

This study showed that 125 of the 130 children said "yes" in terms of understanding and clarity of the questionnaire used. Most of the children answered "yes" when asked if they understood each question and if they can relate to it.

Those with mild visual impairment scored higher compared to the other subgroups, which indicates better QoL (Table 2). Furthermore, the severity of the visual impairment did not affect the child's ability to describe the level of quality of his or her life as the participants have a similar overall respondent score of >1.0 . Despite the person residual values (mild group, 0.98 ± 0.44 ; severe bilateral group, 0.03 ± 0.40), the questionnaire still showed content validity and internal reliability because the overall residual value computed was at $-0.72 (+0.39)$. Questions with the highest logical measure were most likely involved in exploration and safety of the environment (explore new places, safety, and security) (Appendix 4).

The item overall score was 12.5 (+ 7.07). This affirmed that the probability of a correct response of each child to every question of the Filipino-translated questionnaire was high and independent of the level of disability.

DISCUSSION

Our study showed that the translated Filipino version of the IVI_C questionnaire was of adequate reliability and validity. We only made minor modifications to adapt the instrument to the Philippine setting. It was deemed appropriate for utilization as a screening tool. These attributes were common internal conflicts of growing school-aged children. The use of local language familiar and understandable to inter-ethnic groups promoted understanding and reproducible assessments on children aged 8 to 18 years, permitting the questionnaire to detect early vision impairment and evaluate outcomes of interventions on these children.

The Rasch threshold depicted the probability that one child can choose one or the other item when confronted with two choices. The thresholds for each of the choices on the IVI_C questionnaire did not imply a disordered state. The child's decision of choosing an answer on that specific category was in no way greater than any other single category which proved that the questionnaire was valid. Furthermore, every answer of the child for each of the 24 questions did not show any bias nor was given a greater probability of being observed or selected by the participant. If the language and meaning were clear to the child, he/she was able to independently answer the questions, regardless of how the questions were asked.

CONCLUSION

The Filipino-translated IVI_C questionnaire was proven to have high internal consistency and validity. This is the first vision-specific QoL questionnaire for school-aged children to help assess the effectiveness of special support interventions in the local setting – specifically looking at mobility, access to information within the school environment, confidence in interacting with non-vision-impaired peers and other adults in the community around them, as well as the overall QoL resulting from drug intervention or low vision rehabilitation on visual acuity.

Table 2. Rasch values of the response of children according to levels of visual impairment

Variable (Mean/SD)	Level of Visual Disability			
	Mild (n=69)	Moderate (n=33)	Severe (n=12)	Severe bilateral (n=16)
Overall respondent score	1.65 (+0.30)	1.56 (+0.32)	1.24 (+0.35)	1.02 (+0.26)
Person residual value	0.98 (+0.44)	0.84 (+0.49)	0.36 (+0.52)	0.03 (+0.40)
Item residual value	-0.72 (+0.39)			
Item overall score	12.5 (+7.07)			

Statement of Authorship

All authors contributed in the conceptualization of work, acquisition and analysis of data, drafting and revising and approved the final version submitted.

Author Disclosure

All authors declared no conflicts of interest.

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APPENDICES

Appendix 1. Filipino-Translated Impact of Vision Impairment for Children (IVI_C)

Babasahin ko ang ilang tanong para sa iyo.

Ang mga tanong ay tungkol sa iyo, sa iyong paaralan, pamilya at iba pang nakapaligid sa iyo.

Mangyaring sabihin kung alin ang pinakanaglalarawan kung ano ang kadalasang ginagawa at nararamdaman mo.

Walang tama o maling sagot.

Mangyaring sagutin ang mga tanong para sa iyong sarili – mahalaga ang iyong pamilya ngunit hindi namin kailangan ang kanilang sagot, ang iyong sagot ang kailangan namin.

Mangyaring sagutin mula sa isa sa mga pagpipiliang binasa ko sa iyo. Kung gusto mo, maaari mong ituro ang tugon na nasa kard sa iyong harapan.

May mga bagay na hindi mo magagawa dahil napakabata mo pa o dahil sa ibang dahilan.

Para sa mga ganitong tanong, isagot lamang, 'hindi, dahil sa ibang dahilan'.

Narito ang halimbawa:

Ang mga tanong ay tungkol lahat sa kung ano ang lagay ng mga bagay-bagay para sa iyo dahil sa iyong paningin.

Q.	Palagi	Halos palagi	Minsan	Halos hindi	Hindi kailanman	Hindi dahil sa ibang dahilan
1. Tumutulong ka ba sa hardin?						

Salamat, babasahin ko na ngayon ang mga tanong.

Q.	Palagi	Halos palagi	Minsan	Halos hindi	Hindi kailanman	Hindi dahil sa ibang dahilan
1. Nahihirapan ka bang bumaba sa hagdan o humakbang mula sa bangketa?						
2. Tiwala ka ba sa sarili mo na kaya mong makarating (pumasok) nang nag-iisa sa paaralan?						
3. Tiwala ka ba sa sarili mo na kaya mong sumakay sa pampublikong transportasyon (gayang bus, dyip o traysikel) nang nag-iisa?						
4. Kakayanin mo bang mag-isa sa mga lugar na hindi mo pa napupuntahan?						
5. Tiwala ka ba sa sarili mo na ligtas kang makapaglilibot o (makapagiikot) sa araw sa lugar na ngayon mo pa lang napuntahan?						
6. Tiwala ka ba sa sarili mo na ligtas kang makapaglilibot o (makapagiikot) sa gabi sa lugar na ngayon mo pa lang napuntahan?						
7. Mahahanap mo ba ang iyong mga kaibigan sa palaruan kapag tanghali at sa oras ng paglalaro?						
8. Kapag nasa isang silid ka, makikilala mo ba ang mga taong dati mo nang kilala bago ka pa nila kausapin?						
9. Kaya mo bang sumali sa mga laro o isports na gusto mong makalaro ang mga kaibigan mo?						
10. Nabibigyan ka ba ng pagkakataong pumunta sa mga aktibidad maliban sa isports (gaya ng pagtitipon o salo-salo)?						
11. Nangyari na bang napigilan ka ng iyong paningin (sa mata) para gawin ang mga bagay na gusto mong magawa?						
12. Tinutulungan ka ba ng ibang estudyante kapag humingi ka ng tulong sa kanila?						
13. Tinutulungan ka ba ng ibang estudyante upang makisali sa kanila?						
14. Nahihirapan ka bang makisali sa ibang estudyante?						
15. May ginusto ka ba na hindi mo nagawa (nakuha) dahil sa paningin ng mata mo?						
16. Naiintindihan ba ng ibang estudyante ang espesyal mong pangangailangan?						

Validation of the Filipino Translation of IVI_C Questionnaire

Ang mga tanong ay tungkol lahat sa kung ano ang lagay ng mga bagay-bagay para sa iyo dahil sa iyong paningin.

Q.	Palagi	Halos palagi	Minsan	Halos hindi	Hindi kailanman	Hindi dahil sa ibang dahilan
17. Naiintindihan ba ng mga guro mo ang espesyal mong pangangailangan?						
18. Sa loob ng klase nakikita mo rin ba ang lahat ng aralin na nakikita ng mga kaklase mo?						
19. Kasing bilis mo bang naiintindihan ang lahat ng aralin kasabay ng ibang estudyante ?						
20. Nabibigyan ka ba ng sapat na oras sa paaralan upang matapos ang trabahong ibinigay ng guro?						
21. Kapag nasa silid-aralan, kaya mo bang humingi ng tulong na kailangan mo?						
22. Kapag humihingi ka ng tulong, naiintindihan ba ng mga tao kung hanggang saan (paano) ka nila pwede tulungan?						
23. Sinasabihan ka ba ng mga tao na hindi mo kakayanin ang mga bagay na gusto mong gawin?						
24. Pinipigilan ka ba ng mga tao na gawin ang mga bagay na gusto mong magawa?						

Salamat.

Appendix 2. Impact of Vision Impairment for Children (IVI_C)

I'm going to read some questions to you.

The questions are about you, your school, your family and others around you.

Please say which answer best describes what you do and feel most of the time.

There are no right or wrong answers.

Please answer the questions for yourself - your family is important but we don't want their answers, we want yours.

Please answer with one of the responses that I read out to you. If you want, you can also point to a response on the card in front of you.

Some things you won't do because you are too young or for other reasons. For these questions just answer, 'no, for other reasons.'

Here is an example:

The questions are all about how things are for you because of your eyesight.

Q.	Always	Almost always	Sometimes	Almost never	Never	No, for other reasons
1. Do you help in the garden?						

Thank you, I'll read the questions now.

Q.	Always	Almost always	Sometimes	Almost never	Never	No, for other reasons
1. Do you find it difficult to go down stairs or to step off the footpath?						
2. Are you confident to make your own way to school?						
3. Are you confident to use public transport (such as buses, trains, ferries) by yourself?						
4. Are you confident in places you don't know?						
5. Are you confident that you can move around safely in places you don't know in the daytime?						
6. Are you confident that you can move around safely in places you don't know at night-time?						
7. Can you find your friends in the playground at lunch and play time?						
8. When you are in a room, can you recognise people you know before they speak to you?						
9. Can you take part in games or sports that you want to play with your friends?						
10. Do you get the chance to go to activities other than sport (such as social groups)?						

The questions are all about how things are for you because of your eyesight.

Q.		Always	Almost always	Sometimes	Almost never	Never	No, for other reasons
11.	Has your eyesight stopped you from doing the things that you want to do?						
12.	Do other students help you when you ask them for help?						
13.	Do other students help you to join in with them?						
14.	Do you find it hard to join in with other students?						
15.	Do you get frustrated?						
16.	Do other students understand your special needs?						
17.	Do your teachers understand your special needs?						
18.	In the classroom, do you get all the same information as other students?						
19.	Do you get all the information at the same time as the other students?						
20.	Do you get enough time in school to complete the work set by the teacher?						
21.	When you are in the classroom, are you confident about asking for help you need?						
22.	When you ask for help, do people understand how much help you need?						
23.	Do people tell you that you can't do the things that you want to do?						
24.	Do people stop you from doing the things you want to do?						

Thank you.

Appendix 3. Cronbach's coefficient of the 24-item IVI_C and Rasch value per question in Filipino translation

Item	Obs	Sign	Item-test correlation	Item-rest correlation	Average inter-item correlation	Alpha	Rasch mean square values
Q1	56	+	0.6639	0.6152	0.2298	0.8728	1.10
Q2	56	+	0.5939	0.5380	0.2333	0.8750	1.36
Q3	56	+	0.6563	0.6067	0.2302	0.8731	1.25
Q4	56	+	0.6128	0.5588	0.2323	0.8744	1.21
Q5	56	+	0.6683	0.6201	0.2296	0.8727	1.16
Q6	56	+	0.5341	0.4729	0.2362	0.8767	1.22
Q7	56	+	0.6435	0.5926	0.2308	0.8735	1.09
Q8	56	+	0.4481	0.3804	0.2404	0.8792	1.10
Q9	56	+	0.5564	0.4971	0.2351	0.8761	1.22
Q10	56	+	0.7370	0.6968	0.2262	0.8705	1.13
Q11	56	+	0.5950	0.5392	0.2332	0.8749	0.90
Q12	56	+	0.4897	0.4249	0.2384	0.8780	1.11
Q13	56	+	0.6035	0.5485	0.2328	0.8747	1.09
Q14	56	+	0.6138	0.5598	0.2323	0.8744	0.99
Q15	56	+	0.5222	0.4600	0.2368	0.8771	1.13
Q16	56	+	0.3807	0.3089	0.2437	0.8811	1.29
Q17	56	-	0.0410	-0.0394	0.2605	0.8901	1.42
Q18	56	+	0.5058	0.4423	0.2376	0.8776	1.10
Q19	56	+	0.4674	0.4011	0.2395	0.8787	0.98
Q20	56	+	0.1811	0.1019	0.2536	0.8865	1.22
Q21	56	+	0.4406	0.3725	0.2408	0.8794	1.20
Q22	56	+	0.3971	0.3262	0.2429	0.8807	1.02
Q23	56	+	0.5370	0.4760	0.2361	0.8767	0.96
Q24	56	+	0.5532	0.4937	0.2353	0.8762	0.92
Test Scale					0.2370	0.8817	

Appendix 4. Items for the Rasch-Adjusted Filipino IVI_C (arranged in descending order of difficulty, highest logit values to lowest)

	Question	Location measure (logits)	Item Fit Residual
4	Kakayanin mo bang mag-isa sa mga lugar na hindi mo pa napupuntahan?	1.15	1.21
6	Tiwala ka ba sa sarili mo na ligtas kang makapaglilibot or makapagiikot sa gabi sa lugar na ngayon mo pa lang napuntahan?	0.83	1.22
5	Tiwala ka ba sa sarili mo na ligtas kang makapaglilibot or makapagiikot sa araw sa lugar na ngayon mo pa lang napuntahan?	0.51	1.16
3	Tiwala ka ba sa sarili mo na kaya mong sumakay sa pampublikong transportasyon (gayang bus, dyip, traysikel) nang nag-iisa?	0.39	1.25
15	May ginusto ka ba na hindi mo nagawa o nakuha dahil sa paningin ng mata mo?	0.15	1.13
11	Nangyari na bang napigilan ka ng iyong paningin para gawin ang mga bagay na gusto mong magawa?	0.10	0.90
24	Pinipigilan ka ba ng mga tao na gawin ang mga bagay na gusto mong magawa?	0.06	0.92
18	Sa loob ng klase nakikita mo rin ba ang lahat ng aralin na nakikita ng mga kaklase mo?	0.04	1.10
23	Sinasabihan ka ba ng mga tao na hindi mo kakayanin ang mga bagay na gusto mong gawain?	0.02	0.96
19	Kasing bilis mo bang naiintindihan ang lahat ng aralin kasabay ng ibang estudyante ?	-0.03	0.98
14	Nahihirapan ka bang makisali sa ibang estudyante?	-0.04	0.99
13	Tinutulungan ka ba ng ibang estudyante upang makisali sa kanila?	-0.10	1.09
10	Nabibigyan ka ba ng pagkakataong pumunta sa mga aktibidad maliban sa isports (gaya ng pagtitipon o salo-salo)?	-0.12	1.13
12	Tinutulungan ka ba ng ibang estudyante kapag humingi ka ng tulong sa kanila?	-0.12	1.11
7	Mahamanap mo ba ang iyong mga kaibigan sa palaruan kapag tanghali at sa oras ng paglalaro?	-0.13	1.09
8	Kapag nasa isang silid ka, makikilala mo ba ang mga taong dati mo nang kilala bago ka pa nila kausapin?	-0.15	1.10
22	Kapag humihingi ka ng tulong, naiintindihan ba ng mga tao kung hanggang saan o paano ka nila pwede tulungan?	-0.16	1.02
1	Nahihirapan ka bang bumaba sa hagdan o humakbang mula sa bangketa?	-0.17	1.10
2	Tiwala ka ba sa sarili mo na kaya mong makarating (pumasok) nang nag-iisa sa paaralan?	-0.22	1.36
9	Kaya mo bang sumali sa mga laro o isportsna gusto mong makalaro ang mga kaibigan mo?	-0.23	1.22
21	Kapag nasa silid-aralan, kaya mo bang humingi ng tulong nakailangan mo?	-0.34	1.20
20	Nabibigyan ka ba ng sapat na oras sa paaralan upang matapos ang trabahong ibinigay ng guro?	-0.36	1.22
16	Naiintindihan ba ng ibang estudyante ang espesyal mong pangangailangan?	-0.42	1.29
17	Naiintindihan ba ng mga guro ang espesyal mong pangangailangan?	-0.65	1.42