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The Development of Cyberbullying in Social Media Scale

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Abstract

Despite the fact that cyberbullying is common on social media, only a few instruments have been developed to assess cyberbullying tendencies in the social media context. The purpose of this study is to develop a Cyberbullying in Social Media Scale (CSMS) for cyberbullying perpetration. Participants are active social media users in Indonesia (n = 958) between the ages of 18 and 40. The Cronbach alpha reliability testing showed that CSMS had a high internal consistency (α =.852). Confirmatory factor analysis revealed that CSMS fit the one-factor model (χ^2 (54) = 154.891, p < 0.001, RMSEA = 0.044 [90% CI 0.036, 0.052], CFI = 0.906, TLI = 0.885, SRMR = 0.049). Convergent-discriminant validity testing method using the Big Five Inventory also showed that CSMS is valid in measuring cyberbullying perpetration in the social media context. The Cyberbullying in Social Media Scale (CSMS) is a developed unidimensional measurement tool that evaluates cyberbullying tendencies on social media. The CSMS has demonstrated reliability and validity, making it a valuable new instrument for screening and assessing levels of cyberbullying tendencies among young adults in Indonesia. As such, the scale has practical applications for guiding interventions and investigating cyberbullying behavior.

Keywords: confirmatory factor analysis, cyberbullying, psychometrics, social media

Abstrak

Meskipun perundungan merupakan fenomena yang umum dalam media sosial, instrumen yang mengukur kecenderungan perundungan secara khusus pada konteks media sosial masih terbatas. Tujuan penelitian adalah untuk mengembangkan Cyberbullying in Social Media Scale *(CSMS) pada pelaku. Partisipan penelitian merupakan pengguna aktif media sosial di Indonesia (n = 958) yang berusia antara 18 hingga 40 tahun. Uji reliabilitas menggunakan Cronbach alpha menunjukkan bahwa CSMS memiliki konsistensi internal yang tinggi (α =.852).* Confirmatory Factor Analysis *(CFA) menunjukkan bahwa item-item CSMS fit dalam model satu faktor (χ^2 (54) = 154.891, p < 0.001, RMSEA = 0.044 [90% CI 0.036, 0.052], CFI = 0.906, TLI = 0.885, SRMR = 0.049). Validitas konvergen-diskriminan yang dilakukan menggunakan* Big Five Inventory *juga menunjukkan bahwa CSMS valid dalam mengukur tingkah laku perundungan dalam konteks media sosial.* Cyberbullying in Social Media Scale *(CSMS) merupakan alat ukur unidimensional untuk mengevaluasi kecenderungan perundungan di media sosial. CSMS valid dan reliabel dan bisa digunakan untuk* screening *dan mengukur tingkat kecenderungan perundungan di dewasa muda di Indonesia. Oleh karena itu, alat ukur ini memiliki dampak praktis untuk mengembangkan intervensi dan menindaklanjuti tingkah laku perundungan.*

Kata kunci: confirmatory factor analysis, cyberbullying*, psikometri, media sosial*

Introduction

Social media is an accessible online software application that makes people gather, communicate, share, and have fun with each other (von Muhlen & Ohno-Machado, 2012). There are around 160 million active users of social media in Indonesia that is dominated by individuals 25-34 (20.6 percent men dan 14.8 percent women) and followed by those between the ages of 18-24 (16.1 percent men and 14.2 percent women) (Kemp, 2020). Those age groups are classified as young adulthood (Santrock, 2019). Moreover, social media platforms that are frequently used in Indonesia are YouTube, WhatsApp, Facebook, Instagram, and Twitter (Kemp, 2020).

Social media makes everyone interact with people around the world effortlessly. Nevertheless, when an individual uses the platform recklessly, they might bring harmful effects to other people. According to Asosiasi Penyelenggara Jasa Internet Indonesia (APJII, 2018), around 49 percent of internet users have been bullied through social media. This number indicates high bullying cases on social media in Indonesia. This form of bullying that occurs in social media is often called cyberbullying. Cyberbullying is common on social media, but only a few instruments have been developed to assess cyberbullying tendencies in the social media context. Thus, the current study is trying to develop a cyberbullying in social media scale (CSMS) for cyberbullying perpetration.

Cyberbullying is defined as intentionally aggressive behaviour carried out by a group or an individual, through electronic forms of contact, repeatedly against a victim who cannot protect themselves (Smith, 2008). Although cyberbullying is similar to traditional bullying (Hinduja & Patchin, 2018), these two constructs had some differences. In contrast to traditional bullying, cyberbullying engages in aggressive behavior through the use of specific media, one of which is social media. Social media tends to make individuals feel safe to express their hostile behaviour anonymously. As a result, individuals are escaped from the social pressure and moral burden of cyberbullying behaviour (Hinduja & Patchin, 2008). Furthermore, the complication of tracing anonymity makes one think that there are no consequences for their behaviour (Calvete et al., 2010).

There are some differences between cyberbullying and traditional bullying. First, the medium of bullying. Cyberbullying is bullying that is done online or using technology while traditional bullying is done directly toward the victim (Hinduja & Patchin, 2018). Second, the anonymity, implies that there are no consequences for cyberbullying behavior because perpetrators often cannot be identified (Calvete et al., 2010) The anonymity factor in cyberbullying makes cyberbullying perpetrators feel liberated from social pressure and moral obligations (Hinduja & Patchin, 2008). Thus, the difference between cyberbullying and traditional bullying made the instruments for cyberbullying should be developed.

Previous instruments had been developed to measure cyberbullying, such as the Cyberbullying Questionnaire (CBQ; Gámez-Guadix et al., 2014), the Cyberbullying Triangulation Questionnaire (CTQ; Gonzalez-Cabrera et al., 2019), and the Cyberbullying Scale (CBS; Stewart et al., 2014). However, they have several limitations. First, the target population of specific measuring instruments were still developed in specific countries. Such expositions are unsatisfactory because the ability to generalize in the context of Indonesia is not measured. Secondly, most studies do not measure specifically in the social media context. On the other hand, cyberbullying brings adverse effects, such as emotional distress, substance abuse, depression, and suicide (Hemphill et al., 2012). Not only the victim but also the perpetrator experience the adverse effect of cyberbullying. With such high risk, the research of this topic has been growing both national and international scope (Lee, Abell, & Holmes, 2015). Extensive attention in this research area urges the high quality of cyberbullying in social media context measurement that is reliable and valid, especially for the Indonesian population.

There are some different views regarding the dimension of cyberbullying construct. First, Patchin and Hinduja (2015) and González-Cabrera et al. (2019) argue that cyberbullying is a multidimensional

construct. On the other hand, Stewart et al. (2014) state that cyberbullying is a unidimensional construct. Both unidimensional and multidimensional measurements of cyberbullying construct have been developed. Multidimensional cyberbullying measurement viewed the construct from the offender, victim, and bystander perspective (e.g. Patchin & Hinduja, 2015; Gonzalez-Cabrera et al., 2019). On the other hand, the unidimensional measurement focused on one perspective (e.g. Stewart et al., 2014). However, a measurement focused on the perpetration perspective, often called cyber-offending, is not well explored.

Due to the high number of cases of cyber-offending, it is crucial to develop the measurement of perpetration perspective. Previous cyber-offending instruments (e.g. Gámez-Guadix et al., 2014; González-Cabrera et al., 2019; Stewart et al., 2014) have several limitations. First, previous cyber-offending measurement is not sensitive to capture cyberbullying behaviour in social media. This context is necessary because around 49 percent of Indonesian internet users have been bullied on social media. Moreover, there is a growing number of social media users in Indonesia. In order to illustrate this phenomenon, there is approximately 8.1 percent growth of Indonesian internet users from April 2019 to January 2020 (Kemp, 2020). This number might be higher due to the lockdown regulations during the global pandemic, making people connect with other people through social media.

Second, the cyberbullying construct has been developed in the western cultural context. Considering that there might be differences in sociocultural components of the construct, the existing measurement of cyberbullying needs to be adjusted. The ability to generalize psychometric properties in the Indonesian context is still unknown. This study aims to contribute to this growing area of research by developing a valid and reliable measurement of cyberbullying in social media scale that focuses on the perpetrator, called Cyberbullying in Social Media Scale (CSMS). We develop the CSMS by using steps in constructing psychological test, from test conceptualization, test construction, test tryout, analysis, and revision (Cohen & Swerdlik, 2013). In order to get satisfying psychometric properties of this instrument, this study used several reliability and validity testing. The reliability is tested with internal consistency. Validity is tested with Confirmatory Factor Analysis (CFA) and Convergent-Discriminant method. Previous study showed the correlation between cyberbullying perpetrators and their personality tendency. Cyberbullying perpetrators tended to have higher neuroticism, and there was no correlation between cyberbullying perpetrators and the openness aspect of personality (Garaigordobil, 2015; Zhou, Zheng, & Gao, 2018; van Geel et al., 2016). Therefore, this study used neuroticism as a convergent construct and openness as a discriminant construct. This research is conducted on Indonesian young adults who use social media actively. This CSMS instrument is beneficial to screen people's proclivity to involve in cyberbullying on social media. Furthermore, this instrument can be used by practitioners as a consideration in determining interventions, and for researchers to conduct a study related to cyberbullying.

Methods

Inclusion criteria of this study were 18-40 years old individuals who agreed to the informed consent, used the internet and social media at least once every day, and filled out the questionnaire completely. Participants were recruited through social media, such as Twitter, Instagram, Whatsapp, and Line. Data was collected from November 19, 2020 to December 2, 2020. Initially, the total number of participants of this study were 1011, but only 958 were used because some of their responses did not meet the inclusion criteria. The majority of the participants were women (74.6 percent), aged from 18 to 40 years old (M = 23, SD = 3.59). In addition, the latest education level of the participants was mostly bachelor's or diploma degree (51.3 percent). Overall, the majority of participants started to use social media in 2010 (19.6 percent), and the average of social media usage in a day was 5-6 hours (SD = 3.39). Participants were recruited online through a google form. Each participant had the opportunity to win a reward in the form of electronic money.

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This study aims to develop an Indonesian version of a Cyberbullying in Social Media Scale (CSMS). CSMS was constructed in accordance with Smith et al.'s (2008) cyberbullying theory, which defines cyberbullying as " An aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and overtime against a victim who cannot easily defend him or herself." The definition has been modified to accommodate the context of social media, such that cyberbullying is now defined as "'An aggressive, intentional act carried out by a group or individual, using social media, repeatedly and overtime against a victim who cannot easily defend him or herself." Furthermore, this instrument focused on the perpetrator perspective. The definition and indicators for developing the CSMS are as follows:

Table 1. Cyberbullying in Social Media Scale Indicators.

Variable	Behavior Indicator (s)	English Version	Indonesian (Original) Version	Item Constructed	Item Target
An aggressive, intentional act carried out by a group or individual, using social media, repeatedly and overtime against a victim who cannot easily defend him or herself'	An aggressive, intentional act carried out by a group or individual, using *text/message*, repeatedly and overtime against a victim who cannot easily defend him or herself	Providing negative comments on someone's post	*Memberikan komentar negatif pada unggahan seseorang*	12	6
	An aggressive, intentional act carried out by a group or individual, using *picture/video*, repeatedly and overtime against a victim who cannot easily defend him or herself'	Posting images or videos online that insult or belittle a person.	*Mengunggah gambar/video yang bersifat menghina seseorang*	9	6

A total of 21 item pools were constructed. Each indicator was represented by 6 chosen items. Thus, the total of 12 final items was chosen by quantitative and qualitative item analysis to produce items with good psychometric properties. The items were answered on a 4-point Likert scale: 0 (never), 1 (1-2 times), 2 (3-4 times), and 3 (five times or more). The total score of the instrument is 0-36 that is obtained from the summed score of each item. Higher scores indicate the higher tendency of cyberbullying in social media. Participants were asked to answer the items based on their experiences in the past month.

The instrument development procedure was carried out with the following phase. First, peer-reviewed and readability testing were conducted before the field in-take data to ensure each item is clear, unambiguous, and comprehensible. The readability test participants are young adults aged 21-27 years old whose minimum education was a bachelor's degree. The participants of the readability test were excluded from the final sample analysis. In order to improve the quality of the instrument, the items were revised based on the feedback. Second, the revised version of the instrument was administered. Data collection was administered online using Google Form. This survey consisted of introduction of the study, informed

consent, demographic data, CSMS scale, and Big Five Inventory (BFI-25) to measure its validity. Big Five Inventory-25 (BFI-25) has been adapted into Indonesian (Akhtar & Azwar, 2018). Only the Neuroticism subscale and Openness subscale were included in this study. Finally, the collected data were analysed to examine the psychometric properties

Cyberbullying in Social Media Scale's internal consistency was analysed using Cronbach's alpha to assess item homogeneity. The cut-off criteria to test the reliability was 0.7 to 0.8 (Kaplan & Saccuzzo, 2005). Confirmatory Factor Analysis (CFA) was conducted to confirm the unidimensional model of CSMS structure. Model fit was assessed using the following fit indices and cut-off criteria: p-value > .05, RMSEA < .07, CFI/TLI > .90, and SRMR < .08 (Hair et al., 2019). Next, correlation coefficients between CSMS and BFI-25 were calculated to analyse convergent and discriminant validity. The characteristic of cyberbullying should converge with the Neuroticism subscale and diverge with the Openness subscale. The item analysis was conducted using standardized factor loadings and corrected-item total correlation (CrIT) for the item discrimination analysis. Residual covariance item was taken into consideration.

Results and Discussion

Cronbach's alpha was conducted to assess the CSMS's internal consistency. The reliability of the CSMS (M = 4.09, SD = 4.99) with 21 items was high (α = .852). This showed a satisfactory coefficient of the instrument's internal consistency. Therefore, test items' consistently measured one construct. CFA was conducted to test a one factor model. The CFA analysis showed no good fit indexes in the model and the data collected (χ^2 (189) = 1348.681, p < .001, RMSEA = .080 [90% CI .076, .084], CFI = .472, TLI = .413, SRMR = .085). Construct validity is tested using standardized factor loading with a value of .3 as the lower limit (Brown, 2015, p. 115). In measuring the construct validity of cyberbullying, there are 15 valid items (71.43 percent) and 6 invalid items (28.58 percent) because the factor loading values do not meet the set limit (λ > .3) and the residual covariance exceeds the tolerance, encouraging the need to further evaluate. Further item analysis using the total item correlation index was conducted to ensure that the CSMS measuring instrument contained items that able to distinguish individuals with high and low cyberbullying behavior, as well as items that were good at representing the cyberbullying construct. According to Nunnally and Bernstein (1994), all of the items on the Cyberbullying in Social Media Scale have high item discrimination power (CrIT $\geq$ .3). This demonstrates that all CSMS measuring instrument items can differentiate between individuals with high and low cyberbullying behaviour.

Integrative item analysis was performed on the 21-item CSMS to produce a final 12-item CSMS with good psychometric properties that adhered to the proposed criteria through quantitative and qualitative item analysis. The analysis was conducted using quantitative criteria, specifically CrIT and standardized factor loading. Items that did not meet the predetermined psychometric minimum criteria were removed. Meanwhile, analysis was also carried out qualitatively by taking into account some factors, such as grammar, language complexity, content coherence and content variability, and residual covariance. This analysis aims to select items that represent the construct better thus improve the content validity.

Table 2. Integrative Item Analysis.

Behavior Indicator (s)	Selected Item	Eliminated Item
An aggressive, intentional act carried out by a group or individual, using *text/message*, repeatedly and overtime against a victim who cannot easily defend him or herself	3, 7, 13, 14, 15, 16	1, 5, 6, 12, 19, 21
An aggressive, intentional act carried out by a group or individual, using *picture/video*, repeatedly and overtime against a victim who cannot easily defend him or herself'	2, 4, 9, 11, 18, 20	8, 10, 17

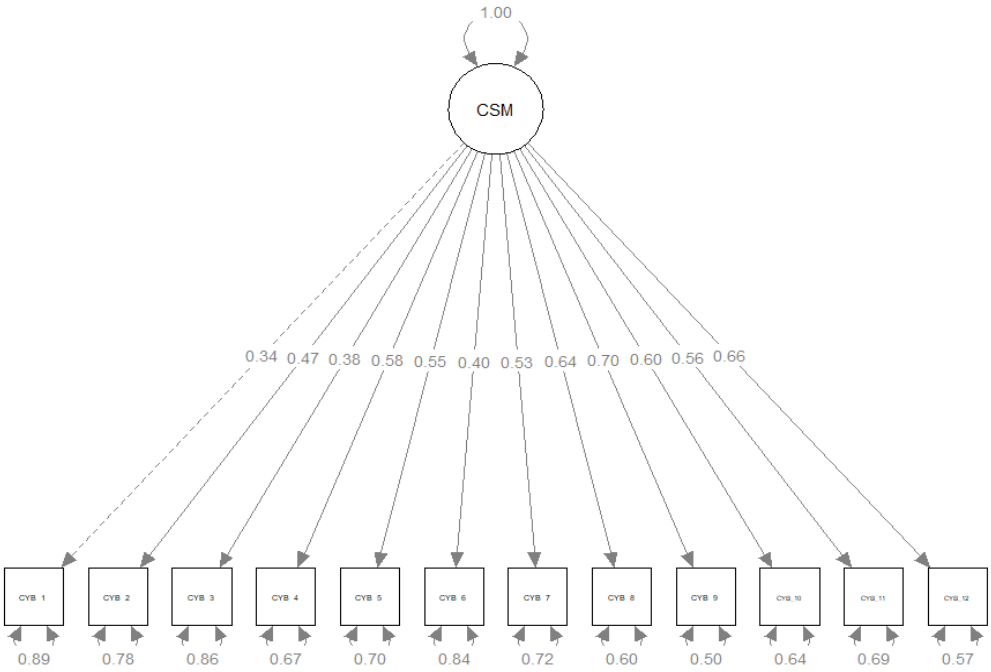
Sources: Personal data (2021).

The final 12-item CSMS was re-analysed using the same method. The reliability of Cyberbullying in Social Media Scale (M = 2.66, SD = 3.50) was tested using Cronbach's Alpha (α = .814). Although it is slightly decreased, the reliability still showed satisfactory result. One factor model was tested using Confirmatory Factor Analysis (CFA). The one dimension factorial structure of the Cyberbullying in Social Media Scale had an acceptable fit, with the indices meeting three out of four cut-off criteria. (χ^2 (54) = 154.891, p < .001, RMSEA = .044 [90% CI .036, .052], CFI = .906, TLI = .885, SRMR = .049). Hence, Cyberbullying in Social Media Scale is valid to measure cyberbullying construct based on Smith et al.'s (2008) theory. Standardized Factor Loading Cyberbullying in Social Media Scale is presented in Table 3.

Table 3. Standardized Factor Loading and Corrected Item-Total Correlation of Cyberbullying in Social Media Scale.

Construct	Item	*p Value*	*Standardized Factor Loading*	C*rIT*
Cyberbullying	CYB 1	< 0.001	0.339	0.320
	CYB 2	< 0.001	0.469	0.439
	CYB 3	< 0.001	0.378	0.341
	CYB 4	< 0.001	0.578	0.511
	CYB 5	< 0.001	0.551	0.489
	CYB 6	< 0.001	0.403	0.368
	CYB 7	< 0.001	0.534	0.470
	CYB 8	< 0.001	0.636	0.569
	CYB 9	< 0.001	0.704	0.631
	CYB 10	< 0.001	0.601	0.548
	CYB 11	< 0.001	0.561	0.516
	CYB 12	< 0.001	0.656	0.589

Sources: Personal data (2021)



Sources: Personal data (2021)

Figure 1. Unidimensional Model that Fit with the Data.

Table 3 showed that each item of CSMS has factor loading >.30. Brown (2015) argued that the acceptable factor loading cut-off is .30. Hence, each item of CSMS is valid to represent cyberbullying construct and has good factor loading. Furthermore, convergent and discriminant validity was assessed by correlating CSMS with Neuroticism and Openness subscale of IPIP-BFI 25. The result indicated that CSMS is significantly correlated with the Neuroticism subscale ($r = .162$, $p < .001$), while not correlated with the Openness subscale ($r = .018$, $p > .05$). The results indicate that each CSMS is valid to measure hardiness based on its significant correlation with personality scale, which is BFI-25.

The CSMS was found to be a valid and reliable scale through validity and reliability testing. Cyberbullying in Social Media Scale has good reliability due to the high variability of scores between participants. This finding indicates that the measurement has satisfactory internal consistency. The heterogeneity of participants and the amount of sample size are two factors that could explain this result. The greater the heterogeneity of the participants, the greater the instrument's reliability (Azwar, 2015). Furthermore, the larger the research sample size, the more reliable the measuring instrument due increasement of precision of item parameter estimates (Fitzpatrick & Yen, 2001).

CFA was conducted to assess the construct validity of CSMS. The results showed a fit model, indicating that the items used represent the construct of cyberbullying. The items in the CSMS are organized based on cyberbullying behavior, which is derived from indicators in the theory review. As a result, there are no items that do not constitute cyberbullying behavior. The outcome could be explained by the quality of the CSMS that contains simple, unambiguous, and easy-to-understand grammar, making it easier for participants to respond to the items.

This study supported previous findings that cyberbullying is associated with neuroticism but not with openness (Garaigordobil, 2015). Furthermore, the CSMS items are arranged relatively close to the neuroticism construct while remaining sufficiently distant from the openness construct to achieve convergent and discriminant validity (Raykov & Marcoulides, 2011). As a result, the CSMS and its items are valid for measuring cyberbullying and have good convergent and discriminant validity.

To determine the characteristics of each CSMS item, item analysis was performed both quantitatively and qualitatively. Item analysis reveals that several items tend to measure the similar cyberbullying behavior (i.e "Spreading written materials concerning other individuals with the intent of engaging in gossip" and "Sharing links that contain ridicule, gossip, or rumors about someone"). Following that, item elimination is performed based on item analysis to obtain items that match the target item. The elimination process is carried out by ensuring that each indicator, namely text and image/video indicators, has a portion of items that match the measuring tool grid. Based on the findings of the analysis, items of the desired quality were obtained. The remaining items are sufficient to measure cyberbullying on a one-dimensional scale.

There are some limitations of CSMS and several things can be done to improve the quality of CSMS. First, the data collection showed a positive skewed result. There might be a tendency for social-desirability bias given the culture in Indonesia. Another thing that needs to be considered is the gender proportion of the participants. Women outnumbered men, which appeared to influence the distribution of answers. It is better to consider the number of male participants to ensure an equal proportion with female participants. The disparity in the proportion of female and male participants may be one factor that makes the scores were not normally distributed. Second, further research can assess the psychometric properties using other methods to get a comprehensive picture of CSMS qualities. For example, future research can conduct a test-retest reliability test to see the consistency over time or test the validity using the correlation with other cyberbullying measures.

Notwithstanding these limitations, the findings reported here shed new light on the development of cyberbullying in social media scale in Indonesia. The target items of the CSMS measuring instrument have the desired quality, both in terms of reliability and validity. The CSMS has good psychometric properties, both validity and reliability. This result shows that the instrument consistently measures the same construct, correlates with constructs related to cyberbullying and is not correlated with other unrelated constructs. In addition, the items can represent the latent construct of cyberbullying, according to Smith et al. (2008). Moreover, it was found that every item in CSMS has good discriminating power that adequately represents the same content domain.

Conclusion

CSMS has been proved as an unidimensional measurement of cyberbullying that focuses on the perpetrator perspective in social media. Furthermore, the latent construct of cyberbullying is found to be represented by this instrument. Thus, it was found that CSMS is valid and reliable to measure cyberbullying tendencies. Moreover, each CSMS item has the ability to differentiate between individuals of high level and low level of cyberbullying behavior. Therefore, CSMS is useful for assessing and screening the level of cyberbullying tendencies, especially among young adults. This instrument can be used as a consideration in determining interventions and for researchers to conduct a cyberbullying study.

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Conflict of Interest

Declaration by the authors that they do not have any conflicts of interest to declare.

Authors Contribution

Shabrina Audinia, Riangga Novrianto, Bianca Alia Sudewaji and Izzatullail A. Lotusiana designed the study, gathered data, conducted data analysis, interpreted the data, and drafted the manuscript. Dewi Maulina contributed to the study design, provided critical feedback on the manuscript, interpreted the data, reviewed and edited the manuscript.

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Appendix A

The Cyberbullying in Social Media Scale (CSMS) (Indonesian/Original Version)

Pada kuesioner ini Anda akan dihadapkan pada 12 pernyataan mengenai aktivitas Anda dalam menggunakan media sosial. Pada setiap pernyataan berikan penilaian seberapa sering Anda melakukan aktivitas tersebut di media sosial. Bacalah setiap pernyataan dengan teliti. Tidak ada jawaban yang salah, sehingga berikanlah jawaban yang paling menggambarkan diri Anda.

Untuk setiap pernyataan terdapat empat pilihan jawaban, yaitu:

0 = *Tidak pernah*

1 = 1–2 *kali*

2 = 3–4 *kali*

3 = 5 *kali atau lebih*

Jawaban	***Pernyataan***
_____	1. *Menyebarkan tulisan mengenai orang lain untuk bergosip*
_____	2. *Memberikan komentar negatif pada unggahan seseorang*
_____	3. *Menulis isu negatif mengenai seseorang*
_____	4. *Menyebarkan tanggapan negatif yang ditulis orang lain*
_____	5. *Menulis tanggapan yang menyudutkan seseorang*
_____	6. *Menulis sindiran untuk orang lain*
_____	7. *Menyebarkan foto/video privat seseorang tanpa izin*
_____	8. *Menyebarkan video "prank" yang merugikan orang lain*
_____	9. *Mengunggah gambar/video yang bersifat menghina seseorang*
_____	10. *Menyebarkan gambar/video untuk mempermalukan seseorang*
_____	11. *Menyebarkan video/screenshot kecerobohan seseorang untuk menyudutkannya*
_____	12. *Menggunakan meme untuk menghina seseorang*

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Appendix B

The Cyberbullying in Social Media Scale (CSMS) (English Version)

Below you will find 12 items regarding your activity on social media. For each item, please indicate how often you do this activity on social media. Please reach each item carefully. There are no wrong answers, therefore please provide responses that would best describe yourself.

For each item there are four possible responses:

0 = Never

1 = 1–2 times

2 = 3–4 times

3 = 5 times or more.

Answer	Items
_____	1. Spreading post about other people to gossip
_____	2. Providing negative comments on someone's post
_____	3. Writing negative information about someone
_____	4. Spread negative feedback that other people have written
_____	5. Write a response that puts someone in a corner
_____	6. Writing satire for others
_____	7. Sharing someone's private photos/videos without their permission
_____	8. Spreading "prank" videos that would harm others
_____	9. Posting images or videos online that insult or belittle a person
_____	10. Spreading pictures/videos to embarrass someone
_____	11. Spread videos/screenshots of someone's carelessness to corner them
_____	12. Using a meme to insult someone

Appendix C

Scoring Procedure

Code each response to 0 (Never), 1 (1–2 times), 2 (3–4 times), and 3 (5 times or more). To obtain the final score, sum all of the participant's responses. The score ranged from 0–36. Higher scores indicate the higher tendency of cyberbullying in social media.

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