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Development of a pictural test instrument to measure deaf children's knowledge of sexual violence prevention

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Abstract: The purpose of this study is to create a pictural instrument test for measuring sexual abuse prevention knowledge in deaf children. The research adopts a quantitative approach utilizing descriptive methods. The population in this study consisted of deaf students who could read and communicate in two ways. The sampling method used is convenience sampling of as many as 66 deaf students. The findings reveal that the instrument exhibits strong validity and reliability. The instrument consisted of 39 attitudinal items and was tested using Explanatory Factor Analysis (EFA) to refine the instrument's accuracy and consistency. The factor analysis process identified 25 suitable items, forming 8 distinct factors based on four key aspects: appropriate and inappropriate touching, safety rules for children, rejecting unwanted sexual advances, and reporting child sexual abuse to trusted adults. The instrument can be a tool to develop targeted strategies, policies, and programs to protect the communities. It is advised that further research be pursued to establish broader validation for this assessment tool while providing thorough justification for the accompanying manual detailing deaf children's knowledge of preventing sexual violence.
Keywords: development pictural test instrument; measurement knowledge; sexual violence prevention; deaf children

INTRODUCTION

Education is a perpetual and deliberate endeavor aimed at nurturing and enhancing students through the integration of various elements: the raw materials (students themselves), tools of education, goals, materials/programs/curriculum/methods, infrastructure, and facilities, as well as the surrounding conditions within the educational setting (Yusuf, 2017). Therefore, to craft an optimal learning framework, it becomes imperative to grasp and value each facet of education. This underscores the significance of measurement in education; a process that entails assigning numerical values to individuals based on specific criteria determined by the measuring instrument used to yield quantitative data (Dachliyani, 2019).

Tests are one such measuring tool employed in this process and play a pivotal role in enhancing the quality of learning experiences (Dachliyani, 2019). In the realm of academia, a test instrument is deemed as a refined implement that fulfills the stringent standards necessary for gauging an object's attributes or procuring data regarding a variable within a specific domain of content or substance (Yamtinah, Utami, Mulyani,

Masykuri, & Ulfa, 2022). This signifies that tests are meticulously utilized in alignment with contextual exigencies to address pressing issues in the realm of education. One such critical conundrum gripping education in contemporary times pertains to the alarming incidence of sexual violence perpetrated against children. Indeed, the Minister overseeing matters of Education, Culture, Research, and Technology has underscored three cardinal transgressions plaguing educational settings - namely sexual abuse, bullying, and intolerance (Syam & AN, 2023). Consequently, in order to combat this societal scourge effectively, the Minister issued Regulations Number 46 of 2023 about Prevention and Management Measures pertaining to Violence emanating from Educational Settings also known as Permendikbudristek PPKSP was enacted (Khasanah, Rakhmawati & Handayani, 2024).

Permendikbudristek PPKSP was passed as a legal umbrella for all school or education unit members to firmly handle and prevent the three big sins of education, one of which is the emergency cases of sexual violence that occur in the educational environment (Sriyanti, Asbari, & Praptoyo). The PPKSP states that the principle of efforts to prevent and handle violence in the education unit environment is carried out with the principle of equal rights and accessibility for persons with disabilities and education units are required to educate in the rules and programs for preventing and handling sexual violence in the education unit environment for persons with disabilities (Khasanah, Rakhmawati, & Handayani, 2024). Based on this, children with special needs must also become priority targets regarding the prevention of sexual violence. Children with special needs in education are children who experience learning and developmental obstacles so they require specific and different services according to the child's condition (Pitaloka, Fakhiratunnisa, & Tika, 2022). Children with special needs can be divided into several varieties, one of which is deaf children, namely children who have disorders in language development due to deficiencies or loss of hearing ability caused by part or all of their hearing being damaged or not functioning (Nofiaturrahmah, 2018).

Children with special needs often get the false assumption that they are asexual beings even though children with special needs have the same sexual urges as other children so they still need proper sexual education (Pratiwi & Romadonika, 2020). According to data released by the Washington Coalition of Sexual Assault Programs (2021), 54% of deaf children have experienced sexual abuse. This shows that children with special needs, one of which is deaf children, are more vulnerable to sexual violence than children with normal hearing (Paramesthi & Rahardjo, 2021). This reaffirms the urgency of knowledge about preventing sexual violence in children with special needs, in this case, deaf children.

Education is actually about humanizing humans, meaning that it also plays a role in solving problems that occur in students. Teachers are at the forefront of children's learning at school but must also understand the potential and problems that students are experiencing (Susilo & Sarkowi, 2018). However, the lack of programs and training provided for teachers in delivering material on sexual education is a current problem. This can be seen from the data that as many as 2% (n = 301) of students scored the maximum score for the ability to protect themselves from sexual harassment and 68% of teachers (n = 60) did not know the methods of preventing sexual harassment for children (Wulandari, et al., 2021). In addition, there are barriers in the form of parental consent and taboos in implementing sexual education (Felicia & Pandia in Handayani, 2019). The absence of a standardized test instrument for measuring knowledge of sexual violence prevention for children with special needs makes it more difficult for

teachers to measure children's abilities.

Thus far, a standardized test instrument to gauge the understanding of sexual abuse prevention among deaf children remains absent. Among the limited instruments tested for validity and reliability in measuring knowledge of preventing sexual abuse in children is the "What-If" Situations-Test (WIST) instrument. This comprehensive tool comprises inquiries into the appropriateness of various actions or scenarios, including but not limited to touching a child's private areas. Additionally, it delves into queries regarding how a child should respond in an abusive situation, as well as one specific item pertaining to the naming and identification of these private body parts (Wurtele, Hughes, & Owens., 1998).

Although the WIST instrument has undergone testing to establish its validity and reliability, it is evident that adjustments are necessary. Previous studies have revealed that when the WIST instrument is adapted to the Indonesian language, certain discrepancies arise where three key indicators were found not to be adequately represented by the items within this measuring tool (Handayani, 2018). It is therefore imperative that enhancements be made with a focus on refining aspects of language, culture, and relevance to the issue at hand. Furthermore, existing literature fails to provide any adaptations of the WIST instrument tailored for use with deaf children. To address this pressing need for an effective measurement tool for teachers assessing deaf children's knowledge in preventing sexual violence, there ought to be a comprehensive effort toward constructing an instrument that aligns with both the unique circumstances and requirements of this specific demographic.

The quality of the instrument determines the quality of the data collected so that involving several experts who are competent in their fields is an important support in the instrument development process (Miftah, 2022). According to Haryono (in Miftah., 2022) said that the instrument must be standardized: and developed through procedures that meet the validity and reliability requirements of instrument development. When developing an instrument there are procedures that need to be considered, namely (a) planning, including formulating objectives, determining variables, and variable categories, (b) writing items, preparing interview guidelines, (c) editing, (d) trials, both on a small and large scale, (e) analyzing results and items, and (f) making revisions to items needed. In the development of these instruments, there needs to be adjustments that pay attention to aspects of language, culture, and issue relevance (Handayani, 2018).

Deaf children face various obstacles in communication, warranting the use of test instruments that cater to their unique needs. The distinction in language acquisition between hearing and deaf children significantly impacts their understanding of language-related concepts (Haliza, Kuntarto, & Kusmana, 2020). Consequently, it is imperative that the design of these instruments be visually oriented and grounded in tangible examples from everyday life rather than abstract notions. By incorporating visual elements such as material explanations and contextual illustrations drawn from students' personal experiences, comprehension can be enhanced while simultaneously fostering student interest (Syafrudin & Suwarjo, 2019). With this goal in mind, the present study endeavors to create a valid and reliable test instrument for assessing deaf children's knowledge of sexual violence prevention. Through this research initiative, there is an aspiration for education systems worldwide to treat issues surrounding sexual violence with greater gravity and inclusivity.

METHOD

The research discussed in this text focuses on the development of an instrument using a quantitative approach with descriptive methods. The instrument development process, as described by Creswell, was followed, comprising four phases: planning, construction, quantitative evaluation, and validation. The use of a quantitative approach is beneficial as it avoids bias and allows for objective measurements related to social phenomena (Adnan, & Latief, 2020). Additionally, it enables the generalization of findings in a specific population, in this case, deaf children. The research aims to create an instrument that can be used by deaf individuals in general, despite their diverse characteristics. To achieve this, the study incorporates theories related to the general principles of learning for deaf children, such as the use of visual objects for demonstration and concrete examples from everyday life for context. The use of the quantitative approach aligns with the research's needs and objectives.

This study focuses on a population of deaf students who are able to read and communicate using sign language. The researchers used a convenience sampling method, where participants were chosen voluntarily based on their availability and willingness to participate (Cresswell, 2014). A total of 66 deaf students were included in the study, which meets the minimum sample size requirement of 30 for quantitative research (Kerlinger& Lee, 2000). However, it is important to note that this number is not ideal due to the limited data and accessibility to deaf students in Indonesia, which posed challenges in recruitment. Despite these limitations, the researchers aimed to test the instruments for this specific population and gather valuable insights.

The instrument developed is an attitudinal measure, which is an instrument used to measure negative and positive actions towards a topic (Creswell, 2012). The dimensions in the instrument used in measuring knowledge of sexual violence prevention in the deaf are appropriate and inappropriate touching, safety rules for children, rejecting unwanted sexual advances, and reporting child sexual abuse to trusted adults. Data analysis used factor analysis in the form of Explanatory Factor Analysis (EFA) which is used to test the structure and relationship of variables looking for new groupings of the original variables in the development of measuring instruments (Yanti & Hamzah, 2024). Testing stages include the calculation of the *Kaiser-Meyer-Olkin Measure of Sampling Adequacy* (KMO) and *Bartlett's Test,* anti-image correlation, and eigenvalue factors. An item-by-item scrutiny ensues with a focus on anti-image correlation, honing in on Measures of Sampling Adequacy (MSA) which wanes below 0.5. Following MSA computations is an evaluation based on eigenvalue factors that scrutinize aspects of instrument values resonating above 1, signifying their significance in subsequent analyses.

RESULTS AND DISCUSSION

Results

Theoretical Basis for the Development of the Instrument

The theoretical basis for the development of the instrument for measuring the knowledge of preventing sexual violence of deaf children is based on the construct of the *"What If" Situations Test* Revision III (WIST-III-R) instrument by Sandy K. Wurtele which contains 18 questions covering 3 indicators, namely *recognize, resist and report* (Wultule, 2017). WIST-III-R contains questions about how children should act if a sexual

violence situation occurs and children's ability to prevent sexual violence. Furthermore, according to (Mossaides & Bartley, 2017) on Training About Child Sexual Abuse Prevention, there are learning standards and lesson objectives at each level of children's school regarding the prevention of sexual violence, namely identification of child safety rules, identification of child consent, identification of touch permissible and not permissible, identification of the ability to refuse someone's invitation, and identification of how to ask for help. The two theories are then integrated to become the basis for the constructs developed in this study. Based on the results of the analysis, the aspects of the instrument to be developed in the study are (1) Aspects of Appropriate and inappropriate touches; (2) Child Safety Rules; (3) Children's Alertness to Sexual Invitations; (4) Ability to reject sexual invitations, and (5) Reporting cases of sexual violence to adults. These aspects were then analyzed and developed to be inclusive for deaf students according to the needs of deaf children, and cultural and learning conditions in Indonesia.

Tabel 1. The Aspects of Instrument

Aspects	Sub-Aspect	Item Number	Test Form
Appropriate and inappropriate touch	Private parts of the child's body	1, 2, 3, 4, 5, 6	True-false Objective test
Children Safety Rules	In-Home scope	7, 8, 9, 10	
	In School scope	11, 12, 13	
	In Society scope	14, 15, 16, 17	
Rejecting unwanted sexual advance	Secret should and shouldn't	18, 19, 20	
Ability to refuse sexual solicitation	Flirtation	21, 22, 23	
	Gift	24, 25, 26, 27	
	Trickery	28, 29	
	Say "No"	30, 31, 32	
Reporting sexual violence to adult	Walk away	33, 34	
	Children willing to tell stories to adult	35, 36, 37, 38, 39	

Validity and Reliability

The validity results were calculated using the expert agreement index (rater agreement) with the Aiken V index which is an index to show the agreement of the results of the experts' assessment of the items and their components (Retnawati, 2016). The Aiken V index value ranges from 0-1 and then an item is categorised based on the index (Dawati et al, 2017). The validity results were calculated using rater agreement with Aiken V, namely the Formula 1.

$$V = \frac{\sum s}{n\,(c-1)} \quad \text{..... 1)}$$

The Aiken V index value ranges from 0-1 and then an item is categorized based on its index:

Table 2. Decision Tabel Based on Aiken's V Index

Interval	Category
≤ 0.4	Less
$0.4 < V \leq 0.8$	Currently
$0.8 < V$	Very Valid

The validity of the test is by reviewing each item based on the rules for writing items in terms of material, construction, language/culture, and the correctness of the answer key Expert judgement who became reviewers in this study were 3 experts.

After calculating the validity of each item, then calculate the validity of the accumulated instrument items. The calculation results show a value of 0.84 then more than 0.8 so it is concluded that the instrument has high validity. The Validity Test of 39 instrument items shows a value of 0.84 then> 0.8 so it is concluded that the instrument has high validity.

Table 3. Instrument Validity Test Result

Items	Reviewers			S1	S2	S3	∑s	V	Result
	I	II	III						
Items 1-43	129	164	160	86	121	117	324	0.84	Very Valid

The instrument reliability test was carried out using the Kuder-Richardson 20 (KR-20). KR-20 is used to calculate test reliability values in the form of objective tests with dichotomous scores, namely correct = 1 and incorrect = 0. The interpretation of this method that if r count> 0.70 then the instrument is said to be reliable. The reliability test uses the Formula 2.

$$r = \left(\frac{k}{k-1}\right)\left(\frac{S_t^2 - \sum pq}{S_t^2}\right) \quad \text{..... 2)}$$

Based on the results of the reliability calculation, the results show 0.82, then r count> 0.70, the instrument is reliable.

Table 4. Accumulated Results of Instrument Validity and Reliability Tests

	Value	Description
Validity	0.84	High Validity
Reliability	0.8	Reliable

Instrument Eligibility Test

After the instrument went through the expert judgment process, then the instrument went through the readability test stage which was tested to deaf students who were able to read and communicate two-way. The instrument was then distributed through the intermediary of teachers of deaf children who have students according to research needs. The instrument was distributed online using *Google Form* The number of respondents who tested the instrument was 66 respondents. The respondents consisted of 28 male students and 38 female students from junior high school and senior high school. The results of the instrument trial were then analysed using Explanatory Factor Analysis (EFA) by calculating Kaiser-Meyer-Olkin Measure (KMO), Bartlett's test, anti-image correlation, and factor eigenvalue.

The feasibility test of the analysis is carried out to see the fulfillment of assumptions as a condition for factor analysis. The extraction method used in this research is *Principal Component Analysis* (PCA) using the eigenvalues criteria. The first step taken to find the eigenvalue is to conduct an MSA (*Measure of Sampling Adequacy*) test to measure the adequacy of respondents from each variable. Furthermore, the results of the quality test and the instrument extraction process can be seen in the Table 5.

Kaiser-Meyer-Olkin (KMO) Analysis

Data criteria can be processed by factor analysis determined by two things, namely the Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test. The KMO test measures sampling adequacy and KMO is an index value used to test the accuracy of factor analysis. The KMO test also aims to determine whether all the data that has been taken is sufficient to factorize (Rahardjo, 2020). The KMO value measurement criteria stipulate

that a value of 0.9 is very good; 0.8 is good; 0.7 is sufficient; 0.6 is less; 0.5 is poor; and <0.5 is unacceptable (Fransisca & Aliya, 2018). According to J. Supranto, if the KMO value is> 0.5, the use of factor analysis is suitable for the data (Hapsari & Widodo, 2017).

Therefore, based on the table above, the KMO value in aspects 1, 2, 4, and 5 has a value> 0.5, so the adequacy of the amount of data has been met for factor analysis. However, in the 3rd aspect with a KMO value of 0.456 which is <0.5, it shows that the adequacy of data has not been fulfilled so factor analysis cannot be carried out. A small KMO value indicates that the use of factor analysis should be reconsidered because the correlation between the original variables cannot be explained by other variables (Rahardjo, 2020).

Table 5. Instrument Eligibility Test

Aspect	Items (X-n)	Kaiser-Meyer-Olkin Measure (KMO)	Bartlett's Test of Sphericity	Anti image Correlation	Initial Eigenvalues			Extraction	
					total	% of Variance	Cumulative %	Yes	No
Aspect 1	X1	0.782	0.001	0.852a	3.833	63.888	63.888		X
	X2			.792a	1.189	19.824	83.712		X
	X3			811a	0.347	5.781	89.493		X
	X4			.833a	0.28	4.672	94.166		X
	X5			.670a	0.231	3.853	98.019		X
	X6			.760a	0.119	1.981	100		X
Aspect 2	X7	0.782	<.001	.619a	2.48	27.551	27.551		X
	X8			430a				X	
	X9			565a	2.084	23.158	50.709		X
	X10			.695a	1.072	11.917	62.625		X
	X11			.534a	0.945	10.498	73.124		X
	X12			.547a	0.72	8.004	81.128		X
	X13			580a	0.667	7.406	88.533		X
	X14			.613a	0.502	5.579	94.112		X
	X15			.450a				X	
	X16			.781a	0.292	3.245	97.357		X
	X17			.602a	0.238	2.643	100		X
Aspect 3	X18	0.456	<0.1	-	-	-	-	X	
Aspect 4	X30	0.747	<.001	.590a	2.604	52.084	52.084		X
	X31			.803a	1.015	20.301	72.386		X
	X32			.723a	0.765	15.302	87.688		X
	X33			.704a	0.376	7.518	95.206		X
	X34			.840a	0.24	4.794	100		X
Aspect 5	X35	0.841	<.001	.884a	3.542	70.833	70.833		X
	X36			.819a	0.619	12.381	83.215		X
	X37			.888a	0.412	8.232	91.446		X
	X38			.794a	0.268	5.369	96.815		X
	X39			.847a	0.159	3.185	100		X

Analysis of Bartlett's Test Calculation

After calculating the KMO value, then calculate Bartlett's Test to determine whether there is a relationship between variables in a multivariate case (Rahardjo, 2020). If the sig value is <0.05, the correlation between variables is high and the factor analysis process can continue. Based on the calculations on each aspect, the value in aspects 1,2,4, and 5 shows a sig value of 0.001 where 0.001 <0.05 so that aspects 1,2,4, and 5 have a correlation between variables and can be continued in the factor analysis

calculation. In aspect 3, the sig value shows 0.1, where 0.1>0.05 means that the correlation between variables is low so factor analysis cannot be continued.

Measure of Sampling Adequacy (MSA) Analysis

The extraction method used in this research is *Principal Component Analysis* (PCA) using the eigenvalues criteria. The first step taken to find the eigenvalue is to conduct an MSA (*Measure of Sampling Adequacy*) test to measure the adequacy of respondents from each variable. The MSA acceptance stage is that if the MSA value is> 0.5 then the variable can be predicted and analyzed further. Meanwhile, if the MSA value is <0.5 then the variable cannot be predicted and must be eliminated. More clearly, the MSA calculation criteria ranging from 0 to 1 (Santoso, 2018) are as follows:

Table 6. MSA Calculation Criteria

MSA	Description
MSA = 1	the variable can be predicted without error by other variables
MSA > 0.5	variables are still predictable and can be analyzed further.
MSA < 0.5	variables cannot be predicted and cannot be analyzed further, so they are excluded from other variables

Referring to these criteria, in the 1st, 4th, and 5th aspects, all item variables show a value> 0.5, so no items are excluded and the calculation is continued to obtain the eigenvalue. In determining the item variables that fit the MSA criteria, the *value of anti-image matrices* is reviewed which is useful for knowing and determining which variables are suitable for use in factor analysis (Raharjo, 2018). In the 2nd aspect, the *anti-image matrice* value on items X8 and X15 shows a value of 0.43 and 0.45, which is <0.5, so the item variable cannot be predicted and needs to be removed. After the item variables were excluded, the second stage of MSA testing was carried out for aspect 2, the results of the second calculation on aspect 2 showed the *anti-image correlation* value on all items of > 0.5, so all variables in aspect 2 could be predicted and continued for the next stage of the calculation. The final results of the MSA calculation can be concluded that aspects 1, 2, 4, and 5 have predictable item variables and these aspects are continued for eigenvalue calculation.

Eigenvalue Analysis

After conducting the MSA test, aspects that meet the criteria are continued to calculate the eigenvalue. Based on the calculation results, the eigenvalue of aspects 1, 2, 4, and 5 shows that the eigenvalue of the first factor is greater than the eigenvalue of the second factor, and the eigenvalue of the second factor is almost the same as the eigenvalue of the next factor. This shows that the requirements for the unidimensionality of the instrument have been met (Susetyo, Homdijah, & Siswaningsih, 2023). In the PCA extraction results, the eigenvalue of each instrument component can be seen. This value is used to determine the number of factors formed by looking at the eigenvalue which has an eigenvalue > 1.

The results obtained for aspect 1 formed 2 factors; aspect 2 formed 3 factors; aspect 4 formed 2 factors; aspect 5 formed 1 factor. The cumulative variance value of all factors formed shows a value of less than 100% because only some of the factors formed are considered to have differences and the remaining factors are considered the same based on the extraction results so they are not included in the factors formed.

Instrument Extraction Process Results

Based on the extraction analysis, it is concluded that aspects 1, 2, 4, and 5 become the final aspects with a cumulative formed factor of 8. Therefore, the final aspects of this instrument are: (1) Appropriate and inappropriate touch; (2) Initial Safety Rules; (3) Rejecting unwanted sexual advances; and (4) Reporting Child Sexual Abuse Cases to Adults. The factors formed are described in the sub-aspects of each aspect in the following:

Table 7. Instrument Grid for Extraction Process Results

Aspects	Sub-Aspect	Items Number	Test form
Aspect 1: Appropriate and inappropriate touch	Private parts of the child's body	1,2, 3,4	True-false Objective test
	Not a Private parts of the child's body	5,6	
Aspect 2: Children's Safety Rules	In-Home scope	7,8,9	
	In School scope	10,11,12	
	In Society scope	13,14,15	
Aspect 4: rejecting unwanted sexual advances	Say “No!”	16,17,18	
	Walk away	19, 20	
Aspect 5: Reporting sexual violence to adult	Children willing to tell stories to adults	21,22,23,24,25	

Based on the Table 7, it can be concluded that the extraction process from a total of 39 instrument items resulted in 18 eliminated instrument items and 25 normalized instrument items. The instrument items that were extracted (eliminated) were items that had been through the factor analysis test but did not meet the requirements to be retained while the other 25 items were items that could be a group in the dimensions of the research being conducted. The 25 items consist of 4 aspects and based on the eigenvalue there are several factors formed from each aspect. The factor was reduced to a total of eight sub-aspects from each aspect calculated.

Discussion

Construct Analysis of Extracted Instruments

Based on the condition of language barriers in deaf children, it is understandable why aspect 3 cannot be maintained on the instrument. This is because according to Ling Nortcot and Pollack (in Fauzan, R. A., 2020), the language development of deaf children is not much different from normal children in general but after the pre-operational stage children begin to experience delays. The delay in language development is due to the lack of receptive language obtained due to the obstruction of the hearing process which affects the amount of vocabulary owned (Fauzan, 2020). Furthermore, deaf children's language understanding is related to their cognitive and perceptual context.

In this case, deaf children can understand the meaning of a sentence if they have a cognitive and lexical vocabulary that is capable of being perceived (Hawadi, 2021). Therefore, the use of long and complex sentences in the instrument items in aspect 3 affects the ability of respondents, namely deaf students, to be able to understand state-

ments and fill in correctly. The results obtained were that some deaf child respondents had difficulty capturing the meaning of some words that were rarely encountered by deaf children in their daily lives. Some of these words are written a lot in the instrument items in aspect 3 so aspect 3 has less value in the statistical calculation of the instrument. This is an explanation that aspect 3 in the instrument is appropriate to be eliminated in the instrument development process.

Different from the other instrument items in aspects 1,2,4, and 5 whose language writing is simpler and consists of vocabulary that is often encountered in respondents' daily lives such as words about the names of body parts, and words related to play, parents, and school. This condition suggests that media and learning for deaf children should be concrete and familiar in children's daily lives (Leton, et al., 2021).

The process of distributing the instrument through the online network was also very helpful for distributing the instrument to deaf children. This is because both mildly classified deaf students. Deaf people can still communicate with each other through several ways, namely face-to-face communication, non-verbal communication by reading gestures, and also using devices connected to the internet (Mudjiyanto, 2018). The presence of communication and information technology as a device or cellphone connected to the internet can then facilitate communication among deaf friends who rely a lot on the sense of sight with teachers, friends, and family (Mudjiyanto, B. 2018). Communication using devices is also one way for teachers to convey or talk about certain subjects to deaf students (Khiyaroh, 2023). Therefore, distributing the instrument online with the help of teachers of deaf children in this study is a successful strategy, especially in the development of education in the era of information technology.

CONCLUSION

The final results of the factor analysis showed that 18 items were eliminated because they did not meet the requirements, while 25 items could be retained. The eigenvalue resulted in 8 factors formed from 4 aspects that could be retained, involving aspects namely (1) Appropriate and inappropriate touch; (2) Child Safety Rules; (3) Rejecting unwanted sexual advances; and (4) Reporting Child Sexual Abuse to Adults. The overall results of this study indicate that the instrument developed is valid, reliable, and can be used to assess knowledge of sexual violence prevention in deaf children. The factors identified provide a solid foundation for formulating effective prevention strategies in the school environment. In terms of the construct of the instrument developed, several notes need to be considered, namely the use of language in the instrument items must be made simple, concrete, and understandable. Instrument items need to avoid the use of diction that is rarely encountered by deaf students. This is also by the condition of deaf language development which is disrupted due to conditions in their hearing. The developed instrument can be implemented as an initial test to give parents, teachers, and school institutions an idea of their understanding of the prevention of sexual violence in deaf children.

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