

# Adaptation and Validation of the Indonesian Version of the Short Moral Disengagement in Bullying Scale

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**Abstract.** Moral disengagement (MD) is a cognitive mechanism that plays a significant role in the development of negative behaviors, including bullying. In this context, a valid and reliable measure of MD is needed to understand the dynamics of bullying in schools. The development, modification, or adaptation of MD scale intended to measure bullying-related MD among school students in Indonesia remains limited. Therefore, this study aimed to adapt and validate the Short Moral Disengagement in Bullying Scale (MDBS) for use in the Indonesian context. The cross-cultural adaptation of the instrument used the forward-backward translation method and was administered to 301 students. The results showed that all six items reported adequate factor loadings (.41–.71), reporting satisfactory item representation of the underlying construct. The measurement model exhibited a good fit to the data ( $\chi^2/df = 1.317$ ; CFI = .988; RMSEA = .032; CFI = .988; TLI = .980; SRMR = .032). In addition, the scale showed acceptable reliability (CR = .769; AVE = .363) and remained robust across different groups, supporting the measurement stability. The AVE provided new insights regarding the contextual boundaries of collectivistic culture for the universal cognitive structure of MD. The Indonesian version of the Short MDBS could be used with students in junior high school or equivalent grades 7 through 9.

**Keywords:** cross-cultural adaptation, moral disengagement, school bullying

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## Introduction

Studies on bullying have continued since the inception by Olweus in the early 1970s (Olweus, 2013). This shows that bullying persists in every country, including Indonesia, even in educational institutions. Related studies among school students remain a crucial part of the Sustainable Development Goals (SDGs) agenda, specifically Goal 4, on quality education. Target 4.a states, “Develop and improve child-friendly, disability-friendly, and gender-sensitive educational facilities, as well as provide a safe, violence-free, inclusive, and effective learning environment for all.” Regarding a violence-free learning environment, Target 4.a.2 addresses the percentage of students who experienced bullying in the past 12 months in elementary and junior high school education (UNESCO, 2023).

BPS (2024) reported that junior high school students experienced the highest prevalence of bullying in 2022 and 2023, reaching 41.34% and 34.07%, compared with (35.55% and 20.48%) and (30.31% and 23.87%) among elementary and senior high school

students, respectively. The prevalence of bullying requires policymakers to identify the true roots of the problem. Various results have provided clues regarding the psychological factors often included in the development of bullying behavior. Among these clues are aspects of individual morality, particularly moral disengagement (MD).

Most studies view MD as a one-dimensional construct (Pozzoli et al., 2012). The mechanisms are learned through social interactions and can become habits or dispositions. According to Bandura (2016), MD refers to a series of self-serving cognitive distortions in which self-regulation based on moral standards is disabled and moral restraints can be relaxed, facilitating inhumane behavior without remorse or guilt. Numerous studies have reported MD as an underlying factor in the development of certain negative behaviors. Several investigations have tested the concept as a predictor, including aggressive driving behavior, corruption intentions, academic dishonesty, plagiarism, bullying, and cyberbullying behavior

(Bussey et al., 2015; Bussey & Luo, 2024; Effendi & Juniarti, 2022; Hikmah & Marastuti, 2020; Natalia et al., 2015; Octavia et al., 2022; Sirca & Billen, 2024; Yemima & Purnama, 2024). A systematic review confirms that MD has a significant positive relationship with cyberbullying perpetrator and passive bystander behavior, even after accounting for moderating variables (Lo Cricchio et al., 2020). A meta-analysis of 49 articles found that MD was positively and negatively related to bullying and defending, respectively (Killer et al., 2019). Regarding the measurement, a systematic review of 41 articles examining the relationship between MD and cyberbullying showed that 80%, 17%, and 3% used self-report questionnaires, vignettes, and interviews, respectively. In these articles, 88% and 12% considered the overall MD score and focused on specific mechanisms (3 articles on moral justification and 1 article on toxic disinhibition), respectively (Lo Cricchio et al., 2020).

Self-report scales consist of general MD constructs and specific domains, such as peer victimization, bullying, antisocial behavior, cyber aggression, and hypothetical bullying scenarios (Thornberg, 2023). Some potential vulnerabilities in the derived data include social desirability bias, careless judgment, as well as recall and perception biases (Thornberg, 2023). This suggests that the self-report scales commonly used still have potential weaknesses. However, other forms of scales, such as vignettes, have shown insignificant results when examined in relation to cyberbullying behavior (Bauman & Pero, 2011; Perren & Gutzwiller-Helfenfinger, 2012; Sticca et al., 2013).

Several MD instruments have been reported for the context of bullying. Hymel et al. (2005) developed the 18-item Moral Disengagement Scale (MDS) to measure Bandura's four categories of MD, namely cognitive restructuring (5 items), minimizing agency (3 items), distortion of negative consequences (4 items), and blaming/dehumanizing the victim (6 items). Factor analysis obtained 13 significant items measuring a single factor and had a high internal consistency estimate ( $\alpha = .81$ ). This scale was used with students of Grades 8–10, 5–12, and 7–9 in Canada, Australia (Tanrikulu & Campbell, 2015), and Europe, respectively (DeSmet et al., 2016). In a sample of active internet-using adolescents in Indonesia, CFA results reported that 17 of the 18 items measured a single factor (Mayangsari, 2015).

Jeong et al. (2024) developed the Moral Disengagement Bullying Behavior Scale (MDBBS) to assess the eight MD mechanisms proposed by Bandura. The instrument was tested among university students aged 18–23 in the USA and obtained 14 items as a single factor. For the context of cyberbullying, a scale

was developed by Bussey et al. (2015) under the name Cyber Bullying Moral Disengagement Scale (CBMDS) ( $\alpha = .85$ ). This scale has 4 response options consisting of 8 items as a single factor that measures 8 MD mechanisms in Australian students aged 11–15 (grades 7–9). In China, the scale has been used with school students aged 11–19 (Yang et al., 2018).

Popular MD measurement instruments include the Moral Disengagement Scale (MDS) developed by Bandura (1996, 2016). The scale has been applied to diverse populations, including university students aged 16–28 years, junior high school students, civil servants, male Islamic boarding school students, and adolescent motorcyclists aged 14–19 years. Previous studies have connected MD to various outcomes, such as academic misconduct, including plagiarism (Natalia et al., 2015; Rifani et al., 2020), honesty and classroom incivility (Sunawan et al., 2023; Susilawati et al., 2019), corruption intentions (Hikmah & Marastuti, 2020), locus of control and boredom (Mulyana et al., 2024), and aggressive driving behavior (Effendi & Juniarti, 2022). An experimental study testing sociodrama methods in high school students used the MD instrument developed by Bandura (Aisy et al., 2024). Based on the measurement tool developed by Detert et al. (2008), other experts expanded the instrument by adding more items and reported the validity for 29 items among university students (Tahrir et al., 2019).

MD measurement instruments used in the context of bullying and cyberbullying across several studies include the 18-item Moral Disengagement in the Function of Bullying and Aggression scale (MD-FUBA) developed by Hymel et al. (2005), applied to participants aged 17–21 years (Lubis et al., 2022). The Moral Disengagement Scale (MDS) developed by Bandura (1966, 2002) has been used among university (Nusantara et al., 2020) and senior high school students (Gholiyah et al., 2021; Yemima & Purnama, 2024). The Moral Disengagement in the Transgressive Conduct scale (MDTC) developed by Bussey et al. (2015) has been applied to junior high school students (Octavia et al., 2022).

Among the several MD studies conducted in Indonesia, Rifani et al. (2020) described the process of adapting a measurement tool. This study was conducted on university students to test MD as a mediator in the relationship between spiritual-religious attitudes and academic dishonesty. Therefore, the MD scale adapted into Indonesian is not specific to the context of bullying. Various MD scales used in bullying have a relatively large number of items, ranging from 8 to 32. MD measuring instruments with 32 items are found in the Mechanisms of Moral Disengagement Scale (Bandura et al., 1996) and the Civic Moral Disengagement Scale by Caprara (Wang et al., 2017). The Moral Disengagement Scale for

Bullying (Caravita et al., 2012) has a 27-item and 17-item version for junior high and elementary school-aged students, respectively. Thornberg and Jungert (2014) developed the Moral Disengagement in Bullying Scale (MDBS), consisting of 18 items. This scale is available in the French version of the Moral Disengagement in Bullying Scale (Fr-MDBS), which has 14 items (Tolmatcheff et al., 2022). The 16-item Cyberbullying Moral Disengagement Scale, constructed from Bandura et al.'s (1996) Mechanisms of Moral Disengagement Scale (Bussey & Luo, 2024; Luo & Bussey, 2022), has an internal consistency of .91. The Scale, abbreviated as CBMDS, has an 8-item measurement tool ( $\alpha = .85$ ) (Bussey et al., 2015; Cabrera et al., 2020). Excessively long scales can be time-consuming and monotonous, leading to reduced engagement and poorer response quality (Wise & Sidarus, 2025). A very short scale can be detrimental to reliability but advantageous because the concept requires limited time for respondents (Morgado et al., 2017).

Thornberg and Jungert (2013) developed a shorter version of the MD scale for bullying contexts. The scale was used with elementary school students in grades 4, 5, and 6, aged 9–13 (Thornberg et al., 2023), and with students aged 15–20 (Thornberg & Jungert, 2013). This consists of six items that measure MD as a single factor. The six-item MD scale has been reported in only two studies, both including Swedish subjects. Therefore, no other studies have adapted the scale into other languages, including Indonesian. This situation shows a population gap since no MD scale with fewer items has been found in Indonesian samples, particularly among school-age subjects.

The choice of a shorter scale that measures MD in the bullying context as a single dimension was based on several considerations. Theoretically, Bandura et al. (1996) asserted that various MD mechanisms operated simultaneously. This unidimensional nature has been empirically reported by measurement tool developers (Thornberg & Jungert, 2013; Thornberg et al., 2023). In practice, experts often need to assess complex psychological constructs in a very limited time. Asking respondents to complete lengthy surveys with repetitive items can reduce the likelihood of paying close attention to the item content. These practical demands and psychological reasons drive efforts to improve the efficiency of assessing psychological constructs with concise scales (Credé et al., 2012).

The original scale was developed in Sweden (Thornberg & Jungert, 2013). Therefore, cross-cultural adaptation testing is necessary given the differences between individualistic and collectivistic cultures. In this context, the 6-item version of the scale is a strategy to suppress satisficing behavior, ensure the originality of cognitive responses, and test whether the universal

structure of the Western psychological model remains fit and fair (i.e., invariant) when replicated in the psychological characteristics of adolescents in Indonesia. This study aims to adapt and validate the Short MDBS for Indonesian adolescents. The hypotheses are: 1) The Indonesian-adapted version of MDBS will conform to the original unidimensional structure of Thornberg and Jungert (2013), as evidenced by goodness-of-fit indices meeting all three criteria ( $\chi^2/df < 3$ ; CFI  $> .95$ ; RMSEA  $< .08$ ), and 2) The Indonesian-adapted version of MDBS will show stable measurement invariance and will not differ significantly across gender groups and grade levels.

## Methods

The method used in the cross-cultural validation study uses a forward and back translation approach (Peters & Passchier, 2006, as cited in Cruchinho et al., 2025).

## Participants

Subjects were selected using non-probability sampling. This method was selected because data collection was conducted with a series of other scales, specifically the bullying bystander intervention scale, which required a 'bystander' criterion. Specific inclusion and exclusion criteria were established. The inclusion criteria were: 1) students at Islamic junior high schools (madrasah tsanawiyah) or junior high schools in West Java Province who had a bullying incident in the past year, based on reports from guidance and counseling teachers or student affairs, 2) male and female students, 3) aged approximately 12-16 years, and 4) bystanders, meaning people who witnessed a bullying incident in the school environment within the past 1-12 months. The exclusion criteria were: 1) students who witnessed a bullying incident in the school environment within the past 1-12 months but were also perpetrators and victims of bullying at other times, and 2) students who witnessed bullying incidents in the school environment within the past 1-12 months but showed signs of serious mental health problems or required professional treatment.

Based on a screening process against several criteria, 301 junior high school students aged 11–17 years from public and private schools in West Java were selected as participants. For the one-construct CFA model with 6 indicators, the minimum sample size limit (Appelbaum et al., 2018) is 265 when the data are not normal and there is no missing data (Muthén & Muthén, 2002). Data collection for the subjects was conducted using a combination of paper-and-pencil and online tests administered through Google Forms. This was based on the consideration that some schools established rules prohibiting students from bringing cell phones to school. Paper-and-pencil tests were administered in class at school, while online tests were

administered in class or individually outside of class time.

Table 1 presents the distribution of participant demographic data. Based on gender, the percentage of male students was higher (56.8%) compared to female students (43.2%). In the context of age, the highest number of students was 14 years old (38.5%), followed by 13 years old (30.9%). Based on class, the highest number of students was in grade 9<sup>th</sup> (43.2%), followed by grade 8<sup>th</sup> (36.2%).

Table 1.

Data Demographic Participants

Category	Frequency	Percentage
Sex		
Man	171	56.8
Woman	130	43.2
Age		
11 years	1	.3
12 years	24	8
13 years	93	30.9
14 years	116	38.5
15 years	63	20.9
16 years	3	1
17 years	1	.3
Grade		
Grade 7 <sup>th</sup>	62	20.6
Grade 8 <sup>th</sup>	109	36.2
Grade 9 <sup>th</sup>	130	43.2

### Instrument

The MD scale used was the Short MDDBS, developed by Thornberg and Jungert (2013). This one-dimensional scale comprised six positively worded items, and the response options were on a seven-point scale. In a previous study, the scale ranged from 1 (very untrue) to 7 (very true), obtaining a Cronbach's  $\alpha$  of 0.83 (Thornberg & Jungert, 2013). The scale ranged from 1 (strongly disagree) to 7 (strongly agree) (Thornberg et al., 2023), and the six items were averaged to obtain a single scale score (Cronbach's  $\alpha$  = 0.80). Confirmatory factor analysis (CFA) confirmed the one-dimensional structure and showed a good fit to the data (Thornberg et al., 2023).

### Procedure

This study consisted of two stages, namely adaptation and validation of the measuring instrument. The adaptation stage followed the five stages proposed by Beaton (2000), namely 1) translation, 2) synthesis, 3) back translation, 4) expert committee review, and 5) pretesting. Before implementing these stages, the initial step was to submit a permit application (International Test Commission, 2018) through email to the measuring instrument developer and to obtain approval from Robert Thornberg on July 10, 2024, with the attached scales in English and Swedish. The adaptation and validation process of the MD measuring instrument

was part of a study activity that received ethical approval from the Research Management & Innovation Centre (RMIC). This was conducted at Sultan Idris Education University Malaysia, under number UPSI/PPPI/PYK/ETIKA(M)/Jld.20(56), dated January 2, 2025.

In stage 1, the scale was translated from English into Indonesian by two independent translators. The first translator is a psychologist with English-language skills. Meanwhile, the second translator is an English linguist with a master's degree in English Language Education. In stage 2, a discussion of the translation results from versions T1 (first translator) and T2 (second translator) produced version T12. This discussion was carried out at a meeting with the two translators and one observer. In stage 3, two translators independently carried out a backward translation of the scale from the Indonesian version T12 into English. The first translator has a master's background in early childhood education and has lived in Australia, an English-speaking country, for 2 years. The second translator has a Master of TESOL (Teaching English to Speakers of Other Languages) background and has also lived in Australia and England. Based on this backward translation process, the English scale versions BT1 and BT2 were produced. In stage 4, an expert committee conducted a review through a Zoom Meeting to produce a pre-final version of the scale. At this meeting, all versions of the scale (original version, T1, T2, T12, BT1, BT2) were presented, and the meeting was attended by four initial and back translators, as well as four experts, including a Doctor of Linguistics, a Doctor of Social Psychology, a Doctor of Educational Psychology, and a Master of Psychometrics. In stage 5, a readability test was conducted by presenting the pre-final version of the scale in hard copy to seven Madrasah Tsanawiyah students.

Table 2.

Goodness Of Fit Indices Criteria

Goodness of Fit Criteria	Reccomended Value
$\chi^2$ (p-value)	$p > .05$
RMSEA	$< .06$
CFI	$> .95$
TLI	$> .95$
SRMR	$< .08$

RMSEA=root mean square error of approximation; CFI=comparative fit index; TLI=tucker-lewis index; SRMR=standardized root mean square residual

### Data Analysis

Data analysis used CFA to evaluate whether the theoretical model fits the empirical data. Model fit cannot be assessed with a single index since this study used a multi-index approach to test model fit. Several model fit criteria were selected, namely a significant chi-square test ( $p < .05$ ), root mean square error of approximation (RMSEA), comparative fit index (CFI),

Tabel 3.

*All Item Versions in the Short Moral Disengagement in Bullying Scale*

No	Version	Item
1	Original	Bullying is okay in certain case
	T1	Perundungan bisa diterima dalam kondisi tertentu
	T2	Perundungan dapat diterima dalam kasus-kasus tertentu
	T12	Perundungan dapat diterima dalam kondisi tertentu
	BT1	Bullying is acceptable under some conditions
	BT2	Bullying is acceptable under certain condition
	Pre-Final	Perundungan dapat diterima dalam kondisi tertentu
	Final	Perundungan dapat diterima dalam kondisi tertentu
2	Original	It's okay to bully someone who you don't like
	T1	Tidak apa-apa untuk mengintimidasi seseorang yang tidak kamu suka
	T2	Boleh saja merundung seseorang yang Anda tidak sukai
	T12	Tidak apa-apa merundung seseorang yang tidak Anda sukai
	BT1	It is acceptable to bully someone you don't like
	BT2	It is okay to bully someone you do not like
	Pre-Final	Tidak apa-apa merundung seseorang yang tidak Anda sukai
	Final	Tidak apa-apa merundung seseorang yang tidak Anda sukai
3	Original	One good thing about bullying is that the victim learns how to behave and how not to behave in order to be accepted
	T1	Salah satu hal baik tentang perundungan adalah bahwa korban belajar bagaimana bersikap dan bagaimana tidak bersikap agar diterima
	T2	Satu hal yang baik tentang perundungan adalah korban belajar bagaimana berperilaku dan bagaimana tidak berperilaku agar diterima
	T12	Satu hal yang baik tentang perundungan adalah korban belajar bagaimana berperilaku dan tidak berperilaku agar diterima.
	BT1	One good thing about bullying is that the victim learns how to behave and not behave in order to be accepted
	BT2	One thing good about bullying is the victim learns how to behave and how not to behave to be accepted
	Pre-Final	Satu hal yang baik tentang perundungan adalah korban belajar bagaimana berperilaku dan tidak berperilaku agar diterima
	Final	Satu hal baik dari perundungan adalah korban menjadi belajar bagaimana berperilaku yang dapat diterima ataupun tidak
4	Original	Bullying really isn't so bad ... something you have to put up with
	T1	Perundungan sebenarnya tidak terlalu buruk...itu hanya sesuatu yang harus kamu hadapi
	T2	Perundungan sebenarnya tidak terlalu buruk, hanya sesuatu yang harus dihadapi
	T12	Perundungan sebenarnya tidak terlalu buruk .. itu hanya sesuatu yang harus Anda hadapi
	BT1	Bullying isn't actually that bad, it's just something you have to deal with
	BT2	Bullying is not necessarily bad. It is just something you must deal with
	Pre-Final	Perundungan sebenarnya tidak terlalu buruk .. itu hanya sesuatu yang harus Anda hadapi
	Final	Perundungan sebenarnya tidak terlalu buruk .. itu hanya sesuatu yang harus Anda hadapi
5	Original	A person who is bullied only has him- or herself to blame
	T1	Seseorang yang dibuli hanya bisa menyalahkan dirinya sendiri.
	T2	Orang yang dirundung hanya bisa menyalahkan dirinya sendiri
	T12	Seseorang yang dirundung hanya bisa menyalahkan dirinya sendiri.
	BT1	A bullied person has only himself to blame
	BT2	Someone who is bullied can only blame themselves
	Pre-Final	Seseorang yang dirundung hanya bisa menyalahkan dirinya sendiri
	Final	Ketika seseorang dirundung maka hanya diri mereka sendiri yang pantas disalahkan
6	Original	Some people deserve to be bullied
	T1	Beberapa orang pantas untuk dibuli
	T2	Beberapa orang pantas untuk dirundung
	T12	Beberapa orang pantas untuk dirundung
	BT1	Some people deserved to be bullied
	BT2	Some people deserve to be bullied
	Pre-Final	Beberapa orang pantas untuk dirundung
	Final	Beberapa orang pantas untuk dirundung

**Original:** Original items in the source language (English); **T1 & T2:** Forward Translation (Translated into Indonesian by two distinct translators); **T12:** Synthesis (Combined version of T1 and T2); **BT1 & BT2:** Backward Translation (Translated back into English by two expert translators); **Pre-Final:** Version ready for pilot testing; **Final:** Final version post-expert review and pilot testing.

Tucker-Lewis fit index (TLI), and standardized root mean square residual (SRMR). The acceptable model fit thresholds for the indices are presented in Table 2. CFA calculations and measurement invariance testing were conducted using the Multiple Indicator Multiple Cause (MIMIC) model in MPlus 8.3.

## Results and Discussion

The adaptation results of the five stages are presented in Table 3. Several points can be explained to understand the process fully. First, in the T1 and T2 results, the word “bullying” as a noun is translated as ‘perundungan’, while as an active and passive verb, there are differences, namely “mengintimidasi” and “merundung” (item number 2) and “dibuli” and “dirundung” (items number 5 and 6). In the synthesis stage, the words “merundung” and “dirundung” were used. Furthermore, “mengintimidasi” is set aside because the meaning differs from “bullying”. Intimidation is a form of bullying, emphasizing “to make them do what one wants”, while bullying does not require someone to do something. The word “buli” in the Indonesian dictionary is the name and language of an ethnic group in the coastal area of Halmahera Island, North Maluku Province, Indonesia.

The familiarity of the term “rundung” and the derived forms as the Indonesian equivalent of “bully,” particularly among potential respondents, was confirmed during the expert committee review. Linguistic experts stated that “perundungan” as the equivalent of “bullying” is commonly used, well known, and easily understood. Second, in item 1, the only issue concerned the choice among the terms “kondisi”, “situasi”, and “kasus-kasus”. In the synthesis stage, the term “kondisi” was agreed upon because the concept is more commonly used in English. For item 2, the expression “tidak apa-apa” was retained since the phrase is more commonly used than “boleh saja” and “yang tidak Anda sukai” is grammatically appropriate in Indonesian. For item 4, “kamu” with “Anda,” since omitting “Anda,” as in the T2 version, is more suitable for respondents who are victims of bullying only. In addition, the use of “Anda” transmits a more respectful tone and is associated with self-reference or the “self.” For item 5, the term “seseorang” was accepted since the word appropriately refers to “a person.” For Item 3, which contained the longest wording, the synthesis stage discussion focused on two issues. First, the difference between the opening phrase “salah satu hal” (T1) and “satu hal” (T2) led to the selection of “satu hal” as “salah satu” implies the existence of multiple positive aspects, or “one of the good things,” suggesting that there are several good things about bullying. Second, consideration was given to the difference in the final term between “bersikap” (T1) and “berperilaku” (T2).

Table 4.

Content Validity Index Results Using Aiken-V

Item	Aikens’V	Results
Item 1	.844	Valid
Item 2	.906	Valid
Item 3	.875	Valid
Item 4	.938	Valid
Item 5	.969	Valid
Item 6	.969	Valid

During the synthesis stage, two additional alternative versions of the item were also proposed: “Salah satu hal baik tentang perundungan adalah bahwa korban belajar bagaimana bersikap dan bagaimana tidak bersikap agar diterima” and “Satu hal yang baik tentang perundungan adalah korban belajar perilaku yang baik dan buruk agar diterima”. The T2 version was selected since “bersikap” or “attitude” is not observable, while “berperilaku” or “behavior” refers to observable actions (“doings” or “actions”). The word “bagaimana” was not repeated since the term appeared in the original version. Therefore, the final wording used “bagaimana berperilaku dan tidak berperilaku agar diterima”, because the phrase was considered easier for respondents to understand while capturing the intended meaning of “dos and don’ts”.

At the expert committee review stage, for item number 1, two alternative wordings were proposed, namely: 1) “Perundungan tidak apa-apa pada kasus tertentu” and 2) “Perundungan itu boleh dalam kasus tertentu”. However, version T12 was selected because the sentence structure was more formal, while the expression “tidak apa-apa” was more characteristic of spoken language. For Item 2, an alternative wording was proposed, “Boleh melakukan perundungan pada orang yang tidak kamu sukai.” Similarly, for Item 3, the proposed alternative was “Satu hal baik tentang perundungan adalah korban belajar bagaimana bersikap dan tidak bersikap agar dapat diterima.” After evaluating the alternatives, the experts agreed to retain the synthesized version (T12). For Items 4, 5, and 6, version T12 was adopted as the pre-final version since no alternative wordings were suggested for the items. In the pretesting phase, for item 3, 3 out of 7 participants expressed confusion or a lack of understanding of the statement. For item 5, 5 out of 7 participants felt confused and misunderstood the statement, focusing on the victim’s perspective that bullying causes students to feel inferior. In this context, participants were unable to understand, from the perpetrator’s perspective, that the statement serves as the justification for bullying. Therefore, the wording of items 3 and 5 was revised, as presented in Table 3.

Table 4 presents the results of content validity based on assessments by 8 experts. The answer choices were set at 5, ranging from “very irrelevant” to “very

relevant." Referring to the criteria table established by Aiken (1985), with a rating of  $n = 8$  and a choice of  $c = 5$ , the minimum criteria obtained were .75 (5% error rate) or .81 (1% error rate). The Aiken values for all six items were above .81, ranging from .844 to .969, since the items were declared valid.

**Table 5.**  
*Univariate Normality Test Results*

Item	Mean	Variance	Skewness	Kurtosis
Item 1	2.525	3.605	1.041	-.074
Item 2	1.96	2.616	1.817	2.415
Item 3	3.475	3.844	.282	-1.047
Item 4	2.355	3.193	1.184	.275
Item 5	2.306	3.388	1.288	.410
Item 6	1.904	2.532	1.904	2.691

**Table 6.**  
*Item parameter of moral disengagement scale*

Item	Factor loading	CR > .7	AVE > .5
		.769	.363
Item 1	.564		
Item 2	.650		
Item 3	.412		
Item 4	.695		
Item 5	.530		
Item 6	.711		

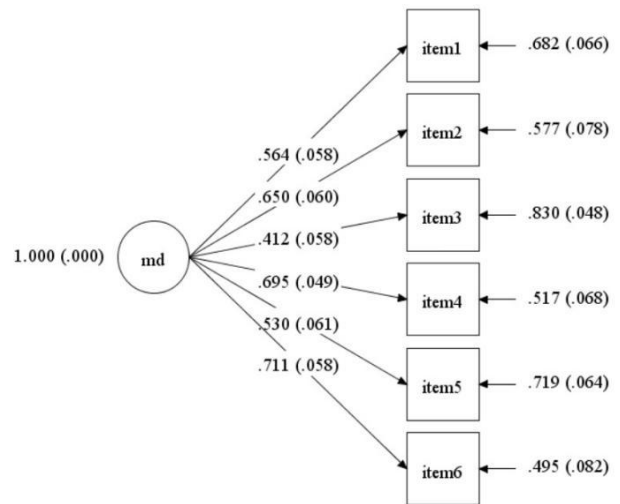
**Confirmatory Factor Analysis**

Table 5 presents the results of the univariate normality test. The skewness values for all items ranged from .282 to 1.904, while the kurtosis values ranged from -1.047 to 2.691. According to the criteria of West et al. (1995), skewness values  $< |2|$  and kurtosis  $< |7|$  show that the data are univariately normally distributed. The multivariate normality test using the Mardia test shows that the data are not multivariately normally distributed (Mardia’s skewness = 14.46,  $p < .05$ ; Mardia’s kurtosis = 70.56,  $p < .05$ ). Parameter analysis and model fit testing were estimated using MLR (maximum likelihood robust) to address the violation of the normality assumption.

The CFA results show that the scale has an acceptable fit model on all three established criteria ( $\chi^2 = 11.857$ ,  $df = 9$ ; RMSEA = .032; CFI = .988; TLI = .980; SRMR = .032). The CFI and RMSEA values have been able to meet the stricter criteria, namely CFI  $> .95$  and RMSEA  $< .06$  (Hu & Bentler, 1999). In addition, the factor loadings range from .41 to .71, which are considered significant because the values are  $> .40$  (Brown, 2015).

The CFA model consisting of 6 positive items is a measurement model for the MD construct that fits the analysis data including bystander bullying participants from middle school students aged 11-17 years. This confirms the same measurement model as proposed by the developers of this measuring

instrument, namely Thornberg and Jungert (2013). In terms of factor loadings, this instrument is valid for measuring MD, with a factor loading above .40. The item most strongly reflecting MD in bullying is number 6: “Beberapa orang pantas untuk dirundung”.



**Figure 1.** Path diagram of the Indonesian version of the short MDBS

The item with the lowest factor loading value, at .412, is 3, which reads: “Satu hal baik dari perundungan adalah korban menjadi belajar bagaimana berperilaku yang dapat diterima ataupun tidak”. The low factor loading for this item is due to the psychological nature of the statement, which triggers a high level of cognitive ambiguity among Indonesian adolescents, a phenomenon related to differences in collective culture. In the original scale of Thornberg and Jungert (2013), this item measures the mechanism of moral justification, namely the effort to transform cruel bullying behavior into something that seems useful or has a noble purpose. In Indonesia, the culture of victim blaming or justifying suffering as a life test or a moment of maturity is quite strong in society. Adolescents who agree with the concept will answer "Strongly Agree," while those who have received anti-bullying education will answer "Strongly Disagree." This sharp polarization in adolescents' answers triggers the high error variance.

Compared to other items, item 3 has the longest sentence structure. The complexity of the sentence can create cognitive load. For example, “Satu hal baik dari perundungan...” requires adolescents to make complex logical leaps. This confusion leads to inconsistent responses, weakening the item's binding factor to the MD construct of the bullying context. Evidence of convergent validity and reliability of the adapted scale is presented in Table 6. The composite reliability (CR) value of .769 ( $> .70$ ) is not very high, showing that the measuring instrument is considered reliable or can be relied upon to measure MD. The average variance extracted value of .363 falls short of the criterion of

>.50, showing unsatisfactory convergent validity. In this context, some argue that meeting the CR value is sufficient to assess reliability, because the AVE value is often difficult to achieve (Malhotra & Dash, 2011).

An AVE value below the standard ideal threshold of .50 shows that the variance explained by the latent construct is smaller than the error variance. Despite the low value, this model remains valid and can be maintained because the low AVE is not due to structural or item wording errors, since the feasibility of content validity (Aiken's V) and the model fit framework have been met. The low AVE value is strongly suspected to be influenced by the sensitivity issue of the MD construct in the context of bullying when applied to the Indonesian adolescent population through the self-report method. This is related to the differences in the instrument's origin and the target culture because the scale is cross-culturally adapted from Sweden. In the latest reconstruction made by Akaliyski et al. (2025) of Hofstede's previous cultural dimensions, Sweden is ranked first (score 75.7) as the most individualistic country, while Indonesia adheres to a collectivistic culture in 13th place (score 33.9) when reviewing the cultural dimensions differentiated into individualism and collectivism. This difference in cultural orientation leads Indonesian adolescents to interpret MD items differently, thereby increasing error variance. In Indonesian adolescents, collectivist culture has formed a psychological characteristic that makes students more susceptible to social desirability bias when responding to the sensitive issue of bullying (Lavidas et al., 2022). Therefore, answers are unconsciously manipulated to avoid appearing "guilty" or "supportive of bullying" and maintain social image. This instrument has reported reliable internal consistency for mapping the dynamics of MD in adolescent subjects with a CR value of .769 (> .70).

A more in-depth analysis at the item descriptive level provides crucial psychometric insights into Item 3. In this context, the item obtained the lowest factor loading in the CFA, the largest mean and variance, as well as the smallest skewness (close to zero). Psychometrically, the smallest skewness suggests that Item 3 has the highest degree of symmetrical response distribution. Other items were skewed by social desirability bias, in which adolescents overwhelmingly focused on rejecting bullying. Item 3 successfully minimized the bias, resulting in a balanced distribution of responses across both sides. This captures a rich and natural diversity of opinions (variance), whose pattern differs from the other homogeneous items due to normative bias. From the perspective of Albert Bandura's Social Cognitive Theory (2016), the high mean score on the symmetrical item shows that the Moral Justification mechanism is widely accepted in the cognition of Indonesian adolescents. Within a

collectivist cultural context that accepts the notion of "learning from conflict," adolescents may respond to the item more openly and honestly without perceiving the responses as an endorsement of bullying.

### Measurement Invariance

The measurement invariance results using MIMIC showed acceptable model fit indices for the established criteria ( $\chi^2 = 25.096$ ,  $df = 24$ ; RMSEA = .012; CFI = .996; TLI = .995; SRMR = .033). Therefore, the proposed model regarding the influence of covariate variables (gender and class) on MD is supported by empirical data. Data analysis reported insignificant results (Table 7) since gender and class do not differ in MD level. In this context, the Moral Disengagement scale does not vary across gender and class variables. In line with the aim of this study to adapt and validate the Indonesian version of the Brief MDDBS, MD was adequately represented by a six-item unidimensional model. Furthermore, the Indonesian version uses a seven-point response scale, a format considered optimal by Taherdoost (2019) since excessively short response scales may be less effective in capturing individual differences.

Short scales are advantageous since limited time is required from respondents. However, very short scales can compromise reliability (Morgado et al., 2017). In this study, the prediction was not confirmed because the adapted 6-item short scale showed good internal reliability (CR = .769). However, the methodological dilemma posed by the trade-off was acknowledged between scale brevity and construct validity (Crede et al., 2012). The use of the 6-item short version of Thornberg and Jungert's (2013) Short Moral Disengagement Scale in Bullying was selected due to the efficiency of accounting for adolescents' limited attention span. The construct was underrepresented since the six items had to summarize the theoretical domain of MD. This study did not conduct an exploratory factor analysis (EFA) and was primarily used for scale development. Therefore, EFA should not be used as a rigorous verification of a theoretical model as a method to verify the factorial adequacy of the translated scale with reference to the original (Roberson et al., 2014). This was supported by other opinions stating that CFA methods were suitable for cross-cultural studies and testing the fit between predetermined theoretical models (Gronier, 2022). MD manifested differently across different contexts (Bandura, 2016). This study addressed the need by adapting a MD scale specifically for the context of bullying.

Based on the description above, bullying peaks at the junior high school level (ages 12–15) and declines toward the end (Hymel & Swearer, 2015). Therefore, this study addresses the need for a specific measurement tool for students at the educational level,

Table 7.

*The effect of Covariates on Moral Disengagement*

Effect		Standardized Estimate	S.E.	z-value	p-value
Moral disengagement	← Gender	-.091	.066	-1.368	.171
Moral disengagement	← Grade 7	.089	.069	1.279	.201
Moral disengagement	← Grade 8	.055	.072	.765	.445

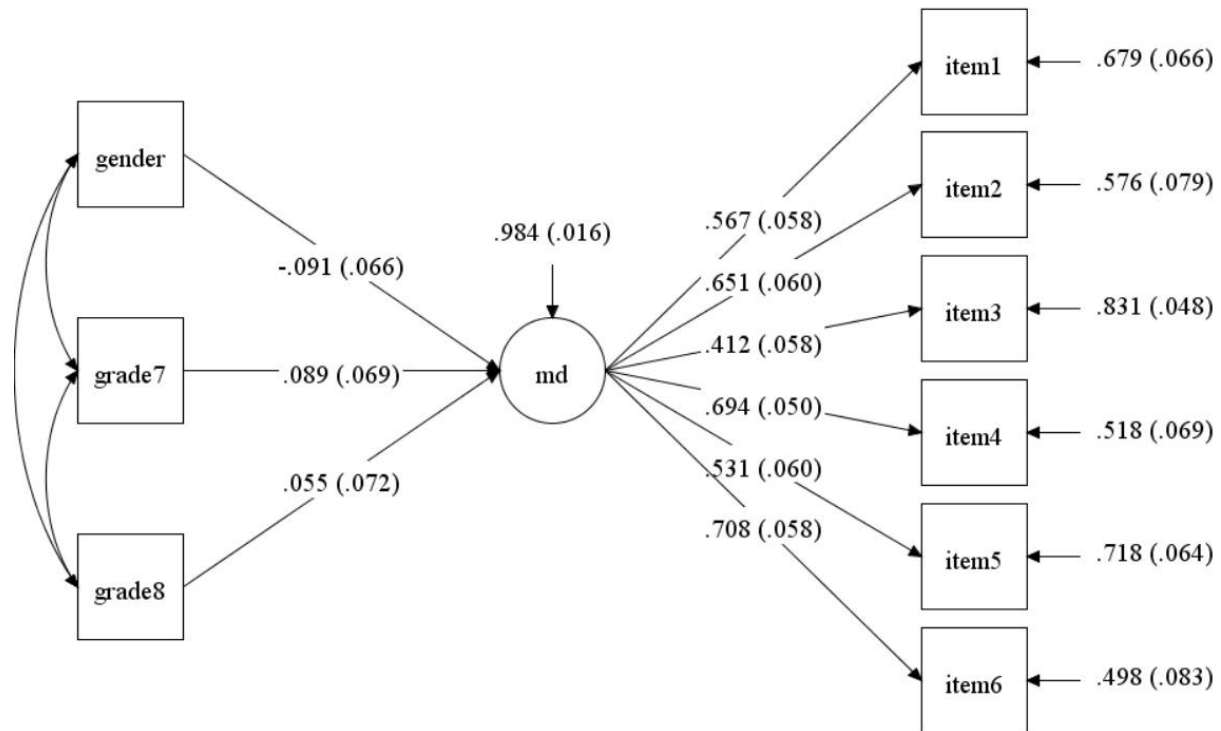


Figure 2. MIMIC model showing the impact of covariates on the moral disengagement

which is considered the peak period for bullying. Another result related to bystander behavior shows that the tendency to defend victims declines between sixth and eighth grade (Suchy et al., 2015). The coexistence of peak bullying rates and a reduction in victim-defending behavior during the developmental period may be associated with MD, showing the importance of assessing MD in the context of bullying among adolescents in this age range. In the original version (Thornberg & Jungert, 2013; Thornberg et al., 2023), this scale was intended for subjects aged 9 to 20 years. Therefore, this measurement tool can reach a wide range of individuals, from upper elementary (grades 4, 5, and 6), middle, and high school students, as well as first- or second-year university students. The results strengthen the use of this scale for junior high school students or equivalent, aged 11–17 years.

Future studies can re-examine the Indonesian version of the short form adaptation of the MDBS with a wider group of subjects in Indonesia, covering several levels of education. The importance of testing a specific measurement tool for bullying is based on the need to examine the MD behind the behavior. This is

because the behavior is reported to occur at every level of education, starting from preschool students (Vlachou et al., 2011), elementary school (Thornberg et al., 2023), junior high school (DiRussa et al., 2023; Georgiou et al., 2022; Kyrrestad et al., 2023; Pascual-Sanchez et al., 2022), senior high school (Hamzah, 2023; Topcu, 2014), and university (Ibrahim et al., 2024; Tigh, 2023).

A CR value of 0.769 was reported (Raykov, 1997) in line with previous studies (Thornberg & Jungert, 2013; Thornberg et al., 2023), which reported Cronbach's  $\alpha$  values of 0.83 and 0.80, respectively. Based on the criteria proposed by Hair et al. (2009), a Cronbach's  $\alpha$  value of 0.70 or higher is categorized as good reliability. Therefore, this adaptation scale has relatively good reliability among students in Indonesia. A measurement should be independent of other unmeasured constructs. This is because high or low scores obtained by individuals are only influenced by the construct measured. Scales susceptible to population heterogeneity obtain biased measurement results (Widhiarso, 2012). The measurement invariance test showed that the scale produced

consistent scores across male and female students as well as those in grades 7, 8, and 9. In this context, high or low scores are influenced by the measured construct and are independent of other unmeasured attributes, namely gender and grade.

The very high model fit (CFI .988; RMSEA .032) and the achievement of measurement invariance provide theoretical evidence that the conceptual structure of MDDBS constructed by [Thornberg and Jungert \(2013\)](#) is universal. The cognitive structure of MD operates in a similar pattern within adolescents in Sweden (individualist) and Indonesia (collectivist). This result can be viewed theoretically as a new contribution, even though statistically seen as evidence of weak convergent validity. This emphasizes the contextual limitations of the theory when applied to collectivist societies such as Indonesia. In collectivist cultures, adolescents' moral responses cannot be separated from a bias to protect the group image.

The relatively low factor loading of Item 3 on the moral justification dimension (.41), which frames bullying as part of the victim's learning process, may reflect the influence of collectivist cultural values. In cultures that emphasize social harmony, rationalizations of suffering can affect the distinction between individual MD and the internalization of socially endorsed norms. From this perspective, the results challenge the psychometric assumption that high error variance necessarily shows item weakness. For constructs such as MD, greater variance may capture adolescents' cognitive ambiguity when navigating the tension between universal moral principles and culturally embedded social expectations. This result reports the need to refine and reconceptualize the MD construct to better accommodate the cultural nuances of collectivist societies. This study has several limitations, particularly issues of convergent validity from biases in the use of self-report scales. In future studies, several steps taken to address the major limitation include modifying the statements on the self-report scales into short story scenarios (vignettes) relevant to adolescents' daily lives, or supplementing the self-assessment scale results with assessments from other parties such as friends, teachers, or parents.

Several limitations of this study should be acknowledged. First, MD in the context of bullying was not assessed using an alternative validated instrument. Therefore, the concurrent validity of the adapted scale could not be examined. Second, measurement invariance was tested only across gender and grade level, leaving other potentially relevant participant characteristics unexplored, such as residential status (living at home or in a dormitory), school type, and other demographic factors. Third, the sample was drawn from a limited number of schools located in

several cities and districts within West Java Province, restricting the generalizability of the result to broader populations. These limitations suggest that further studies should measure similar scales, including MDS (Moral Disengagement Scale) and MDTC (Moral Disengagement Through Cyberbullying) from [Hymel et al. \(2015\)](#) and [Bussey et al. \(2015\)](#), respectively. Further study is recommended to include several covariate variables in the measurement invariance test and to expand the area to accurately reflect the condition of MD.

## Conclusion

In conclusion, the psychometric testing results show that the adaptation and validation of the moral disengagement scale for bullying developed by [Thornberg and Jungert \(2013\)](#) in Sweden successfully maintained the instrument's original structure. In the initial stage, content validity using Aiken's V index was deemed feasible based on the expert panel's assessment, where the statement items were appropriate for the target linguistic and cultural context, namely Indonesia. The measurement model was found to be appropriate for the empirical data, with good internal consistency and robustness to gender and age-group differences. The low AVE value was understood as a contextual impact of the cross-cultural adaptation of the self-report scale to sensitive topics. The shift in social norms from the instrument's individualistic origin culture (Sweden) to the collectivistic target culture (Indonesia), with the psychological characteristics of adolescents susceptible to social desirability bias, led to high error variance. Considering the construct's high model fit and strong reliability, the adapted scale was valid, reliable, and ready for use to measure MD in bullying situations among Indonesian adolescents. This scale was easy to use for junior high school students with 6 items. The content was concise but provided a comprehensive understanding of the mechanisms underlying individual MD in bullying situations.

## Declaration

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### Author Contributions

INH: Conceptualization, Methodology, Data Collection, Data Analysis; WNIWH: Conceptualization, Methodology and Approval for publication

### Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Use of Artificial Intelligence

The authors declare that no Artificial Intelligence (AI) or AI-assisted technologies were used in the creation of this manuscript.

### Ethical Clearance

The study protocol was approved by the Institutional Review Board (IRB) of the Research Management & Innovation Centre (RMIC) at Sultan Idris Education University Malaysia, under number UPSI/PPPI/PYK/ETIKA(M)/Jld.20(56), dated January 2, 2025.

### Data Availability

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

### References

- Aiken, L. R. (1985). Three coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement*, 45(1), 131–142.
- Aisy, R., Prihatiningsih, R., & Rahman, D. H. (2024). The effectiveness of sociodrama techniques in preventing moral disengagement tendencies in high school students. *Enlighten: Jurnal Bimbingan Konseling Islam*, 7(1), 64–81. <https://doi.org/10.32505/enlighten.v7i1.8864>
- Akaliyski, P., Vignoles, V. L., Welzel, C., & Minkov, M. (2025). Individualism–collectivism: Reconstructing Hofstede’s dimension of cultural differences. *Journal of Personality and Social Psychology: Personality Processes and Individual Differences*, 130(2), 308–356. <https://doi.org/10.1037/pspp0000580>
- Appelbaum, M., Cooper, H., Kline, R. B., Mayo-Wilson, E., Nezu, A. M., & Rao, S. M. (2018). Journal article reporting standards for quantitative research in psychology: The APA Publications and Communications Board task force report. *The American psychologist*, 73(1), 3–25. <https://doi.org/10.1037/amp0000191>
- Badan Pusat Statistik (BPS) (2024). *Indikator tujuan pembangunan berkelanjutan Indonesia 2024* (Vol. 8). Badan Pusat Statistik.
- Bandura, A. (2016). *Moral disengagement: How people do harm and live with themselves*. Worth.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, 71(2), 364–374.
- Bauman, S., & Pero, H. (2011). Bullying and cyberbullying among deaf students and their hearing peers: An exploratory study. *Journal of Deaf Studies and Deaf Education*, 16(2), 236–253. <https://doi.org/10.1093/deafed/enq043>
- 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.
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research*. The Guilford Press.
- Bussey, K., Fitzpatrick, S., & Raman, A. (2015). The role of moral disengagement and self-efficacy in cyberbullying. *Journal of School Violence*, 14(1), 30–46. <https://doi.org/10.1080/15388220.2014.954045>
- Bussey, K., & Luo, A. (2024). Mindfulness as a moderator between the association of moral disengagement and cyberbullying. *International Journal of Bullying Prevention*. <https://doi.org/10.1007/s42380-024-00256-3>
- Cabrera, M. C., Larrañaga, E., & Yubero, S. (2020). The role of emotions, moral disengagement and gender in supporting victims of bullying. *Education Sciences*, 10(12), Article 365. <https://doi.org/10.3390/educsci10120365>
- Caravita, S. C. S., Gini, G., & Pozzoli, T. (2012). Main and moderated effects of moral cognition and status on bullying and defending. *Aggressive Behavior*, 38(5), 456–468. <https://doi.org/10.1002/ab.21447>
- Credé, M., Harms, P., Niehorster, S., & Gaye-Valentine, A. (2012). An evaluation of the consequences of using short measures of the Big Five personality traits. *Journal of Personality and Social Psychology*, 102(4), 874–888. <https://doi.org/10.1037/a0027403>
- Cruchinho, P., López-Franco, M. D., Capelas, M. L., Almeida, S., Bennett, P. M., da Silva, M. M., Teixeira, G., Nunes, E., Lucas, P., & Gaspar, F. (2025). Translation, cross-cultural adaptation, and validation of measurement instruments: A practical guideline for novice researchers. *Journal of Multidisciplinary Healthcare*, 18, 2701–2728. <https://doi.org/10.2147/JMDH.S419714>
- DeSmet, A., Bastiaensens, S., Van Cleemput, K., Poels, K., Vandebosch, H., Cardon, G., & De Bourdeaudhuij, I. (2016). Deciding whether to look after them, to like it, or leave it: A multidimensional analysis of predictors of positive and negative bystander behavior in cyberbullying among adolescents. *Computers in*

- Human Behavior*, 57, 398–415. <https://doi.org/10.1016/j.chb.2015.12.051>
- DiRussa, C., Coyle-Eastwick, S., & Jeyanayagam, B. (2023). The bystander intervention model and bystander behavior: The impact of school climate on students' likeliness to intervene in bullying. *International Journal of Bullying Prevention*. <https://doi.org/10.1007/s42380-023-00178-6>
- Effendi, E. A., & Juniarly, A. (2022). Kaitan moral disengagement dan aggressive driving behavior: Tinjauan pada remaja pengendara sepeda motor. *Personifikasi: Jurnal Ilmiah Psikologi*, 13(2), 137–150. <https://doi.org/10.21107/personifikasi.v13i2.17375>
- Georgiou, S. N., Charalampous, K., & Stavrinides, P. (2022). Moral disengagement and bullying at school: Is there a gender issue? *International Journal of School & Educational Psychology*, 10(3), 395–407. <https://doi.org/10.1080/21683603.2020.1859421>
- Gholiyah, Y. D., Nashori, F., & Diana, R. R. (2021). The effect of empathy to bystander's role towards bullying at school through moral disengagement as a mediator. *Communications in Humanities and Social Sciences*, 1(1), 16–23. <https://doi.org/10.21924/chss.1.1.2021.11>
- Gronier, G. (2022). Psychometric analyses in the transcultural adaptation of psychological scales. Dalam *Psychometrics - New insights in the diagnosis of mental disorders*. IntechOpen.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7th ed.). Prentice-Hall.
- Hamzah, A. A. (2023). *Predictors of bullying behaviors among adolescents in Saudi Arabia: The role of self-esteem, emotional intelligence, and moral disengagement* [Unpublished doctoral dissertation]. Andrews University.
- Hikmah, A. T., & Marastuti, A. (2020). Peran moral disengagement dan kepemimpinan etis terhadap intensi korupsi pada pegawai negeri sipil. *Gajah Mada Journal of Psychology*, 6(2), 132–150. <https://doi.org/10.22146/gamajop.54178>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Hymel, S., Rocke-Henderson, N., & Bonanno, R. A. (2005). Moral disengagement: A framework for understanding bullying among adolescents. *Journal of Social Sciences*, 8, 1–11.
- Hymel, S., & Swearer, S. M. (2015). Four decades of research on school bullying: An introduction. *American Psychologist*, 70(4), 293–299.
- Ibrahim, F. M., Dabou, E. A. R., AbdelSamad, S., & Abuijlan, I. A. M. (2024). Prevalence of bullying and its impact on self-esteem, anxiety and depression among medical and health sciences university students in RAS Al Khaimah, UAE. *Heliyon*, 10, Article e25063. <https://doi.org/10.1016/j.heliyon.2024.e25063>
- International Test Commission. (2018). ITC guidelines for translating and adapting tests (2nd ed.). *International Journal of Testing*, 18(2), 101–134. <https://doi.org/10.1080/15305058.2017.1398166>
- Jeong, R., Demaray, M. K., & Styck, K. M. (2024). Development of the moral disengagement bullying behavior scale. *International Journal of Bullying Prevention*. <https://doi.org/10.1007/s42380-023-00206-5>
- Killer, B., Bussey, K., Hawes, D. J., & Hunt, C. (2019). A meta-analysis of the relationship between moral disengagement and bullying roles in youth. *Aggressive Behavior*, 45(4), 450–462. <https://doi.org/10.1002/ab.21833>
- Kyrrestad, H., Kaiser, S., & Fossum, S. (2023). Frequency of bullying and cyberbullying victimization and associated factors among Norwegian adolescents. *International Journal of Bullying Prevention*. <https://doi.org/10.1007/s42380-023-00182-w>
- Lavidas, K., Papadakis, S., Manesis, D., Grigoriadou, A. S., & Gialamas, V. (2022). The effects of social desirability on students' self-reports in two social contexts: Lectures vs. lectures and lab classes. *Information*, 13(10), Article 491. <https://doi.org/10.3390/info13100491>
- Lo Cricchio, M. G., García-Poole, C., te Brinke, L. W., Bianchi, D., & Menesini, E. (2020). Moral disengagement and cyberbullying involvement: A systematic review. *European Journal of Developmental Psychology*, 18(2), 271–311. <https://doi.org/10.1080/17405629.2020.1782186>
- Lubis, A. Y., Mikarsa, H. L., & Andriani, I. (2022). Mediation of moral disengagement on cyberbullying perpetration influenced by emotional intelligence and anonymity of Indonesian adolescents on social media. *Russian Psychological Journal*, 19(4), 231–242. <https://doi.org/10.21702/rpj.2022.4.15>
- Luo, A., & Bussey, K. (2022). Mediating role of moral disengagement in the perpetration of cyberbullying by victims and bystanders.

- Journal of Adolescence*, 94(8), 1142–1149. <https://doi.org/10.1002/jad.12092>
- Malhotra, N. K., & Dash, S. (2011). *Marketing research: An applied orientation*. Pearson Publishing.
- Mayangsari, D. (2015). *Uji validitas konstruk instrumen moral disengagement. (Catatan: Referensi tidak lengkap, silakan tambahkan nama penerbit/institusi atau detail jurnal/konferensi)*.
- Morgado, F. F., Meireles, J. F., Neves, C. M., Amaral, A. C., & Ferreira, M. E. (2017). Scale development: Ten main limitations and recommendations to improve future research practices. *Psicologia: Reflexão e Crítica*, 30(1), Article 3. <https://doi.org/10.1186/s41155-016-0057-1>
- Mulyana, A., Kardinah, N., & Afiati, N. A. (2024). Pengaruh locus of control dan boredom terhadap moral disengagement pada santri. *PSISULA: Prosiding Berkala Psikologi*, 6.
- Muthén, L. K., & Muthén, B. O. (2002). How to Use a Monte Carlo Study to Decide on Sample Size and Determine Power. *Structural Equation Modeling*, 9, 599–620. [https://doi.org/10.1207/S15328007SEM0904\\_8](https://doi.org/10.1207/S15328007SEM0904_8)
- Natalia, J., Wijaya, A., Liesera, N., & Hutapea, B. (2015). Moral disengagement and plagiarism among undergraduate students [Paper presentation]. International Conference on Educational Research and Innovation (ICERI 2015).
- Octavia, D., Sari, R. M., Merdekawati, D., Marisdayana, R., & Yuliyana, R. (2022). The correlation between parental communication pattern, self-esteem, and moral disengagement with cyberbullying behavior in early adolescents: A cross-sectional study. *Jurnal Ners*, 17(1), 42–46. <https://doi.org/10.20473/jn.v17i1.24539>
- Olweus, D. (2013). School bullying: Development and some important challenges. *Annual Review of Clinical Psychology*, 9, 751–780. <https://doi.org/10.1146/annurev-clinpsy-050212-185516>
- Pascual-Sanchez, A., Mateu, A., Martinez-Herves, M., Hickey, N., Kramer, T., & Nicholls, D. (2022). How are parenting practices associated with bullying in adolescents? A cross-sectional study. *Child and Adolescent Mental Health*, 27(3), 223–231. <https://doi.org/10.1111/camh.12475>
- Perren, S., & Gutzwiller-Helfenfinger, E. (2012). Cyberbullying and traditional bullying in adolescence: Differential roles of moral disengagement, moral emotions, and moral values. *European Journal of Developmental Psychology*, 9(2), 195–209. <https://doi.org/10.1080/17405629.2011.643168>
- Pozzoli, T., Gini, G., & Vieno, A. (2012). Individual and class moral disengagement in bullying among elementary school children. *Aggressive Behavior*, 38(5), 378–388.
- Raykov, T. (1997). Estimation of composite reliability for congeneric measures. *Applied Psychological Measurement*, 21(2), 173–184. <https://doi.org/10.1177/01466216970212006>
- Rifani, E., Sugiyo, S., & Purwanto, E. (2021). The mediation effect of moral disengagement on spiritual religious attitudes and academic dishonesty among guidance and counseling students. *Islamic Guidance and Counseling Journal*, 4(1). <https://doi.org/10.25217/igcj.v4i1.1147>
- Roberson, R. B., Elliott, T. R., Chang, J. E., & Hill, J. N. (2014). Exploratory factor analysis in rehabilitation psychology: A content analysis. *Rehabilitation Psychology*, 59(4), 429–438. <https://doi.org/10.1037/a0037899>
- Sirca, C. L., & Billen, E. (2024). Predicting academic dishonesty: The role of psychopathic traits, perception of academic dishonesty, moral disengagement and motivation. *Journal of Academic Ethics*, 22, 489–503. <https://doi.org/10.1007/s10805-024-09506-x>
- Sticca, F., Ruggieri, S., Alsaker, F., & Perren, S. (2013). Longitudinal risk factors for cyberbullying in adolescence. *Journal of Community & Applied Social Psychology*, 23(1), 52–67. <https://doi.org/10.1002/casp.2136>
- Suchy, C. M., Tomasino, E. K., & Jenkins, L. N. (2015). Types of defending behaviors among late elementary and middle school students. Dalam *Proceedings of the National Conference on Undergraduate Research (NCUR) 2014*. University of Kentucky.
- Sunawan, S., Sutoyo, A., Nugroho, I. S., & Susilawati, S. (2023). Prediction of moral disengagement and incivility against the honesty of junior high school students. *Bulletin of Counseling and Psychotherapy*, 5(1). <https://doi.org/10.51214/bocp.v5i1.424>
- Susilawati, S., Wibowo, M., & Sunawan, S. (2019). Moral disengagement and classroom incivility against the social responsibility character of junior high school students. *Islamic Guidance and Counseling Journal*, 3(1). <https://doi.org/10.25217/igcj.v3i1.661>
- Taherdoost, H. (2019). What is the best response scale for survey and questionnaire design: Review of different lengths of rating scale/ attitude scale/ likert scale. *International Journal of Academic Research in Management*, 8(1), 1–12.

- Tahrir, Nurdin, F. S., & Damayanti, I. R. (2020). The role of critical thinking as a mediator variable in the effect of internal locus of control on moral disengagement. *International Journal of Instruction*, 13(1), 17–34. <https://doi.org/10.29333/iji.2020.1312a>
- Tanrikulu, I., & Campbell, M. (2015). Correlates of traditional bullying and cyberbullying perpetration among Australian students. *Children and Youth Services Review*, 55, 138–146. <https://doi.org/10.1016/j.chilyouth.2015.06.001>
- Thornberg, R. (2023). Longitudinal link between moral disengagement and bullying among children and adolescents: A systematic review. *European Journal of Developmental Psychology*, 20(6), 1099–1129. <https://doi.org/10.1080/17405629.2023.2191945>
- Thornberg, R., & Jungert, T. (2013). Bystander behavior in bullying situations: Basic moral sensitivity, moral disengagement and defender self-efficacy. *Journal of Adolescence*, 36(3), 475–483. <https://doi.org/10.1016/j.adolescence.2013.02.003>
- Thornberg, R., & Jungert, T. (2014). School bullying and the mechanisms of moral disengagement. *Aggressive Behavior*, 40(2), 99–108. <https://doi.org/10.1002/ab.21509>
- Tigh, M. (2023). Bullying in higher education: An endemic problem? *Tertiary Education and Management*, 29, 123–137. <https://doi.org/10.1007/s11233-023-09124-z>
- Tolmatcheff, C., Galand, B., Roskam, I., & Veenstra, R. (2022). The effectiveness of moral disengagement and social norms as anti-bullying components: A randomized controlled trial. *Child Development*, 93(6), 1873–1888. <https://doi.org/10.1111/cdev.13828>
- Topcu, C. (2014). *Modeling the relationships among coping strategies, emotion regulation, rumination, and perceived social support in victims of cyber and traditional bullying* [Unpublished doctoral dissertation]. Middle East Technical University.
- UNESCO. (2023, September). *Official list of SDG 4 indicators*. UNESCO.
- Vlachou, M., Andreou, E., Botsoglou, K., & Didaskalou, E. (2011). Bully/victim problems among preschool children: A review of current research evidence. *Educational Psychology Review*, 23, 329–358. <https://doi.org/10.1007/s10648-011-9153-z>
- Wang, X., Yang, L., Yang, J., Wang, P., & Lei, L. (2017). Trait anger and cyberbullying among young adults: A moderated mediation model of moral disengagement and moral identity. *Computers in Human Behavior*, 73, 519–526. <https://doi.org/10.1016/j.chb.2017.03.073>
- West, S. G., Finch, J. F., & Curran, P. J. (1995). Structural equation models with nonnormal variables: Problems and remedies. Dalam R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (hlm. 56–75). Sage.
- Widhiarso, W. (2012). Penerapan model MIMIC untuk menguji konsistensi hasil pengukuran melalui skala. *Journal of Education and Learning*, 6(2), 109–118.
- Wise, T., & Sidarus, N. (2025). Reducing the burden of psychological questionnaire measures through selective item re-weighting. *Royal Society Open Science*, 12, Article 241857. <https://doi.org/10.1098/rsos.241857>
- Yang, X., Wang, Z., Cheng, H., & Liu, D. (2018). Cyberbullying perpetration among Chinese adolescents: The role of interparental conflict, moral disengagement, and moral identity. *Children and Youth Services Review*, 86, 256–263. <https://doi.org/10.1016/j.chilyouth.2018.02.003>
- Yemima, C. K., & Purnama, D. S. (2024). Moral disengagement as a predictor of bullying behavior of adolescent students [Paper presentation]. The Asian Conference on Education 2024.