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Adaptation and validation of the Indonesia version social media engagement scale for adolescent

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ABSTRACT

The rise of social media has reshaped how people, especially adolescents, communicate and express themselves. Accurate assessment of social media engagement quality is critical for understanding its psychological, social, and behavioral effects, highlighting the need for psychometrically sound measurement tools. This study aims to adapt and test the psychometric properties of the Indonesian version of the SMEA scale. The study involved 851 participants aged 12–21 years. Content validity was assessed using Aiken's V index based on ratings from 25 expert judges. Construct validity was evaluated through Confirmatory Factor Analysis (CFA), and reliability was tested using Cronbach's alpha. Results showed Aiken's V values ranged from 0.67 to 0.91, indicating good content validity. CFA supported the model's goodness of fit, confirming construct validity. The instrument demonstrated high internal consistency, with a Cronbach's alpha of 0.83. These findings indicate that the Indonesian version of the SMEA is a valid and reliable tool for assessing adolescents' social media engagement. Its application can support evidence-based interventions to foster healthy social media use and digital literacy.

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Introduction

Indonesia is the third largest country in the Asia-Pacific region with active social media users, with 191.4 million people in 2022 and 68.9% social media penetration (Nurhayati-Wolff, 2023). In addition, Indonesia is also the second country that has the longest time after the Philippines, which spends about 3 hours and 20 minutes per day using social media (Nurhayati-Wolff, 2023). Social media cannot be separated from the lives of modern humans. The emergence of social media makes it easier for modern humans to connect with each other. Through social media such as Facebook, Twitter, Instagram, Snapchat, TikTok, individuals can share information in the form of photos, videos and writings. The easy and fast exchange of information makes individuals more attached to these platforms until it becomes a lifestyle to share information about life and a place to get social recognition. A survey conducted by the Indonesian Internet Providers Association (APJII, 2022) on 7,568 Indonesians shows 98.03% of respondents use the internet to access social media compared to other websites.

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These internet users spend an average of 1-5 hours a day accessing social media. Indonesia is ranked as the 4th largest social media user in the world with 237 million active social media users. Based on a survey (APJII, 2022), the teenage age group of 13-18 years in Indonesia is the most active user of social media.

Social media has become a central part of adolescents' daily routines, shaping the way they connect, communicate, and form identities (Ofcom, 2018). While platforms such as Facebook, Instagram, TikTok, and Snapchat offer opportunities for interaction and self-expression, increasing evidence links social media use among adolescents to various psychological and behavioural issues. Recent research shows that the use of social media by adolescents has associations with psychological problems such as depression (Rahmatulloh & Retnowati, 2021; Twenge, et al, 2018), body dissatisfaction (Jiotsa et al., 2021), alcohol consumption (Alhabash et al., 2022) and cyberbullying behaviours (Garett et al., 2016). These findings suggest that it is not only the time spent on social media that matters, but also how adolescents engage with these platforms.

To gain a deeper understanding of the psychological and behavioural impacts of social media, researchers must look beyond quantitative metrics such as frequency or duration. The concept of social media engagement, which captures the quality of users' interaction with digital platforms, offers a more comprehensive framework. Social media engagement refers to the quality of user experience with technology characterised by feedback, interactivity, sensory appeal, perceived control, aesthetics, awareness, interest, and influence (O'Brien & Toms, 2008). McCay-Peet, and Quan-Haase (2016) define social media engagement as the quality of user experience with web-based technologies that allow users to interact with, create, and share content with individuals and organisations in their social networks. Engagement is a multidimensional concept that focuses not only on behaviour, but also cognition and affective (Hollebeek, 2021). In the context of social media, engagement is the quality of social media use, not just the quantity. Previous research (Orben & Przybylski, 2019) shows that the main factor influencing adolescents' comprehensive use of social media is engagement on social media, not just the time spent using social media. Dessart (2017) states that social media engagement consists of three contract dimensions, which consist of affective, cognitive and behavioural dimensions. The concept of social media engagement is a strong construct that captures the complexity of users in participating in social media (Dessart et al., 2015).

Various instruments have been developed to measure social media use, including The Social Media Motivations Scale (SMM-S) (Pedruzzi et al., 2021), Social Networking Activity Intensity Scale (Li et al., 2016), Social Networking Addiction Scale (SNAS) (Shahnawaz, & Rehman, 2020) and The Multidimensional Facebook Intensity Scale (MFIS) (Orosz et al., 2016). These measuring instruments have several limitations, namely only measuring the initial purpose of using social media, focusing too much on objective behaviour, only measuring the intensity of social media use, only measuring the use of social media at an excessive intensity, and only measuring the use of one type of social media. The scale is suitable for measuring specific social media use and suitable for accurately measuring time of social media use. However, many of these tools do not account for the full spectrum of user experience, particularly the affective and cognitive dimensions of engagement.

To address these gaps, Ni et al. (2020) developed the Social Media Engagement Assessment (SMEA), which consists of affective engagement, behavioural engagement, and cognitive engagement. Affective aspects are emotional dimensions related to positive or negative emotions towards objects or problems. The cognitive aspect refers to the understanding and comments on certain objects or problems that can present individual perceptions in the mind. The behavioural aspect refers to the daily habitual activities involved in the object or issue, which can subconsciously pervade an individual's daily life. Despite the utility of the SMEA, the scale has not yet been adapted for use in the Indonesian context. Cultural adaptation is crucial as social media behaviors are shaped by cultural norms, values,

and communication patterns. Indonesia, as a collectivist society (Himawan, 2024), emphasises social harmony (Lestari et al., 2013) and group affiliation that can significantly influence how adolescents engage with social media.

Understanding social media engagement will be very useful in understanding humans in the cyber world and the impact that may arise from social media behaviour. Conducting this research is essential for adapting a valid and reliable measurement tool for social media engagement, which is crucial for understanding human behaviour in the cyber world. A robust instrument allows researchers to accurately assess how individuals interact with social media, providing insights into engagement patterns and their psychological, social, and behavioural implications. By offering a standardised method for measurement, this study can uncover the impact of social media on various aspects of life, including mental health, relationships, and digital citizenship.

Research on specific measurement tools that measure social media engagement is still very limited in Indonesia. Adaptation of social media engagement measurement tools is needed in the Indonesian cultural context. Scale adaptation in a cultural context will help produce measuring instruments that have robust psychometric properties (Ambuehl & Inauen, 2022). This study provides significant contributions by adapting a culturally valid and reliable tool to measure social media engagement among adolescents in Indonesia. It enhances the understanding of engagement patterns specific to this demographic and offers a standardised instrument that can inform future research in similar contexts. The findings also support practical applications, such as guiding interventions and policies to promote digital literacy and address potential negative impacts of social media use, particularly among adolescents. Thus, the purpose of this study is to determine the validity and reliability of the social media engagement scale for adolescents in Indonesia.

Method

Participants

Table 1

Participants' Demographic Data (N=851)

	Number	Percentage
Gender		
Male	280	32.9%
Female	571	67.1%
Age		
12-15 years	244	28.7%
16-18 years	227	26.7%
19-21 years	380	44.7%
Education level		
Diploma/ Bachelor's	445	52.3%
Senior High School	169	19.9%
Junior High School	236	27.7%
Elementary School	1	0.1%
Duration of using social media in a day		
< 3 hours	220	25.9%
4-6 hours	204	24%
7-9 hours	184	21.6%
10-12 hours	117	13.7%
> 12 hours	126	14.8%

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The study involved 851 participants aged between 12 years to 21 years (M = 17.53; SD = 2.25). of the total samples, 67.1% were females, and 32.9% were males. Based on the level of education, 0.1% were in elementary school, 27.7% in junior high school, 19.9% in senior high school, and 52.3% were pursuing or had completed a Diploma or Bachelor's degree. Regarding daily social media use, 25.9% of participants reported using it for less than 3 hours; 24% for 4–6 hours; 21.6% for 7–9 hours; 13.7% for 10–12 hours; and 14.8% for more than 12 hours. Table 1 provides detailed demographic information about the participants

Instruments

This study used the 11 items of Social Media Engagement Scales for Adolescents (SMES-A) developed by Ni et al. (2020). Affective engagement refers to the feelings that arise in individuals towards existing objects or issues; behavioural engagement refers to a daily activity that involves a certain object; while the cognitive engagement refers to individual's understanding of an object or issue that appears in his perception. The SMES-A comprises three factors: affective engagement (4 items), behavioral engagement (4 items), and cognitive engagement (3 items). Responses are rated on a 5-point scale ranging from 1 (Very Unsuitable) to 5 (Very Suitable). The original SMES-A had Cronbach alpha reliability coefficients of 0.71 to 0.80, and construct validity by confirmatory factor analysis (CFA) found that the three-factor model of the SMES-A had a satisfactory fit Ni et al. (2020). The Social Media Engagement Scales for Adolescents (SMES-A) has never been adapted and tested for validity and reliability in other countries.

Adaptation Process

The adaptation of the SMES-A followed the guidelines of Beaton et al. (2000). In the first step, the original scale was forward-translated into Indonesian by two colleagues with undergraduate and postgraduate degrees in psychology, both fluent in English and with overseas academic experience in English-speaking countries. In the second step, the researcher synthesized the forward translations. The third step involved back-translation of the Indonesian version into the original language by the same professionals from the first step, followed by comparison with the original scale. The fourth step consisted of expert review, involving measurement specialists and linguists, to evaluate the translated version. In the fifth step, a pilot test was conducted with five participants to assess the linguistic clarity and readability of the scale items.

Data Collection

Data was collected by compiling a scale into an online form (i.e., google form) which was distributed through social media and face-to-face directly to schools. The study employed purposive sampling, a non-probability sampling method involving the deliberate selection of participants based on specific criteria aligned with the research objectives (Paramita et al., 2021). The sample consisted of adolescents aged 12 to 21 who were active social media users. Participants were drawn from 27 provinces across Indonesia, including North Sumatra, Riau Islands, Bengkulu, Jambi, West Sumatra, Lampung, South Sumatra, DKI Jakarta, DI Yogyakarta, West Java, Central Java, East Java, West Kalimantan, Central Kalimantan, South Kalimantan, East Kalimantan, South Sulawesi, Southeast Sulawesi, Central Sulawesi, North Sulawesi, Maluku, North Maluku, East Nusa Tenggara (NTT), West Nusa Tenggara (NTB), Papua, West Papua, and Bali.

Validity and Reliability Analysis

Content validity was assessed through expert judgment using the Aiken's V method. A total of 25 experts—holding bachelor's and master's degrees in psychology, with experience in psychological scale development and familiarity with the study context—evaluated the scale items. Construct validity was examined using Confirmatory Factor Analysis (CFA), conducted through JASP software. Confirmatory Factor Analysis (CFA) in this study was conducted using the Maximum Likelihood Estimation method. Prior to CFA, data suitability was assessed using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity. A KMO value above 0.5 indicates adequate sampling adequacy, while values below 0.5 suggest that the data may not be appropriate for factor analysis. A significant result in Bartlett's Test of Sphericity (i.e., a low p-value) indicates that the item correlation matrix differs from an identity matrix, supporting the suitability of the data for factor analysis. Conversely, a non-significant result (high p-value) suggests that inter-item correlations may be insufficient for factor extraction. Reliability was assessed through internal consistency using both Cronbach's Alpha and McDonald's Omega. Employing both methods provides a more comprehensive evaluation: Cronbach's Alpha offers a practical estimate of item homogeneity (Tavakol & Dennick, 2011), while McDonald's Omega yields a more precise reliability estimate without assuming equal factor loadings (Dunn et al., 2014; McNeish, 2018). The use of both indices aligns with current methodological recommendations to improve the robustness of reliability assessments (Cortez & Nussbeck, 2021).

Results

Table 2
Translate English – Indonesia

No	SMEA Original	SMEA Indonesian Version
A1	Using social media is my daily habit	Menggunakan media sosial merupakan kebiasaan saya sehari-hari
A2	I browse social media whenever I have time	Saya menjelajahi media sosial kapanpun saya ada waktu
A3	Even if it's late, I'll take a look at social media before sleep	Meskipun sudah larut, saya akan melihat-lihat media sosial sebelum tidur
A4	I often use social media to relax in habit	Saya sering menggunakan media sosial untuk bersantai dari rutinitas
B1	I get fulfilled from the attention and comments of others on social media	Saya mendapatkan kepuasan dari perhatian dan komentar orang lain di media sosial
B2	The support and encouragement of others on social media is very important to me	Dukungan dan semangat dari orang lain di media sosial sangat penting buat saya
B3	Using social media, I am satisfied with the relationship between myself and my friends.	Menggunakan media sosial membuat saya merasa puas dengan hubungan saya dan teman-teman saya
B4	Compare to the real world, social media makes me feel more comfortable.	Dibandingkan dengan dunia nyata, media sosial membuat saya lebih nyaman
C1	I feel bored when I can't use social media	Saya merasa bosan ketika tidak bisa menggunakan media sosial
C2	Compare to the real world, I am happier when I socialize on social media	Dibandingkan dengan dunia nyata, saya lebih Bahagia ketika bersosialisasi di media sosial
C3	I feel anxious when I can't use social media	Saya merasa cemas ketika tidak bisa menggunakan media sosial

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The results of the adaptation process that has been carried out by following the adaptation steps of Beaton et al. (2000). Table 2 provides an explanation of the original SMEA scale and the results of the SMEA adaptation in Indonesian. Following adaption, the SMES-A scale was tested for content validity using Aiken's V approach. The expert evaluation provided Aiken's V indices ranging from 0.67 to 0.91, which are regarded valid according to the criteria stated by Aiken (1985).

Psychometric properties

The reliability analysis of the 11 SMES-A items, conducted using Cronbach's Alpha, produced item discrimination indices between 0.39 and 0.62, resulting in an overall Cronbach's Alpha coefficient of 0.83. The Omega study for McDonald's revealed coefficient values of 0.818 for the affective factor, 0.62 for the behavioral factor, and 0.60 for the cognitive factor, resulting in a total Omega coefficient of 0.80. These results indicate that the Indonesian version of the SMES-A demonstrates satisfactory internal consistency. See Table 3.

Table 3
Reliability Test Results

	McDonald Omega (ω)	Cronbach Alpha (α)
Affective	0.81	0.81
Behavioral	0.62	0.68
Cognitive	0.60	0.69
Total	0.80	0.83
Suggested cutoff	≥ 0.07	≥ 0.07

The Kaiser-Meyer-Olkin (KMO) test showed a value of 0.83 (KMO> 0.50) and Bartlett's test of chi-square <0.001, indicating that the data were suitable for factor analysis. Meanwhile, the Confirmatory Factor Analysis (CFA) of the Indonesian version of the SMES-A revealed factor loadings ranging from 0.54 to 0.68 for the affective factor, 0.42 to 0.56 for the behavioral factor, and 0.36 to 0.77 for the cognitive factor. Most items demonstrated acceptable loadings above 0.40. Despite item C2's factor loading of 0.361, which is somewhat beneath the widely recognized criterion, it was included since its presence did not significantly undermine the overall measurement quality of the scale. See Table 4.

Table 4
Factor Loading of the Indonesian Version of SMEA

Factor	Indicator	Std. Estimate
Affective	A1	0.67
	A2	0.68
	A3	0.67
	A4	0.54
Behavioral	B1	0.51
	B2	0.56
	B3	0.53
	B4	0.42
Cognitive	C1	0.77
	C2	0.36
	C3	0.59

The Goodness-of-Fit analysis for the Indonesian version of the SMES-A, as presented in Table 5, indicated that most fit indices met the acceptable criteria, with the exception of the chi-square test. Although the chi-square was significant—suggesting a discrepancy between the observed data and the theoretical model—it is known to be highly sensitive to sample size and should be interpreted with caution. The model demonstrated acceptable fit based on alternative indices: RMSEA = 0.07 (≤ 0.08), GFI = 0.99 (≥ 0.90), SRMR = 0.05 (< 0.08), CFI = 0.93 (≥ 0.90), and TLI = 0.91 (≥ 0.90). These results support the conclusion that the model demonstrates a good overall fit.

Table 5
Goodness of Fit of the Indonesian version of SMES-A

Estimation	Criteria	Result	Description
Chi-Square	$p > 0.05$	$p < 0.001$	*Not fit*
RMSEA	< 0.08	0.07	*Good fit*
Goodness of Fit Index (GFI)	≥ 0.90	0.99	*Good fit*
SRMR	< 0.08	0.05	*Good fit*
CFI	≥ 0.90	0.93	*Good fit*
TLI	≥ 0.90	0.91	*Good fit*

Discussion

This study aims to adapt Social Media Engagement Scales for Adolescents to the Indonesian cultural context and assess the psychometry property of the scale. The results showed that the Indonesian version of the SMES-A demonstrates adequate content validity. This suggests that the scale items are considered relevant and representative of the construct of social media engagement among adolescents. According to Azwar (2019), strong content validity reflects the extent to which the instrument adequately covers the domain it intends to measure, ensuring that the scale captures the essential dimensions of the engagement construct within the Indonesian cultural context. This indicates that the scale is not only valid but also culturally appropriate for measuring social media engagement among Indonesian adolescent.

The results also showed that the total Cronbach's Alpha was 0.83, while the total McDonald's Omega was 0.80, indicating a good level of internal consistency across items. Specifically, for the affective factor, α = 0.81 and ω = 0.81; for the behavioral factor, α = 0.68 and ω = 0.62; and for the cognitive factor, α = 0.69 and ω = 0.60. According to Nunnally and Bernstein (1994), a reliability coefficient of 0.70 or higher is generally considered acceptable for early-stage research, while values closer to 0.80 or above are preferable for established scales. Hair et al. (2014) also posited that reliability values between 0.60 and 0.70 are still acceptable in certain situations. In this context, the affective dimension clearly meets acceptable reliability standards in both coefficients. However, the behavioral and cognitive dimensions approach the minimum acceptable threshold, suggesting that future refinement or item revision may improve their internal consistency. The Indonesian version of the SMES-A demonstrates satisfactory internal consistency overall, particularly in the affective domain. The behavioral and cognitive domains, although marginal, remain within an acceptable range for preliminary validation studies.

The Social Media Engagement Scales for Adolescents from Ni et al. (2020) with the context of adolescents in China was found to be adaptable to the Indonesian context. The researchers made a model modification by allowing a residual covariance between items B4 and C2 due to their high residual covariance values, which indicated a mismatch between

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the hypothesized model and the observed data. This modification involved correlating the error terms of B4 and C2 to improve model fit, based on the theoretical justification that both items share similar wording and represent overlapping aspects of the cognitive dimension. According to Brown (2015) and Kline (2016), correlating residuals in confirmatory factor analysis is acceptable when item content is similar, as this similarity can produce shared variance not fully captured by the latent construct. This adjustment was made to enhance the model fit indices without compromising construct validity. After the adjustment, the model demonstrated good fit: RMSEA = 0.07 (≤ 0.08), GFI = 0.99 (≥ 0.90), SRMR = 0.05 (≤ 0.08), CFI = 0.93 (≥ 0.90), and TLI = 0.91 (≥ 0.90). These results are consistent with goodness-of-fit criteria established by Hair et al. (2010, 2014), Hooper et al. (2008), Brown (2006), and Wijanto (2006), indicating that the model achieved acceptable fit and supports the construct validity of the Indonesian version of the SMES-A. This suggests that the scale's factor structure remains stable even after cross-cultural adaptation, and the measured constructs—affective, behavioral, and cognitive engagement—are conceptually meaningful in the Indonesian adolescent context. Achieving acceptable model fit reinforces the validity of using this instrument to assess social media engagement in a culturally different population, demonstrating both theoretical consistency and empirical adequacy

In contrast, Wisessathorn et al. (2022), in developing the Thai-Social Media Engagement Scale (T-SMES) based on engagement theory and social media behavior among Thai adolescents, identified a different factor structure. Their exploratory factor analysis yielded three dimensions—feel at ease and not missing out, make it a habit, and sense of being attracted to and connected to others—which predominantly reflect affective and behavioral components. Although their scale was grounded in engagement theory, the cognitive dimension was not distinctly represented. This differs from both the present study and Ni et al.'s (2020) findings, in which affective, behavioral, and cognitive engagement were consistently retained as core constructs. These differences may reflect cultural or contextual variations in how adolescents experience and interpret engagement with social media platforms.

The practical implications of these findings are that the SMEA can be a valid instrument that can be used to support evidence-based interventions to promote healthy social media use and digital literacy. By providing objective and quantitative data on social media engagement patterns, this tool enables educators, counselors, and public health officials to gain a deeper understanding of the impact of social media. Consequently, stakeholders are able to develop customized intervention programs to address specific problematic behaviors identified by the scale, such as compulsive use or excessive emotional investment.

This study has several limitations that should be acknowledged. Although the findings demonstrated adequate content validity and internal consistency, the reliability values for the behavioral and cognitive dimensions were at the lower acceptable threshold, suggesting that some items may not fully capture the constructs of social media engagement in the Indonesian cultural context. In addition, the present study did not assess criterion-related validity, so it remains unclear how well the scale correlates with external measures theoretically related to social media engagement. This study primarily emphasized content validity, internal consistency, and confirmatory factor analysis. However, additional evidence such as temporal stability *(test-retest reliability)* and measurement invariance across groups would further strengthen the robustness of the instrument.

Future studies are recommended to conduct further refinement or revision of items, particularly within the behavioral and cognitive dimensions, to improve reliability. Subsequent research should also include *criterion-related validity* testing by examining the correlations between this scale and other established measures of social media use, well-being, or related constructs. In addition, conducting *measurement invariance* analyses across groups (e.g., gender, education level, or frequency of social media use) as well as *test-retest*

reliability would provide stronger evidence of temporal consistency and construct equivalence.

Conclusion

Based on the findings of this study, it can be concluded that the Indonesian version of the Social Media Engagement Assessment (SMEA) scale demonstrates strong psychometric properties, with satisfactory validity and reliability. Confirmatory Factor Analysis (CFA) supports a three-factor structure (affective, behavioral, and cognitive engagement), which offers the best model fit in representing the construct of social media engagement among Indonesian adolescents. The results showed that the SMES-A adapted to the Indonesian context can be considered a valid and reliable tool by researchers and practitioners. The primary strength of this study is its substantial sample size and the inclusion of participants from diverse regions across Indonesia. This validated version of the SMEA scale provides a reliable and culturally appropriate tool for future research on social media engagement in the Indonesian context. It is expected to facilitate more accurate assessments and support the development of targeted interventions and digital literacy programs.

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Declarations

Author contribution. The first author contributed to designing the study, collecting data, and analysing data. The second author contributed to writing the manuscript draft, collecting data and finalising the manuscript. The third author contributed to collecting data and writing the manuscript.

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References

Aiken, L. R. (1985). Three coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement*, *45*(1), 131–142. https://doi.org/10.1177/0013164485451012

Alhabash, S., Park, S., Smith, S., Hendriks, H., & Dong, Y. (2022). Social media use and alcohol consumption: A 10-year systematic review. *International Journal of Environmental Research and Public Health*, *19*(18), 11796. https://doi.org/10.3390/ijerph191811796

Ambuehl, B., & Inauen, J. (2022). Contextualized measurement scale adaptation: A 4-step tutorial for health psychology research. *International Journal of Environmental Research and Public Health*, *19*(19), 12775. https://doi.org/10.3390/ijerph191912775

Asosiasi Penyelenggara Jasa Internet Indonesia. (2022). Data on Indonesian internet service users. *Indonesian Internet Service Providers Association*. https://apjii.or.id/content/read/104/503/BULETIN-APJII-EDISI-74-November-2020

ISSN 2598-6368 (online) / ISSN 1693-7236 (print)

Azwar, S. (2021). *Reliability and validity* (4th ed.). Pustaka Pelajar.

Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, *25*(24), 3186–3191. https://doi.org/10.1097/00007632-200012150-00014

Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. The Guilford Press.

Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). The Guilford Press.

Cortez, D., & Nussbeck, F. W. (2021). Combining reliability coefficients: A comparison of Cronbach's alpha and McDonald's omega. *Psychological Reports*, *124*(3), 1124–1144. https://doi.org/10.1177/0033294120936186

Dessart, L. (2017). Social media engagement: A model of antecedents and relational outcomes. *Journal of Marketing Management*, *33*(5–6), 375–399. https://doi.org/10.1080/0267257X.2017.1302975

Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: A social media perspective. *Journal of Product & Brand Management*, *24*(1), 28–42. https://doi.org/10.1108/JPBM-06-2014-0635

Dunn, T. J., Baguley, T., & Brunsden, V. (2014). From alpha to omega: A practical solution to the pervasive problem of internal consistency estimation. *British Journal of Psychology*, *105*(3), 399–412. https://doi.org/10.1111/bjop.12046

Garett, R., Lord, L. R., & Young, S. D. (2016). Associations between social media and cyberbullying: A review of the literature. *MHealth*, *2*(46), 1-7. https://doi.org/10.21037/mhealth.2016.12.01

Hair, J. F., Black, W. C., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Pearson Education Limited.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Pearson Prentice Hall.

Himawan, K. K. (2024). Exploring collective wisdom: Relationship-based approach in Indonesian psychological research and practice. *Jurnal Psikologi Ulayat*, *11*(1), 1–5. https://doi.org/10.24854/jpu1016

Hollebeek, L. (2011). Exploring customer brand engagement: Definition and themes. *Journal of Strategic Marketing*, *19*(7), 555–573. https://doi.org/10.1080/0965254X.2011.599493

Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, *6*(1), 53–60. https://doi.org/10.21427/D7CF7R

Jiotsa, B., Naccache, B., Duval, M., Rocher, B., & Grall-Bronnec, M. (2021). Social media use and body image disorders: Association between frequency of comparing one's own physical appearance to that of people being followed on social media and body dissatisfaction and drive for thinness. *International Journal of Environmental Research and Public Health*, *18*(6), 2880. https://doi.org/10.3390/ijerph18062880

Kline, R. B. (2015). *Principles and practice of structural equation modeling.* The Guilford Press.

Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). The Guilford Press.

Lestari, Sri., Fatturochman., Adiyanti, Goretti., & Walgito, B. (2013). The concept of harmony in javanese society. *ANIMA Indonesian Psychological Journal*, *29*(1), 24–37. https://journal.ubaya.ac.id/index.php/jpa/article/view/4125

Li, J., Lau, J. T. F., Mo, P. K. H., Su, X., Wu, A. M. S., Tang, J., & Qin, Z. (2016). Validation of the social networking activity intensity scale among junior middle school students

in China. *PLoS ONE*, *11*(10), e0165695. https://doi.org/10.1371/journal.pone.0165695

McCay-Peet, L. & Quan-Haase, A. (2016). A model of social media engagement: User profiles, gratifications, and experiences. In: O'Brien, H., Cairns, P. (eds) *Why Engagement Matters*. Springer, Cham. https://doi.org/10.1007/978-3-319-27446-1_9

McNeish, D. (2018). Thanks coefficient alpha, we'll take it from here. *Psychological Methods*, *23*(3), 412–433. https://doi.org/10.1037/met0000144

Ni, X., Shao, X., Geng, Y., Qu, R., Niu, G., & Wang, Y. (2020). Development of the social media engagement scale for adolescents. *Frontiers in Psychology*, *11*, 701. https://doi.org/10.3389/fpsyg.2020.00701

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.

Nurhayati-Wolff, H. (2025). Influencer marketing in Indonesia. *Statista*. https://www.statista.com/topics/7090/influencer-marketing-in-indonesia/

O'Brien, H. L., & Toms, E. G. (2008). What is user engagement? A conceptual framework for defining user engagement with technology. *Journal of the American Society for Information Science and Technology*, *59*(6), 938–955. https://doi.org/10.1002/asi.20801

Ofcom. (2024). Children and parents: Media use and attitudes report. *Ofcom*. https://www.ofcom.org.uk/media-use-and-attitudes/media-habits-children/children-and-parents-media-use-and-attitudes-report-2024

Orben, A., & Przybylski, A. K. (2019). Screens, teens, and psychological well-being: Evidence from three time-use-diary studies. *Psychological Science*, *30*(5), 682–696. https://doi.org/10.1177/0956797619830329

Orosz, G., Tóth-Király, I., & Bőthe, B. (2016). Four facets of Facebook intensity - the development of the Multidimensional Facebook Intensity Scale. *Personality and Individual Differences*, *100*, 95–104. https://doi.org/10.1016/j.paid.2015.11.038

Paramita, R. W. D., Rizal, N., & Sulistyan, R. B. (2021). *Quantitative research methods* (3rd ed.). Widya Gama Press.

Pedruzzi, P. F., Almeida, M. I., Matoz, F. R., & Andrade, A. L. (2021). Social media motivations scale (SMM-S): Measure adaptation and predictors. *LIBERABIT. Revista Peruana de Psicología*, *27*(2), e472. https://doi.org/10.24265/liberabit.2021.v27n2.04

Rahmatulloh, A. R., & Retnowati, S. (2021). Validation of cognitive-based mindfulness program to reduce suicidal ideation in individuals with depression. *Gadjah Mada Journal of Professional Psychology (GamaJPP)*, *7*(1), 55–73. https://doi.org/10.22146/gamajpp.62852

Shahnawaz, M. G., & Rehman, U. (2020). Social networking addiction scale. *Cogent Psychology*, *7*(1), 1832032. https://doi.org/10.1080/23311908.2020.1832032

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, *2*, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Twenge, J. M., Joiner, T. E., Rogers, M. L., & Martin, G. N. (2018). Increases in depressive symptoms, suicide-related outcomes, and suicide rates among U.S. adolescents after 2010 and links to increased new media screen time. *Clinical Psychological Science*, *6*(1), 3–17. https://doi.org/10.1177/2167702617723376

Wijanto, S. H. (2006). *Structural equation modeling with LISREL 8.8: Concepts and tutorials*. Graha Ilmu.

ISSN 2598-6368 (online) / ISSN 1693-7236 (print)

Wisessathorn, M., Prameplueem, N., & Kaewwongsa, S. (2022). Factor structure and interpretation on the Thai-Social Media Engagement Scale (T-SMES). *Heliyon*, *8*(7), e09985. https://doi.org/10.1016/j.heliyon.2022.e09985