



## Psychometric evaluation of the Identity Status Scale within the framework of digital leisure: study on adolescent TikTok users

*Evaluación psicométrica de la Escala de Estatus de Identidad en el marco del ocio digital: estudio con usuarios adolescentes de TikTok*

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### Abstract

**Introduction:** TikTok has become the primary digital entertainment platform among adolescents. However, existing identity status measurement instruments have not been specifically evaluated within the context of algorithmic digital recreation.

**Objective:** This study aims to evaluate the psychometric properties of the Identity Status Scale among TikTok-using adolescents in Indonesia within the framework of digital recreation.

**Methods:** A quantitative study was conducted among 550 active TikTok users aged 15–19 years. Data were analyzed using Confirmatory Factor Analysis (CFA) with the Maximum Likelihood method via JASP software. After removing three problematic items (IF4, IM4, and IM6), the four-factor model was evaluated for model fit, convergent validity, discriminant validity, and reliability.

**Results:** The CFA results indicate good model fit (CFI = 0.957; TLI = 0.952; RMSEA = 0.054 [90% CI: 0.050–0.059]; SRMR = 0.041). All Composite Reliability (CR) values were > 0.70 and Average Variance Extracted (AVE) values were > 0.50, thus meeting the criteria for convergent validity. Discriminant validity is met with HTMT values below 0.95 (highest = 0.948). High inter-factor correlations (0.693–0.95) reflect the dynamic nature of the identity process in the digital environment.

**Conclusion:** The Identity Status Scale demonstrates robust psychometric properties, offering a reliable tool for assessing identity development related to digital leisure habits. These findings assist psychologists, educators, and health practitioners in understanding adolescent identity dynamics and promoting a balanced lifestyle within the social media ecosystem.

### Keywords

Adolescent, digital leisure, identity status, psychometrics, sedentary behavior.

### Resumen

**Antecedentes:** TikTok se ha convertido en la principal plataforma de entretenimiento digital entre los adolescentes. Sin embargo, los instrumentos existentes para medir el estado de identidad no se han evaluado específicamente en el contexto del ocio digital algorítmico.

**Objetivo:** El presente estudio tiene como objetivo evaluar las propiedades psicométricas de la Escala de Estado de Identidad entre los adolescentes usuarios de TikTok en Indonesia, en el marco del ocio digital.

**Métodos:** Se llevó a cabo un estudio cuantitativo entre 550 usuarios activos de TikTok de entre 15 y 19 años. Los datos se analizaron mediante un análisis factorial confirmatorio (AFC) con el método de máxima verosimilitud a través del software JASP. Tras eliminar tres ítems problemáticos (IF4, IM4 e IM6), se evaluó el modelo de cuatro factores en cuanto a ajuste del modelo, validez convergente, validez discriminante y fiabilidad.

**Resultados:** Los resultados del AFC indican un buen ajuste del modelo (CFI = 0,957; TLI = 0,952; RMSEA = 0,054 [IC del 90 %: 0,050-0,059]; SRMR = 0,041). Todos los valores de fiabilidad compuesta (CR) fueron > 0,70 y los valores de varianza media extraída (AVE) fueron > 0,50, cumpliendo así los criterios de validez convergente. La validez discriminante se cumple con valores de HTMT inferiores a 0,95 (máximo = 0,948). Las altas correlaciones entre factores (0,693–0,95) reflejan la naturaleza dinámica del proceso de identidad en el entorno digital.

**Conclusión:** La Escala de Estado de Identidad demuestra propiedades psicométricas sólidas, ofreciendo una herramienta fiable para evaluar el desarrollo de la identidad en relación con los hábitos de ocio digital. Estos hallazgos ayudan a psicólogos, educadores y profesionales de la salud a comprender la dinámica de la identidad adolescente y a promover un estilo de vida equilibrado dentro del ecosistema de las redes sociales.

### Palabras clave

Adolescentes, ocio digital, identidad, psicometría, comportamiento sedentario.

## Introduction

The acceleration of digital transformation has fundamentally changed patterns of human interaction (Reis & Melão, 2023; Singh et al., 2022; Vermesan & Bacquet, 2022), thereby making social media platforms the primary arena of contemporary social life (Azzaakiyyah, 2023). Among various platforms, TikTok has emerged as a global phenomenon that dominates user interest through short-form video formats and immersive algorithm-based personalization (Cai, 2025). This dynamic raises profound concerns about how TikTok use relates to the most central developmental task of adolescence: identity formation. The search for identity intensifies during adolescence (Moreno-vitoria, 2025; Pérez-Torres, 2024), where adolescents will explore their identity and formulate the direction of their future (De Lise, Luyckx, & Crocetti, 2024). Within the identity status framework formulated by Marcia, (1993), identity development is conceptualized through the interaction of two fundamental processes: exploration and commitment.

Although this framework has demonstrated strong explanatory power over the past decade, the theory was originally developed within a pre-digital sociocultural context that differs significantly from today's algorithm-mediated environment. In the modern era, TikTok has evolved beyond a mere communication tool to become a primary form of digital entertainment (Kułaga, n.d.; Mahetaji & Nieborg, 2024; Söğüt & Öngel, 2022), where adolescents spend most of their free time engaged in sedentary recreational activities (Ávalos-Ramos, Pascual-Galiano, Vidaci, & Vega-Ramírez, 2024; Haug, 2025). As one of the most dominant forms of digital entertainment, characterized by sedentary leisure, intensive TikTok use shapes the recreational patterns of contemporary adolescents (Irtaza & Khan, 2026; Qin, Musetti, & Omar, 2023). This aligns with RETOS's focus on the relationship between sedentary recreational behavior, psychosocial development, and the well-being of the younger generation.

The transition from face-to-face interactions to digital spaces marks a crucial turning point (Childs & Holland, 2024; Mohammed, Mohammed, & Shaker, 2025). Consequently, there are significant psychometric concerns regarding whether the Identity Status Scale can function equivalently (measurement equivalence) in the context of contemporary digital entertainment. Scale items originally designed to capture exploration and commitment in the offline realm may no longer adequately represent the "identity work" occurring in TikTok's fast-paced, visual, and ephemeral algorithmic environment. The scale's factor structure, validity, and reliability are at risk of being compromised by the distinct characteristics of the highly immersive, passive-recreational digital context.

Although the urgent need to establish a digital identity is growing, there remains a significant gap in the psychological research tools available. Most identity measurement tools were developed in an era when commitments centered on offline domains such as work and religion. These classical instruments were not designed to capture the "work of identity" that occurs in highly visual, algorithm-mediated environments, or in the context of contemporary recreational activities. Without rigorous psychometric evaluation through Confirmatory Factor Analysis (CFA), the use of these older instruments risks introducing measurement bias and an incomplete representation of the construct in modern contexts. Therefore, this study aims to evaluate the psychometric properties of the Identity Status Scale among adolescent TikTok users in Indonesia, specifically exploring how identity is formed within the digital recreational landscape.

This study makes an important contribution by providing a valid and reliable measurement tool for educators, counselors, and health practitioners to understand the factors that influence adolescent identity. By bridging classical developmental theory, cyberpsychology, and studies on digital recreation, this research is expected to serve as a foundation for practical interventions to support adolescents' mental well-being and ensure they remain resilient in facing identity challenges in the digital age.

### **Conceptual Framework**

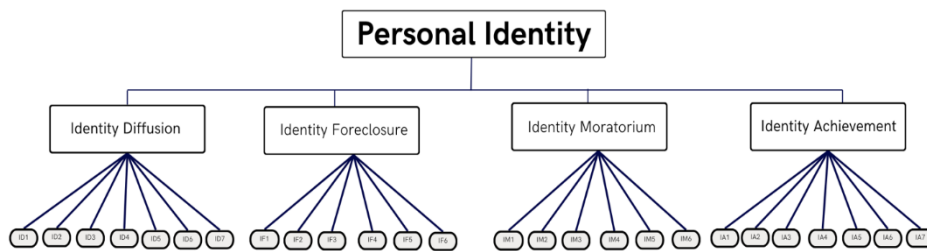
This study adopts the identity status model developed by Marcia (1993), which is an operational extension of Erikson's psychosocial development theory. This model distinguishes adolescent identity formation based on two key dimensions: exploration (crisis) and commitment. Among adolescent TikTok users, these four identity statuses reflect how individuals navigate information and social influences in the digital space. The details of these four dimensions are as follows:



1. **Identity Achievement:** This status characterizes individuals who have undergone a period of exploration of alternatives (often referred to as an identity crisis) and have successfully established a strong commitment to their life choices, both in the domain of work and in ideology. This identity is considered a "self-constructed" one, in which individuals feel they have actively participated in defining who they are.
2. **Identity Moratorium:** Individuals in this status are in a period of crisis or transition; they are actively exploring their life direction, but their current commitment is still either absent or very vague. This status is often described as a trapeze artist who has let go of the past and is swinging toward the future, filled with both tension and excitement.
3. **Identity Foreclosure:** This status occurs when individuals have established a strong commitment without prior exploration. Their identity is often a "given" to authority figures, such as parents, in which the individual simply fulfills the plans or standards set for them without questioning alternatives.
4. **Identity Diffusion:** Individuals in this status lack a strong commitment and are not actively exploring or striving to achieve it. They tend to lack a clear sense of self, have no clear future direction, and often feel like their lives are out of control or that they are simply going with the flow.

The structural relationship between these four dimensions in shaping a comprehensive personal identity construct is illustrated in Figure 1 below:

Figure 1. Conceptual Framework



## Method

### Participants

The participants in this study were 550 Indonesian adolescents who actively use TikTok as part of their daily digital engagement. Adolescence was operationally defined as individuals aged 15–19 years, in accordance with the developmental psychology literature. Participants were required to meet the following inclusion criteria: (1) Indonesian citizenship, (2) active use of TikTok for at least six months, and (3) regular engagement with TikTok (at least once a day). Adolescents with incomplete responses or inconsistent response patterns were excluded from the analysis. Respondents in this study came from various high schools and were selected using convenience sampling via social media platforms. The characteristics of the respondents involved in this study are shown in Table 1.

Table 1. Respondent Characteristics Data Category

Category	Frequency	Percentage
Gender		
Male	244	44%
Female	306	56%
Total	500	100%
School		
General	238	43%
Skills	194	35%
Religion	118	22%

Total	500	100%
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### *Instruments*

The Identity Status Scale used in this study is based on the theoretical framework of identity status developed by Marcia, (1993). This scale measures identity development through the four classic dimensions of identity status: Achievement, Foreclosure, Moratorium, and Diffusion, which are operationalized through items that reflect exploration and commitment in key life domains. This inventory uses a 5-point Likert scale, with responses indicating agreement or disagreement with each statement. The scores follow the following pattern:

Table 2. Instrument measurement score

Response Options	Positive Statement Score	Negative Statement Score
Strongly Agree	5	1
Agree	4	2
Undecided	3	3
Disagree	2	4
Strongly disagree	1	5

The adaptation procedure for the Identity Status Scale was adapted to the Indonesian context in accordance with the recommendations of the (International Test Commission, 2017). The adaptation process began with a test of the conceptual equivalence of Marcia's theory within the local culture, followed by a forward-back translation procedure conducted by language and counseling experts. During the development phase, four items (12, 18, 20, and 25) were eliminated for not meeting content validity criteria, leaving 26 items for the pilot test. Construct validity was then confirmed through a Confirmatory Factor Analysis (CFA) with 550 respondents, including evaluations of AVEs, composite reliabilities, and HTMT ratios. The test was administered digitally, with instructions adapted for easy understanding by adolescents without compromising psychometric integrity. The entire process, from item modification to the interpretation of sociocultural scores, was thoroughly documented to ensure transparency, data integrity, and the replicability of the research.

### *Procedure*

Data collection was conducted using an online format designed to be easily accessible. Participants were recruited through various secondary educational institutions, digital networks, and social media platforms frequently used by adolescents. This research protocol has been approved by the Research Ethics Committee of Padang State University under letter number 1908/UN35.4.10/AK/2025 and was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki. Consent was obtained from all participants in accordance with ethical guidelines. Participants were informed that this study was voluntary and assured that their responses would be kept confidential. The online survey included demographic questions, characteristics of TikTok usage, and 26 items from the Identity Status Scale. The average time to complete this instrument was approximately 15–20 minutes.

### *Data Analysis*

Data analysis was conducted using Confirmatory Factor Analysis (CFA) using JASP software (version 0.18.3). CFA was used to confirm the factor structure of the Identity Status Scale among adolescent TikTok users in Indonesia. Parameter estimation was performed using the Maximum Likelihood (ML) method to assess the consistency between Marcia's four-factor theoretical model and the empirical data. With a sufficiently large sample size ( $N = 550$ ), this study possesses very strong statistical power to produce stable estimates and minimize standard errors. Model fit was comprehensively evaluated through the Confirmatory Factor Analysis (CFA) Path Diagram and several categories of fit indices: Comparative Indices: Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Bentler-Bonett Normative Fit Index (NFI), and Bollen's Additional Fit Index (IFI). Absolute and Residual Indices: Root Mean Square Error of Approximation (RMSEA) along with a 90% Confidence Interval, Standardized Root Mean Square Residual (SRMR), and Goodness of Fit Index (GFI). Parsimony Indices: the Parsimony Normative Fit Index (PNFI) and Hoelter's Critical N to verify sample adequacy. The cutoff values for determining

good fit refer to the conservative criteria from Hair (Saleh, Kuncahyo, Tiryana, & Puspaningsih, 2025) namely CFI, TLI, NFI, and GFI  $\geq .90$ , and RMSEA and SRMR  $\leq .08$ . Additionally, convergent validity was evaluated by analyzing standardized factor loadings ( $\lambda \geq .50$ ) and Indicator Reliability ( $R^2$ ) for each item. Items with very low loadings (e.g., IM6 = .123) were discussed further in the results section and considered for removal to improve the model's quality. Correlations among latent variables were also analyzed to ensure discriminant validity among the identity status dimensions (Identity Diffusion, Foreclosure, Moratorium, and Achievement).

## Results

This study evaluates the psychometric properties of the Identity Status Scale (ISS), which has been adapted for TikTok-using adolescents in Indonesia. Confirmatory Factor Analysis (CFA) enables testing the instrument's partial validity and reliability, ensuring that this scale accurately measures adolescents' identity status within the digital ecosystem. The scale is designed to map four main identity statuses based on Marcia's theory, namely: Identity Diffusion (ID), Identity Foreclosure (IF), Identity Moratorium (IM), and Identity Achievement (IA). The four-factor CFA model was tested as a whole to confirm whether Marcia's theoretical framework remains applicable in the context of the digital entertainment platform TikTok.

After confirming the overall fit of the model, the analysis proceeded to evaluate factor loadings, indicator reliability, convergent validity, discriminant validity, and to interpret the correlations among factors. The validity and reliability of the instrument were evaluated based on several criteria of model fit and factor loadings. In accordance with methodological standards, each item is expected to have a factor loading of 0.50 or higher to demonstrate adequate convergent validity (Hair Jr et al., 2021b). Additionally, reliability testing was conducted by examining the Coefficient of Determination ( $R^2$ ) to assess the extent to which each indicator represents the variance of its latent construct. Item deletion criteria were established when the factor loading was  $< 0.40$  and the model fit was substantially weakened (Hair Jr et al., 2021b). These rigorous testing procedures were conducted to ensure that the Identity Status Scale has strong psychometric integrity and comprehensively measures the psychosocial dynamics of Indonesian adolescents. Details on the results of partial validity calculations, model fit indices, and indicator reliability are presented systematically in the following tables and figures.

Table 3. Model Fit Indices for the Four-Factor Model of the Identity Status Scale

<i>Fit indices</i>	
Index	Value
Comparative Fit Index (CFI)	0.957
Tucker-Lewis Index (TLI)	0.952
Bentler-Bonett Non-normative Fit Index (NNFI)	0.952
Bentler-Bonett Standardized Fit Index (NFI)	0.933
Normalized Parsimony Fit Index (PNFI)	0.841
Bollen Relative Fit Index (RFI)	0.925
Bollen's Additional Fit Index (IFI)	0.957
Relative Non-Centrality Index (RNI)	0.957

Results in Table 3 indicate that the factor model of *the Identity Status Scale* meets the established *fit* criteria. Fit indices such as CFI (0.957) and TLI (0.952) consistently exceed the threshold (0.90) (Sejati, Wahyuni, Gumelar, & Rakhman, 2025) indicating that the theoretical structure of this model is consistent with the empirical data of TikTok users in Indonesia. Additionally, the PNFI value of (0.841) indicates that the model is acceptable. To further validate the tested model, the analysis continued by evaluating *other fit measures* to examine estimation errors and model residuals:

Table 4. Absolute Fit Indices and Residual Statistics for the Identity Status Scale Model

Other fit measures	
Metric	Value
Root Mean Square Error of Approximation (RMSEA)	0.054
Lower limit of the 90% confidence interval for RMSEA	0.050
Upper limit of the 90% confidence interval for RMSEA	0.059
RMSEA p-value	0.056
Standardized Mean Squared Residual (SRMR)	0.041
Hoelter critical N ( $\alpha = 0.05$ )	239,008
Hoelter critical N ( $\alpha = 0.01$ )	252.063
Goodness-of-fit index (GFI)	0.958
McDonald's fit index (MFI)	0.647
Expected Cross-Validation Index (ECVI)	1.708

The results in Table 4 show that the model has a low approximation error. After confirming that the model as a whole has a very good goodness-of-fit, the analysis then focused on the indicator level to evaluate the extent to which the variance of each item can be explained by its latent construct through the  $R^2$  value (multiple correlation coefficient), as shown in the following table:

Table 5. Indicator Reliability and Multiple R-Squared ( $R^2$ ) for Items on the Identity Status Scale

Dimension	Item	Standardized Loading ( $\lambda$ )	$R^2$	p-Value
Identity Diffusion	ID1	0.412	0.452	< 0.001
	ID2	0.462	0.753	< 0.001
	ID3	0.599	0.689	< 0.001
	ID4	0.699	0.715	< 0.001
	ID5	0.571	0.495	< 0.001
	ID6	0.726	0.722	< 0.001
	ID7	0.643	0.531	< 0.001
Identity Theft	IF1	0.661	0.710	< 0.001
	IF2	0.546	0.638	< 0.001
	IF3	0.785	0.739	< 0.001
	IF4	0.279	0.605	< 0.001
	IF5	0.712	0.691	< 0.001
	IF6	0.741	0.692	< 0.001
Moratorium Identity	IM1	0.680	0.612	< 0.001
	IM2	0.761	0.750	< 0.001
	IM3	0.684	0.701	< 0.001
	IM4	0.380	0.513	< 0.001
	IM5	0.592	0.482	< 0.001
	IM6	0.123	0.194	0.044
Identity Achievement	IA1	0.653	0.670	< 0.001
	IA2	0.726	0.592	< 0.001
	IA3	0.572	0.608	< 0.001
	IA4	0.767	0.499	< 0.001
	IA5	0.788	0.660	< 0.001
	IA6	0.539	0.623	< 0.001
	IA7	0.599	0.543	< 0.001

Table 5 presents the estimated standardized factor loadings ( $\lambda$ ) and indicator reliability ( $R^2$ ) for each item in the four-factor model. The analysis results show that most items have factor loadings above 0.50 and are highly significant ( $p < 0.001$ ). The Identity Achievement dimension shows the highest internal consistency, with all factor loadings exceeding 0.539. However, three items with low loadings warrant attention: IF4 ( $\lambda = 0.279$ ), IM4 ( $\lambda = 0.380$ ), and particularly IM6 ( $\lambda = 0.123$ ). Item IM6 has a very low loading and an  $R^2$  of only 0.194, thus failing to meet the minimum criteria. This item is considered for removal in subsequent analyses because its contribution to the latent construct is very weak and could lower the overall model quality. Convergent validity was evaluated through Average Variance Extracted (AVE) and Composite Reliability (CR) with the following results:

Table 6. Average Variance Extracted (AVE) and Composite Reliability (CR) for Identity Status Scale

Factor	AVE	CR
Identity Diffusion	0.624	0.915
Identity Foreclosure	0.697	0.919
Identity Moratorium	0.639	0.872
Identity Achievement	0.601	0.912

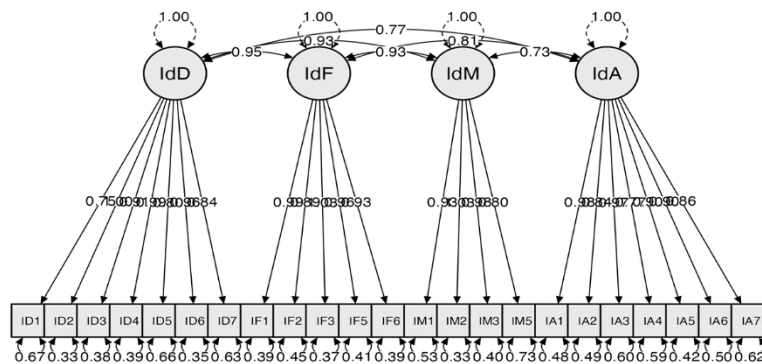
The results in Table 6 were obtained after removing items IF4, IM4, and IM6 because they had weak latent constructs and had the potential to undermine the overall model. The results showed that all dimensions had CR values above 0.70, indicating good internal reliability. AVE values were also above 0.50 for most dimensions, thus meeting the criteria for convergent validity (Hair Jr et al., 2021a). Next, a Discriminant Validity Test (HTMT) was conducted to ensure that a construct (latent variable) is empirically distinct from other constructs in the research model, as shown in the following table:

Table 7. Inter-Factor Correlation Matrix and Discriminant Validity Test (HTMT) Results

Heterotrait-monotrait ratio			
Identity Diffusion	Identity Foreclosure	Identity Moratorium	Identity Achievement
1.000			
0.948	1.000		
0.928	0.921	1.000	
0.720	0.791	0.693	1.000

All HTMT values are below 0.95 (the highest value is 0.948 between Identity Diffusion and Identity Foreclosure). Although the value of 0.948 is slightly above the conservative threshold of 0.90 (Henseler, Ringle, & Sarstedt, 2015), it is still acceptable given the conceptual proximity between the two statuses in Marcia's theory. These results confirm that the four dimensions of identity status can be empirically distinguished, despite their strong correlation within the context of digital entertainment. To clarify the relationships among the model's factors, the path diagram of the four-factor Identity Status Scale model is presented in Figure 2.

Figure 2. Path Diagram of the Four-Factor Identity Status Scale Model



As shown in Figure 2, this model indicates very strong correlations among the latent factors. The highest correlation is between Identity Diffusion (IdD) and Identity Foreclosure (IdF) at 0.95, followed by the correlation between Identity Foreclosure (IdF) and Identity Moratorium (IdM) at 0.93. The correlation between Identity Diffusion and Identity Moratorium is 0.77, while the correlation between Identity Moratorium and Identity Achievement (IdA) is 0.81. All correlations between factors are positive and significant. These high correlations indicate that the four identity statuses are closely interrelated within the context of TikTok's digital entertainment. Adolescents tend to experience identity exploration and commitment simultaneously and dynamically, rather than distinctly and separately. This finding aligns with TikTok's algorithmic characteristics, which provide rapid, continuous exposure to identity stimuli, making the boundaries between identity statuses more fluid than in traditional offline contexts. Overall, the CFA results following the removal of three problematic items (IF4, IM4, and IM6) indicate that the



four-factor model of the Identity Status Scale demonstrates good fit and adequate psychometric properties for use with TikTok-using adolescents in Indonesia.

## Discussion

This study demonstrates that the adapted Identity Status Scale possesses adequate psychometric properties for use among Indonesian adolescents who use TikTok. In line with the finding Avci et al., (2025) that social media plays a significant role in identity formation through self-exploration and self-presentation. CFA results confirm that Marcia's four-factor theoretical structure remains stable in the context of digital entertainment. Although this instrument was developed in the pre-digital era, good model fit indices (CFI = 0.957; TLI = 0.952; RMSEA = 0.054) suggest that Marcia's framework remains relevant for mapping the dynamics of adolescent identity formation in algorithmic environments.

The high correlations among latent factors (0.95 between Identity Diffusion and Identity Foreclosure; 0.93 between Identity Foreclosure and Identity Moratorium) can be explained from two perspectives. Theoretically, the four identity statuses in Marcia's model are indeed interrelated because they are built upon the same two basic dimensions: exploration and commitment. Empirically, on TikTok, adolescents tend to engage in exploration and commitment simultaneously through rapid, continuous content consumption. These findings support the use of the four-factor model, as it captures the complexity and fluidity of adolescent identity statuses in the era of digital entertainment.

These validation results have important practical implications. The validated scale can serve as a reliable screening tool for school counselors, psychologists, and educators to identify adolescents experiencing difficulties in identity formation amid intensive exposure to digital entertainment because social media can influence adolescents' psychological well-being (Estrada-Araoz et al., 2025; Mann & Blumberg, 2022; Villodres, Campos-Pérez, Salvador-Pérez, Muros, & Vizcaíno-Cuenca, 2025). This scale supports efforts to promote adolescents' holistic well-being, including a balance between digital and physical activities as part of a healthy lifestyle. Furthermore, the findings of this study can serve as a basis for policymakers in education and adolescent health when designing digital literacy programs. These programs should integrate aspects of identity formation and the prevention of sedentary behavior resulting from prolonged use of electronic devices outside of school hours, which raises health concerns (Corvetto-Castro et al., 2025) one of them is obesity (Atiyah & Lian, 2026).

This study has several limitations. First, the sample was selected using convenience sampling through schools and social media, so the findings cannot be generalized to the entire population of Indonesian adolescents. Second, the measurements rely on self-reports, which may be subject to social desirability bias. Third, the study design is cross-sectional, so it cannot establish a causal relationship between TikTok use and identity development. Fourth, although the model demonstrates good validity in Indonesia, these results may have certain cultural-specificities. Nevertheless, this study offers practical contributions to the field of adolescent health and well-being. Practitioners can use the validated instrument to support early interventions that integrate psychological and behavioral health aspects, including reducing sedentary behavior driven by digital entertainment.

For future research, it is recommended to conduct longitudinal studies to examine the dynamics of changes in identity status over time. Additionally, testing measurement invariance across groups (gender, age group, and TikTok usage intensity) and integrating physical health behavior variables will provide a more comprehensive understanding. Overall, this study successfully bridges the gap between classical identity development theory and the reality of contemporary digital entertainment. By providing a valid and reliable instrument, this study offers an empirical foundation for evidence-based interventions that foster healthy identities among Indonesian adolescents in the digital age.

## Conclusions

This study successfully evaluated the psychometric properties of the Identity Status Scale in a sample of TikTok-using adolescents in Indonesia. After removing three problematic items (IF4, IM4, and IM6), Marcia's four-factor model demonstrated good fit with the empirical data, as indicated by fit indices



meeting strict criteria (CFI = 0.957; TLI = 0.952; RMSEA = 0.054). Composite Reliability (CR) values for all dimensions exceed 0.70, and Average Variance Extracted (AVE) values exceed 0.50, confirming adequate internal reliability and convergent validity. Discriminant validity was also supported by the HTMT test, despite strong factor correlations. These findings demonstrate that Marcia's four-factor structure (Identity Diffusion, Foreclosure, Moratorium, and Achievement) remains relevant and reliable for measuring adolescents' identity status on the TikTok digital entertainment platform. The high correlations among factors reflect the dynamic nature of " " and the fluid processes of identity exploration and commitment within an algorithmic environment, thereby reinforcing the justification for using this model in the digital age.

Overall, this validated Identity Status Scale makes an important contribution as a valid and reliable instrument for researchers, counselors, and mental health practitioners to understand the dynamics of adolescent identity formation within the digital recreational landscape. This instrument can be utilized to support evidence-based interventions that integrate psychological and behavioral aspects of adolescent health. This study is not without limitations, including the use of convenience sampling, the self-report nature of the data, and the cross-sectional design. Therefore, generalizing the results should be done with caution. Future research is encouraged to conduct longitudinal studies, test measurement invariance across groups, and integrate health behavior variables (such as physical activity levels) to gain a more comprehensive understanding of the relationship between social media use and adolescent identity development.

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