

Research Article

Translation and Adaptation of Cyberbullying Victimization and Perpetration Scales for Indonesian Contexts

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Cyberbullying incidents have increased intensively in Indonesia, affecting children's mental health. However, no adapted and validated cyberbullying scales in Indonesian contexts were found. A systematic literature review presented several cyberbullying scales; one of them is cyberbullying victimization and cyberbullying perpetration scales that Patchin and Hinduja developed. Therefore, this study's aims are twofold. First, to translate the two stated cyberbullying scales and adapt them for use in Indonesian contexts. Second, to test the validity and reliability of these two scales. This study's methods include testing the translated scale for legibility and children's understanding of the wording, conducting focus group discussions (FGDs) with three groups of children ($N = 14$), working on the back translation, and reviewing the back-translated version. This process also included pilot testing of the cyberbullying scales in children and adolescents aged 10-18 ($N = 3,752$; 52.4% girls; 47.6% boys; 81.6% middle school students; 18.4% high school students). Results showed that the Indonesian version of cyberbullying victimization and perpetration scales have been translated and adapted excellently and can be used for children aged 10 years and above.

Keywords: adolescents, children, cyberbullying victimization scale, cyberbullying perpetration scale, Indonesia

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1. Introduction

Cyberbullying incidents have increased intensively during the COVID-19 pandemic [1], [2] including in Indonesia [3], and are a significant concern with harmful impacts on children and adolescents. During the COVID-19 pandemic, schools were closed and children were confined at home, drastically changed social interactions, communication, and learning processes. This situation limited their opportunities to meet in person with friends [4], [5]. The use of online platforms is the only way for daily activities,

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including online learning and staying in contact with friends using social medias. As consequences, children are more vulnerable to experience cyberbullying [6]

Studies on cyberbullying have increased these past 22 years with technological advancements. Before 2000, studies on bullying focused on traditional bullying, particularly school bullying (e.g., physical, verbal, and emotional bullying), pioneered by Olweus in 1978. In 2006, Patchin and Hinduja expressed their concern that bullying moved from traditional bullying at school into cyberbullying [7]. Patchin and Hinduja stated that “cyberbullying is when someone repeatedly harasses, mistreats, or makes fun of another person online or while using cell phones or other electronic devices” [8].

Chun et al. [9] systematically reviewed 63 cyberbullying instruments. The systematic review results presented the type of scale, participants' age, gender differences, type of devices, item pooling method, subscales, reliability, and validity. Among 63 cyberbullying instruments, an instrument developed by Patchin and Hinduja [8] was the one with high reliability (.89 - .97), were tested for both genders, and middle and high school students. These cyberbullying scales have been translated and validated in several contexts, for example, among undergraduates in the mid-Atlantic [10], in secondary school students aged 12 to 18 in Thailand [11], and in university students in Iran [12], and the UK [13]. Hinduja and Patchin [14] started developing these cyberbullying scales in 2008. They used an exploratory analysis of factors related to cyberbullying victimization and perpetration.

Many Indonesian children who are victims of bullying seem to adapt to physical bullying to maintain their SWB levels [6]. Previous study showed that 49.3% of all respondents had experienced abuse, falling into frequency categories ranging from “very often” to “frequently.” Subsequently, 16% experienced abuse at school and 13% in the classroom [15].

Although cyberbullying incidents tend to increase in Indonesia and are followed by studies on cyberbullying in children and adolescents, translating and adapting cyberbullying scales are scarce. After searching on Google Scholar with keywords “adaptation cyberbullying scales in Indonesia” and “adaptasi alat ukur cyberbullying,” we cannot find any adapted and validated cyberbullying scales in Indonesia. Therefore, this study aims are twofold. First, to translate two cyberbullying scales developed by Patchin and Hinduja [8] named Cyberbullying Victimization Scale and Cyberbullying Perpetration Scale and adapt these scales for use in Indonesian contexts. Second, to test the validity and reliability of the scales.

2. Methods

2.1. Samples

Two groups of sample participated in this study. The first group of convenient samples consisting fourteen students aged 10 to 18 years old (Mean age = 13.43; 71.43% girls, 28.57% boys) in West Java Province participated for testing the legibility. The second group of convenient samples of middle and high school students in Bandung City (N = 3,752; 52.4% were girls, 47.6% were boys; 81.6% were middle school students; 18.4% were high school students) participated for piloting the Indonesian version of the scales.

2.2. Ethical approval

The ethical approval was gained from the ethical committee of Nusantara Scientific Psychology Consortium (Konsorsium Psikologi Ilmiah Nusantara; K-PIN). Parents of chosen students were sent an electronic letter and informed consent via WhatsApp. The research team also informed children through Google Form link that they were free to join or not join the study, and their data would be treated confidentially.

2.3. The instruments

2.3.1. Cyberbullying Victimization Scale

Nine items measure cyberbullying victimization: (1) "I have been cyberbullied," (2) "Someone posted mean or hurtful comments about me online," (3) "Someone posted a mean or hurtful picture online of me," (4) "Someone posted a mean or hurtful video online of me," (5) "Someone created a mean or hurtful web page about me," (6) "Someone spread rumors about me online," (7) "Someone threatened to hurt me through a cell phone text message," (8) "Someone threatened to hurt me online," and (9) "Someone pretended to be me online and acted in a way that was mean or hurtful to me." Five response options are never = 0, once = 1, a few times = 2, several times = 3, and many times = 4. A summary scale could range from 0 to 36, with higher scores representing more frequent bullying victimization experiences [8].

2.3.2. Cyberbullying Perpetration Scale

Nine items measure cyberbullying perpetration: (1) "I cyberbullied other," (2) "I posted mean or hurtful comments about someone online," (3) "I posted a mean or hurtful picture online of someone," (4) "I posted a mean or hurtful video online of someone," (5) "I created a mean or hurtful web page about someone," (6) "I spread rumors about someone online," (7) "I threatened to hurt someone through a cell phone text message," (8) "I threatened to hurt someone online," and (9) "I pretended to be someone else online and acted in a way that was mean or hurtful to them." Five response options are never = 0, once = 1, a few times = 2, several times = 3, and many times = 4. A summary scale could range from 0 to 36, with higher scores representing more frequent experiences being bully perpetration [8].

2.4. Procedure of translating and adapting the scales

Translating and adapting the Cyberbullying Victimization Scale and Cyberbullying Perpetration Scale included several steps following guidance from Van de Vijver [16]. These steps included a conceptual translation process, testing the legibility of the translated scales, conducting focus group discussions regarding participants' understanding, and a back-translation. This guidance has been used in the process of translating, adapting, and validating scales cross-culturally in Indonesian contexts, for example, the Children's Worlds Subjective Well-Being Scale; CW-SWBS [17], the Children's Worlds Psychological Well-Being Scale; CW-PSWBS [18], and the Child and Youth Resilience Measure-Revised [19].

First, the research team did literature studies for searching cyberbullying scales that presented good validity and reliability. The research team chose Patchin and Hinduja's cyberbullying scales [8]. These scales referred to the previously developed cyberbullying scales [20].

Second, to avoid poor item translation and inadequate conceptual formulation, the research team learned about the blueprint of the scales, carefully reading and discussing the meaning of each item in English to understand what the original authors [8] intended. After fully understanding the importance of each item, the research team translated the items into the national Indonesian language. Process of translation taking into account the Indonesian contexts and characteristics of Indonesian children, including their level of understanding, particularly Indonesian children and adolescents using the internet, and avoiding translating the items only literally. The phrasing of the items using active

voice. Sentences are short and simple that can be easily understood by Indonesian students [19]. The instructions and response options for the scales were also carefully translated to keep the same meaning.

Third, the research team conducted several focus group discussions (FGDs) with fourteen students in separate groups. The first FGD was conducted on January 22, 2022, with five middle school students. The second and third FGDs were conducted separately on January 23, 2022. The morning session was with four elementary students, and the afternoon session was with five high school students. In every FGD, the research team discussed the translated scales to test the legibility of the items. The research team checked participants' understanding of the instructions and the wording of the items. The research team also requested participants' suggestions on changing the wording when needed.

Fourth, the research team analyzed participants' suggestions for the wording of each item and carefully changed the wording based on the recommendations regarding Indonesian contexts.

Fifth, the research team piloted this revised Indonesian version of the scales to convenient samples of middle and high school students in Bandung City ($N = 3,752$). Before piloting the Indonesian version of the scales, the research team sent informed consent to parents via Google Form link to gain their children's permission to participate in piloting the scales. After gaining active parent consent, parents passed the Google Form link to their children. Children were also informed that they were free to answer or not answer the items in these two scales, and their data will be treated confidentially. When children finished answering the items, they submitted their answers, and it was automatically sent to the research team.

Sixth, testing the validity and reliability of the items. The validity test uses Pearson's product-moment, and the reliability test uses Cronbach's alpha. Results are presented in the next section.

Seventh, the scales were then back-translated from Indonesian to English. The professional English editors who were not familiar with the scales back-translated the piloted Indonesian version of the scales. This back-translating is a technique where professional English editors who were unfamiliar with the scales translate the scales back into the original language [16]–[19]. This back-translated technique was suggested by van de Vijver and is a standard method for adapting instruments in the cross-cultural psychology approach [16].

Eighth, after receiving the back-translated version, the research team reviewed this version to check similarities and differences with the original English ones and to check for any conceptual differences.

3. Results

In the FGDs, participants actively discussed some ideas to change the wording of the items. Participants preferred to use several English wordings rather than using Indonesian wordings. All participants suggested using the original English word cyberbullying rather than the Indonesian word "perundungan" for cyberbullying. Participants suggested using the word hate comments rather than mean or hurtful comments in item number 2 on both scales. In item number 5 in both scales, participants pointed to the use word hoax rather than rumors. Participants also recommended using fake account wording rather than mean or hurtful web page.

The response options were translated as follow: never = tidak pernah (score = 0); once = sekali (score = 1); a few times = kadang-kadang (score = 2); several times = sering (score = 3); and many times = hampir selalu (score = 4), and all participants agreed with the wordings.

The results of the validity test using Pearson's product-moment indicated that all items of the two cyberbullying scales shared a significant and robust positive correlation ($p < .001$) with the overall score (Table 1)

The Cronbach's alpha for Cyberbullying Victimization Scale was .86 and for Cyberbullying Perpetration Scale was .67.

The comparison between the original English version of the scale, the Indonesian version, and the English back-translation is presented in these Table 2 and Table 3.

4. Discussion

Studies on cyberbullying in Indonesia have been increasing over the years. However, there are still limited instruments to measure cyberbullying adapted in Indonesian contexts. The research team chose Cyberbullying Victimization and Cyberbullying Perpetration Scales to be translated and adapted in the Indonesian context. The process of translation and adaptation of these two scales carefully followed guidelines from Van de Vijver [16] that have been used for adapting scales cross-culturally [17]–[19].

TABLE 1: Validity score of items of Cyberbullying Victimization and Perpetration Scales.

No. item		Cyberbullying Victimization Scale	Cyberbullying Perpetration Scale
1	Pearson Correlation	.735**	.710**
	Sig. (2-tailed)	.000	.000
2	Pearson Correlation	.766**	.652**
	Sig. (2-tailed)	.000	.000
3	Pearson Correlation	.706**	.561**
	Sig. (2-tailed)	.000	.000
4	Pearson Correlation	.658**	.540**
	Sig. (2-tailed)	.000	.000
5	Pearson Correlation	.739**	.420**
	Sig. (2-tailed)	.000	.000
6	Pearson Correlation	.720**	.534**
	Sig. (2-tailed)	.000	.000
7	Pearson Correlation	.710**	.562**
	Sig. (2-tailed)	.000	.000
8	Pearson Correlation	.679**	.428**
	Sig. (2-tailed)	.000	.000
9	Pearson Correlation	.614**	.374**
	Sig. (2-tailed)	.000	.000

***p* < .001

TABLE 2: English version and Indonesian version of Cyberbullying Victimization Scale.

English original version	Indonesian translation	English back translation
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TABLE 3

Do you have experienced any of the following distinct behaviors within the previous 30 days?	Apakah kamu pernah mengalami kejadian-kejadian ini dalam 30 hari terakhir?	Have you experienced any of these events in the last 30 days?
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Testing the legibility of the wording is essential to check participants' understanding of the items. FGD has been used to discuss items in adapting cross-cultural instruments [17]–[19]. It also allows participants to suggest word changes through active discussion in FGDs. By hearing participants' suggestions in FGD, the research team was able to write understandable questions by participants.

The research team reviewed the validity by comparing similarities between the original version and the back-translated version. Results showed that the items in the back-translated version of the two scales of cyberbullying were similar to the original version and have not had essential differences compared to original version. The

TABLE 4

I have been cyberbullied	Saya pernah menjadi korban cyberbullying	I have been a victim of cyberbullying
Someone posted mean or hurtful comments about me online	Seseorang memposting hate comments atau komentar menyakitkan mengenai saya secara online	Someone posted hate comments or hurtful comments about me online
Someone posted a mean or hurtful picture online of me	Seseorang memposting gambar yang jahat atau menyakitkan mengenai saya secara online	Someone posted a mean or hurtful picture of me online
Someone posted a mean or hurtful video online of me	Seseorang memposting video yang jahat atau menyakitkan mengenai saya secara online	Someone posted a mean or hurtful video of me online
Someone spread rumors about me online	Seseorang menyebarkan hoax atau berita tidak benar mengenai saya secara online	Someone spread hoax or untrue stories about me online
Someone threatened to hurt me online	Seseorang mengancam akan menyakiti saya secara online	Someone threatened to hurt me online
Someone threatened to hurt me through a cell phone text message	Seseorang mengancam akan menyakiti saya melalui chat di handphone	Someone threatened to hurt me through chat on a cell phone
Someone created a mean or hurtful web page about me	Seseorang membuat akun palsu/fake account yang jahat atau menyakitkan mengenai saya	Someone created a malicious or hurtful fake account about me
Someone pretended to be me online and acted in a way that was mean or hurtful	Seseorang berpura-pura menjadi saya secara online dan bertindak dengan cara yang jahat atau menyakitkan bagi saya	Someone pretended to be me online and acted in a way that was mean or hurtful to me

TABLE 5: English version and Indonesian version of Cyberbullying Perpetration Scale.

English original version	Indonesian translation	English back translation
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TABLE 6

Do you have experienced any of the following distinct behaviors within the previous 30 days?	Apakah kamu pernah mengalami kejadian-kejadian ini dalam 30 hari terakhir?	Have you experienced any of these events in the last 30 days?
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review of the back-translated scales showed that the two scales had been translated excellently.

There are two strengths of this study. First, this study used several steps in translating and adapting the scales cross-culturally, as suggested by van de Vijver [16]. Second, the

TABLE 7

I cyberbullied other	Saya pernah melakukan cyberbullying terhadap orang lain	I have cyberbullied other
I posted mean or hurtful comments about someone online	Saya memposting hate comments atau komentar menyakitkan mengenai seseorang secara online	I posted hate comments or hurtful comments about someone online
I posted a mean or hurtful picture online of someone	Saya memposting gambar yang jahat atau menyakitkan mengenai seseorang secara online	I posted a mean or hurtful picture of someone online
I posted a mean or hurtful video online of someone	Saya memposting video yang jahat atau menyakitkan mengenai seseorang secara online	I posted a mean or hurtful video about someone online
I spread rumors about someone online	Saya menyebarkan hoax atau berita tidak benar mengenai seseorang secara online	I spread hoax or untrue stories about someone online
I threatened to hurt someone online	Saya mengancam akan menyakiti seseorang secara online	I threatened to hurt someone online
I threatened to hurt someone through a cell phone text message	Saya mengancam akan menyakiti seseorang melalui chat di handphone	I threatened to hurt someone through chat on a cell phone
I created a mean or hurtful web page about someone	Saya membuat akun palsu/fake account yang jahat atau menyakitkan mengenai seseorang	I created a malicious or hurtful fake account about someone
I pretended to be someone online and acted in a way that was mean or hurtful to them	Saya berpura-pura menjadi orang lain secara online dan bertindak dengan cara yang jahat atau menyakitkan terhadap orang yang saya bully tersebut	I pretended to be someone else online and acted in a way that was mean or hurtful towards the person I bully

research team piloted the scales using rather big samples of children and adolescents in Kota Bandung.

Despite its strengths, this study has one limitation. The scales were only piloted in children and adolescents aged 10-18. Therefore, it needs further studies to test the scales in adolescents older than 18 and children under 10.

5. Conclusion

The Cyberbullying Victimization and Cyberbullying Perpetration Scales have been successfully adapted for use in Indonesian contexts. Since two scales use the national

language of Indonesia, these two scales can be used throughout the country. These scales can be used for children and adolescents aged 10 to 18.

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