

Adaptation and Validation of the Indonesian Version of the Environmental Cynicism Scale

Adaptasi dan Validasi Alat Ukur Sinisme Lingkungan Versi Indonesia

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ABSTRACT

Environmental cynicism refers to distrust of the motives underlying environmental conservation efforts. In Indonesia, research on this phenomenon remains limited, largely because no instrument has been systematically adapted for the local context. Following the International Test Commission (ITC) guidelines, this study translated and adapted the Environmental Cynicism Scale (ECS) for use in Indonesia. University students were recruited through convenience sampling. The adaptation process included forward-backward translation, expert evaluation of content validity, and assessment of response process validity to ensure alignment with the intent of the original instrument. The findings showed that the ECS items were relevant and easy for respondents to understand. Confirmatory factor analysis supported a unidimensional measurement model, with acceptable factor loadings and satisfactory internal consistency. The Indonesian version of the ECS, which consists of six items, was valid and reliable for assessing environmental cynicism among university students in Indonesia. These findings provide a foundation for using the ECS in Indonesian environmental psychology research and offer directions for future studies on factors that shape individual engagement with environmental issues.

Keywords: adaptation; measurement tool; confirmatory factor analysis; students; psychometrics; environmental cynicism.

ABSTRAK

Sinisme lingkungan merupakan bentuk ketidakpercayaan terhadap motif di balik upaya pelestarian lingkungan. Di Indonesia, penelitian mengenai fenomena ini masih terbatas karena belum tersedianya alat ukur yang telah diadaptasi secara sistematis. Mengacu pada pedoman International Test Commission (ITC), penelitian ini bertujuan mengalihbahasakan dan mengadaptasi Environmental Cynicism Scale (ECS) ke dalam bahasa Indonesia. Penelitian ini melibatkan responden mahasiswa yang dipilih menggunakan teknik convenience sampling. Proses adaptasi meliputi penerjemahan maju-mundur, penilaian validitas konten oleh ahli, serta evaluasi validitas proses respons untuk memastikan aitem dipahami sesuai tujuan alat ukur asli. Hasil analisis menunjukkan bahwa aitem-aitem ECS relevan dan mudah dipahami oleh responden. Analisis faktor konfirmatori mendukung kesesuaian model pengukuran satu dimensi dengan muatan faktor yang berada pada tingkat memadai, serta didukung oleh tingkat reliabilitas internal yang baik. Secara keseluruhan, ECS versi Indonesia yang terdiri dari enam aitem dinyatakan valid dan reliabel untuk mengukur sinisme lingkungan pada populasi mahasiswa di Indonesia. Temuan ini memberikan landasan awal bagi penggunaan ECS dalam riset psikologi lingkungan serta membuka peluang penelitian lanjutan terkait faktor-faktor yang memengaruhi keterlibatan individu dalam isu lingkungan.

Kata Kunci: adaptasi; alat ukur; analisis faktor konfirmatori; mahasiswa; psikometrika; sinisme lingkungan

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INTRODUCTION

Human behavior is a major driver of environmental problems (Cook et al., 2016; Steg and Vlek, 2009), including global warming, ecosystem degradation, biodiversity loss, and the increasing frequency of disasters such as floods, droughts, and wildfires (Calvin et al., 2023). Despite ongoing environmental degradation, some people continue to minimize or dismiss these problems, sometimes framing them as hoaxes or conspiracies (Haltinner and Sarathchandra, 2021). However, the success of mitigation efforts depends heavily on public participation (Leite et al., 2023), particularly from younger generations, who are often seen as key agents of change (Qazi et al., 2022; Whitley et al., 2018). Although younger people generally show positive attitudes toward environmental issues, their commitment to mitigation efforts often remains limited (Dewi and Atika Anggraini, 2022; Harding et al., 2018; Herlina et al., 2021). Consequently, identifying the factors that hinder youth engagement in environmental mitigation is essential (Benoit et al., 2022; Gifford and Nilsson, 2014).

Environmental cynicism (EC) is one psychological factor that may help explain this gap. EC derives from the broader concept of cynicism, which refers to a tendency to doubt the motives and integrity of others (Kanter & Mirvis, 1989). In the environmental domain, EC describes the belief that environmental protection efforts by governments, corporations, or activists are primarily symbolic, insincere, or manipulative (Semenescu et al., 2025).

Previous studies suggest that EC poses a substantial barrier to environmental conservation. Evidence from Asia shows a consistent pattern. In Hong Kong, social cynicism reduced people's attitudes toward and beliefs in the effectiveness of responses to environmental problems (Chan and Tam, 2021). In China, cynicism was also found to inhibit pro-environmental behavior (Yang and Liu, 2025).

The psychological basis of EC often lies in a sense of futility, or the belief that individual actions cannot meaningfully affect environmental outcomes. Pro-environmental behavior depends on the belief that personal actions matter and can contribute to broader social change (Ones et al., 2015). Environmental cynicism weakens this belief by fostering the perception that personal efforts are insignificant within the social, political, and economic complexity of the environmental crisis (Scott et al., 2016). This process aligns with learned helplessness theory, which states that repeated exposure to uncontrollable situations reduces initiative and motivation (Seligman, 1972).

Environmental cynicism may also weaken both social trust and institutional trust. Social capital theory emphasizes that trust in institutions supports collective cooperation and public support for policy (Putnam et al., 2004). Empirical research supports this argument. Levis dan Smith (2024) showed that trust in institutions responsible for environmental policy implementation is positively associated with pro-environmental behavior and policy support. By contrast, when people perceive institutions as incompetent or unresponsive, cynicism may intensify distrust and reduce public engagement. Ainscough et al. (2024) found that this distrust can produce reflexive impotence, defined as the belief that participation does not lead to meaningful change. Similarly, Schoene (2019) identified distrust as a barrier to public engagement. Together, these findings suggest that when people view mitigation efforts as ineffective, their motivation to participate declines (Scott et al., 2016).

In environmental psychology, climate change perception is commonly used to assess how individuals respond to climate-related issues and has already been adapted for use in Indonesia (Adiwena and Bramanwidyantari, 2024). However, climate change perception and EC do not capture the same construct. Climate change perception focuses on how individuals assess the risks and impacts of climate change.

Environmental cynicism, in contrast, focuses on distrust of the motives and effectiveness of the actors and institutions responsible for environmental action. As a result, a person may perceive climate change as serious while remaining unwilling to engage in pro-environmental behavior if they believe mitigation efforts will not produce meaningful results. This distinction supports the continued use of the Environmental Cynicism Scale (ECS), even when other environmental measures are available.

Research on EC in Indonesia remains scarce. Abraham *et al.* (2015) found that general cynicism positively predicted pro-environmental behavior among university students in Jakarta. This result may reflect the use of instruments that did not distinguish dysfunctional apathy from strategic cynicism, thereby producing an overly broad construct. The Environmental Cynicism Scale (ECS) addresses this limitation by specifically measuring negative attributions toward environmental actors and institutions rather than general skepticism. Adapting the ECS for Indonesia may therefore provide a more specific and contextually relevant instrument for assessing distrust in environmental conservation efforts.

Semenescu *et al.* (2025) developed the ECS as a validated instrument for assessing cynicism toward environmental issues. The scale captures distrust of environmental actors' motives, skepticism about the effectiveness of sustainability efforts, and the prioritization of personal interests over long-term environmental concerns. The ECS demonstrated strong psychometric performance, including high internal consistency ($\alpha = .94$) and adequate construct validity ($\chi^2(9) = 13.85$; CFI = 0.994; RMSEA = 0.053 [90% CI .000–.104]; SRMR = 0.018), across both general public and college student samples (Semenescu *et al.*, 2025).

The ECS was originally developed in English and validated with samples from the United Kingdom and the United States (Semenescu *et al.*, 2025). Although the original

study established strong psychometric properties, evidence from non-Western cultural contexts remains limited. Researchers should not apply psychological instruments across linguistic and cultural settings without proper adaptation (Muliadi *et al.*, 2025). Because Indonesia differs substantially from the original context of the ECS, a systematic adaptation process is necessary to achieve functional equivalence and to ensure that the Indonesian version measures the same construct reliably and validly as the original instrument (Epstein *et al.*, 2015).

The Standards for Educational and Psychological Testing (American Educational Research Association *et al.*, 2014) define test adaptation as the modification of an instrument to improve access and support valid score interpretation in the target population. Adaptation aims to establish equivalence in semantics, construct representation, administration, and score interpretation, thereby supporting valid and reliable use across cultural contexts (Van de Vijver, 2016). Translation alone is insufficient because it does not guarantee equivalence in content, difficulty, or psychometric performance (Hernández *et al.*, 2020). Consequently, adaptation of measurement instruments must be conducted rigorously to ensure that the adapted version measures the same construct in a manner consistent with the original (Hambleton *et al.*, 2004; Van de Vijver, 2016).

The International Test Commission (ITC, 2017) and the Standards for Educational and Psychological Testing (American Educational Research Association *et al.*, 2014) outline methodological guidelines for instrument adaptation. This process necessitates collecting validity evidence from multiple sources: (1) evidence based on test content, such as expert evaluation; (2) evidence based on the response process, for example, cognitive interviews; (3) evidence based on internal structure, including analyses of dimensionality, reliability, and measurement invariance; (4) evidence based on relationships with other variables, such as convergent and discriminant validity; and (5)

evidence based on the consequences of test use, which evaluates the impact of the instrument's application on the target population.

Indonesia currently lacks a standardized instrument for measuring EC. Adapting the ECS to Indonesian is therefore necessary. A rigorously adapted Indonesian version would allow researchers to assess EC more accurately and meaningfully. Accordingly, this study aimed to adapt the ECS into Indonesian by following the Guidelines for Translating and Adapting Tests (ITC, 2017). This process was expected to produce a version of the ECS that is conceptually equivalent to the original and suitable for future research on environmental cynicism in Indonesia.

RESEARCH METHOD

This study used qualitative and quantitative methods to adapt the Indonesian version of the Environmental Cynicism Scale (ECS) and to gather validity evidence. The study collected evidence based on test content, response processes, and internal structure (American Educational Research Association et al., 2014)

Participant

The study involved Indonesian university students aged 18 years or older. Three experts in environmental psychology and psychometrics participated in the expert judgment stage to evaluate content validity. They assessed item relevance, linguistic appropriateness, and alignment with the Indonesian sociocultural context. Subsequently, 11 students participated in a pilot readability test to provide evidence based on response processes.

To evaluate internal structure, the study recruited 319 students through convenience sampling. Participants ranged in age from 18 to 23 years, with a mean age of 19.58 years ($SD = 1.51$). This sample size was adequate for factor

analysis (Hair et al., 2019). Participants provided demographic information and completed the questionnaire online through social media platforms, including WhatsApp and Instagram, after providing informed consent. Table 1 summarizes their demographic characteristics.

Measurement Tools

The study used the ECS, developed by Semenescu et al. (2025), to assess environmental cynicism. The original instrument consisted of six items and demonstrated strong psychometric properties, including high internal consistency ($\alpha = .94$) and adequate construct validity, $\chi^2(9) = 13.85$, $CFI = 0.994$, $RMSEA = 0.053$, 90% CI [0.000, 0.104], and $SRMR = 0.018$. The original validation used samples from the United States and the United Kingdom and applied a 7-point Likert scale ranging from 1 (completely disagree) to 7 (completely agree), with 4 representing neutral. In the present study, the response format was changed to a 5-point Likert scale to reduce cognitive burden in the target population. The study adapted all six items to ensure contextual relevance and cross-cultural equivalence.

Research Procedure

This study followed the six guidelines for cross-cultural test adaptation proposed by the International Test Commission (2017). The first stage addressed preconditions, including compliance with intellectual property requirements. The researchers obtained formal permission from Semenescu et al. (2025) to translate and adapt the ECS.

The second stage involved test development through forward-backward translation. Six independent translators participated in this process, including three forward translators and three backward translators. All translators were proficient in English and had TOEFL scores above 500.

Table 1. Descriptive Statistics on the Demographic Characteristics of Participants

Variable	Category	<i>n</i>	%
Sex	Male	76	23.8
	Female	243	76.2
Age	18 – 20 years old	247	77.4
	21 – 23 years old	67	21.0
	> 23 years old	5	1.6
Semester	1 – 3	217	68.0
	4 – 6	58	18.2
	7 – 9	44	13.8
University of Origin	Public	148	46.4
	Private	171	53.6
Residence Location	Java Island	248	77.7
	Sulawesi Island	32	10.0
	Kalimantan Island	30	9.4
	Other	9	2.8
Type of Residence	Sharehome/Rental Housing	170	53.3
	Parents’/Guardians’ Home	135	42.3
	Student Dormitory	8	2.5
	Other	6	1.9
Description of Residential Area	Urban	197	61.8
	Suburban	77	24.1
	Rural	42	13.2
	Other	3	0.9
Total		319	100.0

An expert panel then evaluated content validity. The panel assessed whether the items adequately represented the construct of environmental cynicism within the Indonesian cultural context, in line with current validity frameworks (American Educational Research Association *et al.*, 2014).

The study next examined the validity of the adapted instrument in the target population. Confirmatory factor analysis (CFA) was used to evaluate the factor structure of the Indonesian ECS and to assess construct and method equivalence. The study then assessed reliability and construct validity during the scale construction and interpretation stage as part of the psychometric verification of the adapted instrument. The final stage addressed administration and documentation of the adaptation process.

Data Analysis

The expert panel ratings were analyzed using the Content Validity Index (CVI). The study set the minimum acceptable item-level CVI (I-CVI) at 0.70 and the minimum

acceptable scale-level CVI (S-CVI), calculated as the mean of the I-CVI values, at 0.80. Items that failed to meet these criteria were revised based on expert feedback related to word choice, sentence structure, and conceptual clarity.

During the readability phase, participants completed the revised version of the scale and evaluated the clarity of the instructions and each item. The researchers then conducted a focus group discussion (FGD) to examine further how participants understood the items.

The study used confirmatory factor analysis (CFA) to examine the internal structure of the Indonesian ECS. The analysis used the Maximum Likelihood Robust (MLR) estimator within a covariance-based CFA framework to produce parameter estimates and standard errors that remain robust to non-normality (Brown, 2015). Model fit was evaluated using the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI), with values close to or above 0.95 indicating good fit, the Root Mean Square Error of Approximation (RMSEA), with

values below 0.06, and the Standardized Root Mean Square Residual (SRMR), with values close to or below 0.08 (Hu & Bentler, 1999) (Brown, 2015).

Internal consistency was evaluated using the omega (ω) coefficient (McDonald, 1999) to address the limitations of Cronbach's α , which assumes tau-equivalence, with a minimum acceptable threshold of 0.70 (Hair et al., 2019). All analyses were performed using JASP version 0.19.3.0.

RESULTS

Evidence Based on Test Content

The analysis of responses from 11 participants across six items showed that two items had I-FVI values below 0.80 (see Table 4). This result indicates that some items were difficult for participants to understand. Qualitative feedback supported this interpretation, as reflected in the following statement:

While this aligns with the measured trait of environmental cynicism, I also notice that people talk about and consider environmental issues because they are important for the sustainability and health of both society and nature. (A1)

This comment indicates that the item required revision because it did not adequately reflect the sociocultural context of Indonesian society. This interpretation is consistent with the low I-CVI/Average score. Accordingly, item 4 was revised to reflect the Indonesian cultural context better.

The overall expert relevance score was 0.97, which indicates strong content validity. For clarity, all items achieved an I-CVI score of 1.00. The overall S-CVI/Average score also indicated very good content validity (Boateng et al., 2018; Lynn, 1986).

Although all items received an I-CVI clarity score of 1, particular attention was given to items 1, 3, and 4. These items contained socially sensitive expressions that respondents in Indonesia might interpret differently. Consequently, the translation and synthesis process for these items was examined in greater depth to preserve consistency of meaning and conceptual equivalence with the original instrument.

Table 3 presents the translation and synthesis process for items 1, 3, and 4. The table compares the original items, the forward translations, the synthesized versions, and the backward translations. These comparisons illustrate the linguistic adjustments made to preserve meaning and conceptual equivalence with the original Environmental Cynicism Scale (ECS).

Evidence Based on Response Process

The analysis of responses from 11 participants across six items showed that items 2 and 3 had I-FVI values below the acceptable threshold (see Table 4). This result suggests that participants found these items difficult to understand. Qualitative feedback supported this conclusion.

Table 2. Expert Judgment Results

Clarity					Relevance				
Item	EA	I - CVI	Category	UA	Item	EA	I - CVI	Category	UA
ECS_1	3	1	Valid	1	ECS_1	3	1	Valid	1
ECS_2	3	1	Valid	1	ECS_2	3	1	Valid	1
ECS_3	3	1	Valid	1	ECS_3	3	1	Valid	1
ECS_4	3	1	Valid	1	ECS_4	2	0.67	Invalid	0
ECS_5	3	1	Valid	1	ECS_5	3	1	Valid	1
ECS_6	3	1	Valid	1	ECS_6	3	1	Valid	1

Table 3. Translation Results for items 2, 8, and 9

No	Original Item	Forward Translation	Synthesis Results	Backward Translation
1	Environmental laws put unnecessary brakes on the economy	<i>Undang-undang lingkungan menghambat perekonomian secara tidak perlu</i> <i>Peraturan lingkungan memberikan hambatan pada pertumbuhan ekonomi.</i> <i>Undang-undang lingkungan memberikan batasan yang tidak perlu terhadap perekonomian.</i>	<i>Undang undang lingkungan sering kali dianggap menghambat pertumbuhan ekonomi.</i>	Environmental regulations are often seen as obstacles to economic growth. The environmental regulations are often considered to obstruct the economic growth. Environmental regulations are often perceived as hindering economic growth.
3	There is too much talk nowadays about the environment	<i>Saat ini sudah terlalu banyak pembicaraan tentang lingkungan</i> <i>Saat ini terlalu banyak pembicaraan mengenai lingkungan.</i> <i>Saat ini terlalu banyak pembicaraan tentang lingkungan.</i>	<i>Saat ini pembicaraan tentang lingkungan terasa berlebihan.</i>	Talks about the environment nowadays feel over the top Talks about the environment today feels excessive. Talking about the environment these days feels redundant.
4	There are much more important things that one should bother himself with than environmental issues	<i>Ada banyak hal yang jauh lebih penting yang harus dipikirkan daripada isu lingkungan</i> <i>Ada banyak hal lain yang jauh lebih penting daripada memikirkan masalah lingkungan.</i> <i>Ada hal-hal lain yang jauh lebih penting untuk diperhatikan dibandingkan masalah lingkungan.</i>	<i>Ada berbagai hal lain yang jauh lebih penting daripada memikirkan isu lingkungan.</i>	There are other things that matter much more than environmental issues. There are another things that are more important than environmental issues There are other things that are much more important than environmental issues.

Table 4. Readability Test Using the Face Validity Index (FVI)

Item	EA	I-CVI	Category	UA/S-FVI
ECS_1	8	0.73	Invalid	0
ECS_2	10	0.91	Valid	1
ECS_3	8	0.73	Invalid	0
ECS_4	10	0.91	Valid	1
ECS_5	10	0.91	Valid	1
ECS_6	9	0.82	Valid	1

Note: EA = Expert Agreement; I-CVI = Item-Content Validity Index; UA = Universal Agreement. The Valid category is assigned if the I-CVI value is ≥ 0.80 , while values < 0.80 are categorized as Invalid. (Lynn, 1986).

For item 2, one participant stated:

“Regarding the environment, maybe we could break down what we want to discuss. For example, environmental issues and similar topics.” (resp3)

For item 3, another participant stated:

“Every individual has different biases. Could that affect the data?” (resp4)

These responses indicate that some participants perceived the items as too broad and abstract. They also suggest that participants had difficulty identifying the intended context of the statements. In response to this feedback, items 2 and 3 underwent editorial revisions to narrow their scope by specifying the types of environmental issues addressed and clarifying the indicators of excessive behavior. These revisions made the items more concrete and easier to understand.

The S-FVI/Average score for the six items was 0.84, which indicates an acceptable level of face validity. The researchers nevertheless revised both items based on feedback from cognitive interviews conducted through FGDs. These revisions included adding clarifying expressions and refining item wording to improve respondent comprehension. Table 5 presents the final Indonesian version of the adapted ECS, which was subsequently evaluated for its psychometric properties.

In addition to revising the items, the researchers also modified the response format. The original 7-point Likert scale was reduced to a 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). This decision was based on the readability test, which indicated that the 7-point format could increase cognitive burden and respondent fatigue because it required respondents to distinguish among more response options.

Previous studies have shown that too many response categories can reduce data quality by increasing confusion and fatigue (Boone et al., 2014). Excessive response

categories may also create spurious precision when respondents cannot meaningfully distinguish among adjacent options (Bond and Fox, 2015; DeVellis, 2017). Therefore, a 5-point scale was selected to facilitate meaningful and consistent distinctions between response options.

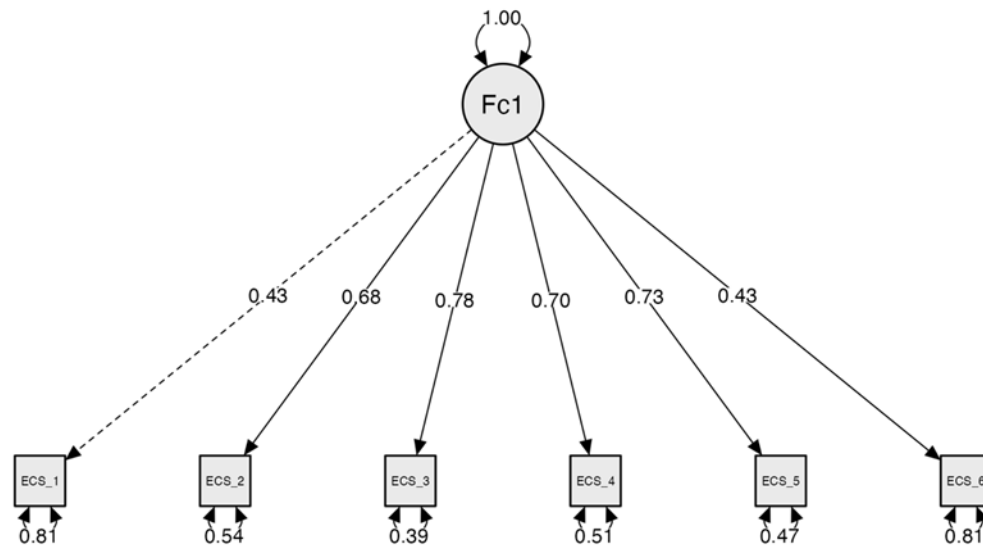
Table 5. Adapted Version of the Environmental Cynicism Scale

No	Final Item
1.	<i>Undang-undang lingkungan seringkali menghambat pertumbuhan ekonomi.</i>
2.	<i>Terlalu memusingkan isu lingkungan menunjukkan cara berpikir yang sempit.</i>
3.	<i>Saat ini, pembicaraan mengenai isu-isu lingkungan terasa berlebihan.</i>
4.	<i>Ada banyak masalah lain yang lebih mendesak untuk dipikirkan daripada isu lingkungan.</i>
5.	<i>Krisis lingkungan hanyalah sesuatu yang dilebih-lebihkan.</i>
6.	<i>Masyarakat seharusnya berhenti mengalokasikan sumber daya untuk lingkungan dan mengalihkannya pada isu yang lebih penting.</i>

Evidence Based on Internal Structure

Confirmatory factor analysis (CFA) showed that the model fit the sample data adequately. The goodness-of-fit indices met the recommended thresholds: $\chi^2(9) = 16.05, p = .066$, CFI = 0.986, TLI = 0.977, RMSEA = 0.050, 90% CI [0.000, 0.088], and SRMR = 0.031. All items loaded significantly on a single factor ($p < .05$), and all standardized factor loadings were at least 0.40. Figure 1 presents the standardized factor loadings for the six items. Items 1 and 6 had the lowest loadings, whereas item 3 had the highest. These findings support the unidimensional structure of the scale.

Within a covariance-based CFA framework, construct validity can be evaluated through model fit, the significance and magnitude of factor loadings, and model-based reliability estimates, without requiring Average Variance Extracted (AVE) (Brown, 2015). The reliability estimate was $\omega = 0.798$, which indicates adequate internal consistency.

Figure 1. CFA Model of the Environmental Cynicism Scale (ECS) Indonesia

DISCUSSION

The Indonesian version of the ECS demonstrated satisfactory validity and reliability, which supports its use for assessing environmental cynicism among university students. The study gathered validity evidence in line with established guidelines for cross-cultural test adaptation (ITC, 2017). Expert evaluation showed that most items were clear and relevant, and only one item required minor revision. These findings indicate strong content validity and are consistent with recommended methodological standards (Boateng et al., 2018; Lynn, 1986).

Evidence based on response processes further supported the clarity and comprehensibility of the instrument. Feedback from the focus group discussions identified two items that required revision. The subsequent revisions improved the correspondence between item wording and respondents lived experiences. This step was important because cross-cultural adaptation prioritizes conceptual equivalence rather than literal translation (Beaton et al., 2000; ITC, 2017; Standards for Educational and Psychological Testing, 2014).

Evidence based on internal structure also supported the adequacy of the Indonesian ECS. Confirmatory factor analysis showed that the

scale retained a stable unidimensional structure. All items loaded significantly on the intended construct, and the model showed excellent fit according to recommended criteria (Hu and Bentler, 1999). These findings are consistent with the original ECS development study by Semenescu et al. (2025), which reported a comparable factor structure in other contexts. The scale also showed adequate internal consistency. Taken together, these results indicate that the Indonesian ECS is a valid and reliable measure of environmental cynicism among Indonesian university students.

These findings strengthen the view that environmental cynicism is a measurable psychological construct across cultural contexts. This issue is especially relevant in Indonesia, which is commonly characterized as collectivist and relatively high in power distance. In such a context, cynicism may operate differently than in Western, educated, industrialized, rich, and democratic (WEIRD) settings (Henrich et al., 2010), where most cynicism research has been conducted (Anson et al., 1986; Atalay et al., 2022; Chiu, 2005; Chon et al., 2021; Kruger and Gilovich, 1999; Neumann and Zaki, 2023; Policarpo et al., 2023; Semenescu et al., 2025; Sloterdijk et al., 1984; Tosun and Çetin, 2025).

Cultural characteristics such as collectivism may shape how cynicism influences environmental engagement. In particular, distrust may not only weaken support for formal institutions but also redirect engagement toward informal or community-based action. Survey evidence from Indikator Politik Indonesia and CERAH suggests that institutional trust in Indonesia is complex and unstable. Public trust in formal institutions may be limited, especially in relation to environmental commitments, yet community-based social action and local collaboration remain relatively strong (Kalmirah et al., 2023; Purba & Kusumawardani, 2023). This pattern suggests that environmental cynicism in Indonesia may not simply reflect disengagement. It may instead reflect a more selective form of distrust directed at institutions rather than at collective environmental action itself.

This study has several limitations. First, the sample consisted only of university students, which limits the generalizability of the findings to broader populations. Second, the study examined only content validity, response-process validity, internal structure, and reliability. Other forms of validity, such as criterion-related validity and associations with related constructs, were not examined. Future studies should therefore test the relationships between environmental cynicism, pro-environmental behavior, institutional trust, and environmental efficacy.

Despite these limitations, this study makes an important initial contribution by introducing an Indonesian version of the ECS with satisfactory psychometric properties. The instrument addresses an important gap in the literature and provides a tool for environmental psychology research in Indonesia. It can help researchers examine patterns of cynicism and identify psychological barriers to public participation in environmental issues. It also provides a basis for future work on how cynicism shapes individual motivation in the context of ongoing environmental crises.

Future research should examine the psychometric performance of the ECS in more heterogeneous samples to improve generalizability. These samples should include populations beyond university students, such as industrial workers, environmental activists, and members of the general public from both urban and rural settings with different levels of exposure to environmental issues. Future studies should also extend validity testing by examining criterion-related validity. For example, researchers could correlate ECS scores with observed pro-environmental behavior. For practitioners in non-governmental organizations and government agencies, the ECS may also serve as an initial diagnostic tool for assessing cynicism in target communities before designing environmental programs or campaigns. Such data may help stakeholders tailor communication strategies more effectively to address community distrust.

CONCLUSIONS

The Indonesian version of the Environmental Cynicism Scale (ECS) showed satisfactory psychometric properties for measuring environmental cynicism. The adaptation process followed the International Test Commission (ITC) guidelines and produced items that were linguistically clear and conceptually appropriate for the Indonesian context. Evidence from content validity and response processes showed that the items were relevant and understandable. Confirmatory factor analysis supported the stability of the scale's unidimensional structure, with all items loading significantly on the intended construct. The scale also demonstrated adequate internal consistency. Overall, these findings indicate that the Indonesian ECS is a valid and reliable instrument for assessing environmental cynicism among Indonesian university students.

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