

Psychometric Evaluation of the Learning Agility Scale–Short (LAS-S) for Indonesian Teachers

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Abstract

Rapid changes in educational systems require teachers to continuously learn and adapt to evolving professional demands. Learning agility has therefore emerged as a critical psychological capacity supporting teacher effectiveness. This study aimed to evaluate the psychometric properties of the Indonesian version of the Learning Agility Scale–Short (LAS-S) adapted for teachers. A quantitative psychometric approach was employed involving 150 Indonesian teachers selected through random sampling. The adapted instrument consisted of 25 items representing four dimensions of learning agility: mental agility, people agility, change agility, and result agility. Data were analyzed using item discrimination analysis and internal consistency reliability testing. The results indicated that all items demonstrated acceptable to high discrimination indices, and the scale showed excellent internal consistency, with a Cronbach's alpha coefficient of .94. These findings suggest that the Indonesian LAS-S is a reliable instrument for assessing learning agility among teachers. The availability of this measure provides a foundation for research and policy initiatives aimed at strengthening teachers' adaptive learning capacities.

Keywords: Learning Agility, Scale Validation, Teachers, Psychometric Properties, Educational Psychology

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INTRODUCTION

Educational systems worldwide are undergoing profound and continuous transformation as a result of rapid technological development, evolving curriculum standards, and increasing accountability demands (Darling-Hammond et al., 2020; Wijaya et al., 2024). Teachers are no longer expected merely to transmit knowledge but are required to function as adaptive professionals who can integrate digital tools, implement student-centered pedagogies, and respond effectively to diverse learner needs. These changes place teachers in dynamic, uncertain, and often ambiguous work environments where professional success depends not only on existing competence but also on the capacity to learn continuously from experience (Reynaldo, 2023; Toh et al., 2022).

In this context, the construct of learning agility has gained increasing attention in both educational and organizational psychology. Learning agility refers to an individual's ability to learn from experience and apply that learning effectively in new and challenging situations

(Gravett & Caldwell, 2016; Milani, 2021). Unlike traditional indicators of ability that emphasize stable knowledge or skills, learning agility emphasizes adaptability, openness, and the capacity to generalize learning across contexts. This makes it particularly relevant for professions characterized by rapid change, such as teaching.

From a theoretical perspective, learning agility is generally conceptualized as a multidimensional construct encompassing cognitive, interpersonal, and motivational components. Reynaldo (2023) and Toh et al. (2022) describe learning agility as involving cognitive flexibility (mental agility), interpersonal effectiveness (people agility), openness to change (change agility), and goal-directed persistence (result agility). These dimensions reflect a combination of how individuals think, interact, adapt, and perform when confronted with novel or complex situations.

Research has shown that learning agility is associated with performance, adaptability, and leadership potential in organizational contexts (Milani, 2021; Kaya, 2023). In educational contexts, teachers with high learning agility are more likely to experiment with innovative teaching methods, respond constructively to feedback, and sustain professional growth over time (Wijaya et al., 2024). Learning agility therefore represents a key psychological resource for teachers navigating curriculum reforms, digitalization, and shifting student characteristics.

Despite its relevance, empirical research on learning agility among teachers remains limited, particularly in non-Western contexts. Most existing instruments were developed for student or corporate populations, raising questions about their applicability to professional educators. One widely used measure is the Learning Agility Scale–Short (LAS-S), originally developed by Gravett and Caldwell (2016) for student and university populations. The LAS-S has demonstrated adequate psychometric properties in its original form and has been adapted in several cultural contexts (Gündoğan & Şahin, 2025). However, the direct application of this instrument to teachers may be problematic due to differences in professional responsibilities, experiential learning processes, and performance expectations.

Teachers differ from students in that their learning is embedded in professional practice rather than formal instruction. Their learning experiences are shaped by classroom challenges, interactions with colleagues and administrators, and accountability to institutional goals (Wardhani & Sulastiana, 2022). As such, items designed for students may not adequately capture the nuances of professional learning in teaching contexts. Without empirical validation, the use of LAS-S among teachers risks measurement error and construct underrepresentation.

In the Indonesian educational context, this issue is particularly salient. Indonesia has implemented extensive educational reforms aimed at improving teacher quality, curriculum relevance, and student outcomes (Wijaya et al., 2024). These reforms demand that teachers continuously update their competencies and adapt to new pedagogical approaches. However, standardized psychological instruments for assessing teachers' adaptive learning capacities remain scarce. Existing assessments often focus on pedagogical competence or job performance rather than on the underlying psychological capacity to learn from experience and adapt to change.

The lack of validated instruments limits both research and practice. From a research perspective, it constrains the ability to investigate the role of learning agility in teacher effectiveness and professional development. From a practical perspective, it restricts the capacity of schools and policymakers to identify teachers' learning needs and to design targeted interventions. Therefore, there is a clear need for psychometrically sound instruments that are culturally and professionally appropriate for Indonesian teachers.

In response to this gap, the present study aims to evaluate the psychometric properties of an Indonesian-adapted version of the Learning Agility Scale–Short (LAS-S) for teachers. Specifically, this study focuses on (1) examining item discrimination and construct representation based on a four-dimensional learning agility framework, and (2) assessing the internal consistency reliability of the adapted scale. By establishing the psychometric adequacy of this instrument, the study seeks to provide a foundation for future research and applied use in teacher development programs.

METHODS

Research Design

This study employed a quantitative psychometric evaluation design to examine the measurement properties of the Indonesian version of the Learning Agility Scale–Short (LAS-S) adapted for teachers. Psychometric evaluation focuses on assessing the quality of measurement instruments in terms of validity and reliability (Yildirim et al., 2022). The present study emphasized item-level analysis, construct representation, and internal consistency reliability as primary indicators of psychometric adequacy. A cross-sectional survey approach was used, in which data were collected at a single point in time from a sample of Indonesian teachers. This design was considered appropriate for evaluating the internal structure and reliability of the instrument.

Participants

The participants consisted of 150 Indonesian teachers selected using a random sampling technique. All participants were actively employed as teachers at the time of data collection. The sample included teachers from various educational levels and subject areas, reflecting the diversity of the Indonesian teaching profession. The sample size was considered adequate for item analysis and reliability testing. According to psychometric guidelines, a sample of at least 5–10 participants per item is generally sufficient for preliminary validation studies (Adila Jali et al., 2023). With 25 items in the adapted scale, the sample of 150 teachers met this criterion.

Instrument

Learning agility in the present study was assessed using an adapted version of the Learning Agility Scale–Short (LAS-S). The original LAS-S, developed by Gravett and Caldwell (2016), consisted of 27 items designed primarily for student and university populations and was grounded in a multidimensional conceptualization of learning agility. In this study, the scale was systematically adapted to the professional context of teachers to ensure that the content of each item reflected the experiential and performance-based nature of professional learning in educational settings. As a result of this adaptation process, the final instrument comprised 25 items representing four theoretically derived dimensions of learning agility: mental agility, people agility, change agility, and result agility.

Mental agility refers to cognitive flexibility and analytical thinking, reflecting individuals' capacity to process complex information, consider multiple perspectives, and generate alternative solutions to problems. In the context of teaching, mental agility is particularly relevant because educators are required to make rapid instructional decisions, interpret diverse student responses, and adjust pedagogical strategies based on ongoing classroom feedback. Items representing this dimension were designed to capture teachers' tendencies to seek new knowledge, analyze situations critically, and approach problems from different viewpoints, thereby reflecting the reflective and adaptive aspects of professional cognition.

People agility encompasses interpersonal effectiveness and openness in social interaction. This dimension emphasizes individuals' ability to work collaboratively with others, respond constructively to feedback, and maintain emotional regulation in challenging interpersonal situations. For teachers, people agility is closely linked to their capacity to learn from colleagues, engage productively with school leaders, and establish positive relationships with students and parents. Items within this dimension therefore focused on openness to diverse perspectives, comfort in working with individuals from different backgrounds, and the ability to handle criticism and conflict calmly. By incorporating these interpersonal elements, the instrument acknowledges that learning in professional settings is inherently social and relational.

Change agility reflects openness to novelty, experimentation, and challenge. This dimension captures individuals' willingness to engage with unfamiliar situations, try new approaches, and adapt to changing demands. In contemporary educational systems, teachers are frequently required to implement new curricula, integrate digital technologies, and respond to shifting policy expectations. Change agility therefore represents a critical component of professional adaptability,

as it reflects teachers' readiness to move beyond established routines and embrace innovation. Items in this dimension were formulated to assess teachers' enjoyment of experimentation, acceptance of challenges, and openness to new strategies, thereby operationalizing the motivational and behavioral aspects of adaptation.

Result agility refers to goal orientation and performance focus, emphasizing the extent to which individuals translate learning into effective action and tangible outcomes. This dimension highlights persistence, task completion, and contribution to collective goals. In teaching contexts, result agility is manifested in sustained efforts to improve instructional practice, achieve educational objectives, and contribute to team-based outcomes such as curriculum development or school improvement initiatives. Items representing result agility were designed to capture teachers' drive to complete tasks, achieve goals despite obstacles, and provide meaningful contributions to collaborative work. By including this dimension, the instrument recognizes that learning agility involves not only the acquisition of knowledge but also the application of learning to achieve performance-related goals.

All items were presented in Bahasa Indonesia and rated using a Likert-type response format, with higher scores indicating higher levels of learning agility. The use of a Likert-type scale allows for the efficient quantification of respondents' self-reported tendencies and facilitates statistical analysis of item functioning and scale reliability. The translation and contextual adaptation of items were conducted to ensure linguistic clarity and conceptual equivalence with the original instrument while enhancing relevance to teachers' professional experiences. Collectively, the four dimensions were intended to provide a comprehensive representation of learning agility as a multidimensional psychological capacity that integrates cognitive, interpersonal, motivational, and behavioral components. This structure is consistent with contemporary theoretical models of learning agility, which emphasize that adaptive learning in complex environments requires not only intellectual flexibility but also social competence, openness to change, and sustained performance orientation.

By adapting the LAS-S to the teaching profession and organizing the items according to these four dimensions, the present study sought to preserve the theoretical foundations of the original scale while extending its applicability to a new professional population. The resulting 25-item instrument was therefore designed to capture the unique features of learning agility as manifested in teachers' everyday professional practices, providing a psychometrically grounded tool for assessing adaptive learning capacities in educational contexts.

Instrument Adaptation Procedure

The adaptation process involved contextual modification of item content to ensure relevance to teachers' professional experiences while maintaining conceptual alignment with the original learning agility framework. This process was guided by the principle that psychometric instruments developed for one population cannot be directly transferred to another without systematic examination of contextual, occupational, and cultural relevance. Accordingly, the original items of the Learning Agility Scale–Short (LAS-S) were carefully reviewed to determine the extent to which they reflected the experiential learning processes characteristic of teachers' professional practice. Particular attention was given to whether item content adequately captured situations commonly encountered in instructional settings, such as problem-solving in the classroom, collaboration with colleagues, and adaptation to institutional demands.

In the first stage of adaptation, a contextual review was conducted to evaluate the relevance of each item to teaching practice and professional learning. Items were examined for their conceptual correspondence with teachers' daily work experiences, including instructional decision-making, interaction with students and peers, and engagement with organizational change. Items that referred primarily to academic or student-centered experiences were identified and revised so that their content reflected professional rather than educational contexts. This step was essential to ensure that respondents could meaningfully relate item statements to their lived

experiences as teachers, thereby reducing the risk of construct underrepresentation and enhancing ecological validity.

The second stage involved linguistic adjustment of item wording to reflect professional rather than student contexts. This process focused on refining phrasing to ensure clarity, appropriateness, and conceptual equivalence in Bahasa Indonesia. The wording of items was modified to use terminology commonly associated with teaching practice, such as tasks, responsibilities, and collaboration, rather than academic study or classroom learning as a student. Linguistic adjustment was also intended to reduce ambiguity and ensure that items were easily comprehensible to teachers with diverse educational backgrounds. By maintaining semantic consistency with the original instrument while adapting the language to the target population, this stage sought to preserve the core meaning of each item while enhancing its contextual relevance.

In the third stage, item reduction was performed to improve the efficiency and relevance of the scale. Items considered redundant, overlapping in content, or less applicable to the teaching profession were removed based on theoretical considerations and practical relevance. This resulted in a reduction from the original 27 items to a final set of 25 items. The decision to remove items was guided by the aim of retaining a balanced representation of the four theoretical dimensions of learning agility while minimizing respondent burden. Shorter instruments are generally preferable in applied research settings because they reduce fatigue and increase the likelihood of accurate responses, particularly when administered to professional populations with limited time availability.

Following item refinement and reduction, a content alignment procedure was conducted to ensure that each retained item corresponded clearly to one of the four theoretical dimensions of learning agility: mental agility, people agility, change agility, and result agility. Each item was mapped onto its intended dimension based on theoretical definitions and conceptual indicators. Mental agility items were aligned with cognitive flexibility, analytical thinking, and perspective-taking; people agility items with interpersonal openness, emotional regulation, and collaborative behavior; change agility items with experimentation, openness to novelty, and acceptance of challenges; and result agility items with persistence, goal achievement, and performance orientation. This mapping process ensured that the multidimensional structure of the original LAS-S was preserved and that the adapted instrument continued to reflect the theoretical breadth of the learning agility construct.

The overall adaptation procedure was designed to balance theoretical fidelity with contextual sensitivity. Preserving the theoretical integrity of the original instrument was considered essential to ensure that the adapted scale measured the same underlying construct of learning agility as conceptualized in previous research. At the same time, enhancing cultural and professional appropriateness was necessary to ensure that the instrument functioned validly within the Indonesian teaching context. By grounding item modifications in theoretical definitions and professional relevance, the adaptation process sought to minimize construct drift while maximizing contextual resonance.

Furthermore, the adaptation procedure reflects widely accepted principles of cross-contextual and cross-population instrument development, which emphasize the importance of systematic review, linguistic refinement, and conceptual mapping when transferring instruments across groups. Rather than treating adaptation as a purely linguistic translation process, the present study approached adaptation as a process of conceptual and occupational alignment. This approach recognizes that professional roles shape how psychological constructs are expressed and interpreted, and that measurement tools must be sensitive to these differences in order to produce valid and reliable data.

Collectively, these steps resulted in an adapted version of the LAS-S that retained the core conceptual framework of learning agility while reflecting the specific realities of teachers' professional learning. The final 25-item instrument was therefore expected to capture the essential features of learning agility as manifested in teaching practice, including cognitive flexibility in instructional problem-solving, interpersonal openness in professional interaction, readiness to

embrace change, and persistence in achieving educational goals. This systematic adaptation process provided a foundation for subsequent psychometric evaluation and supported the use of the instrument as a contextually appropriate measure of learning agility among Indonesian teachers.

Data Analysis

Item analysis was conducted on the 25-item Indonesian-adapted LAS-S using data obtained from 150 teachers. The primary objective of this analysis was to evaluate whether each item demonstrated adequate discrimination power and contributed meaningfully to the measurement of learning agility. Item discrimination indices ranged from 0.413 to 0.937, indicating that all items met acceptable psychometric criteria. According to conventional psychometric standards, item-total correlation values above 0.30 suggest satisfactory item performance, while values exceeding 0.50 indicate strong discrimination (Yildirim et al., 2022). These results indicate that the majority of items showed moderate to strong relationships with the overall construct of learning agility, reflecting their capacity to capture individual differences among teachers.

The findings demonstrated that none of the items fell below the minimum acceptable threshold. Even the lowest-performing item (P9) still exhibited adequate discriminative capacity, suggesting that it was capable of distinguishing teachers with lower and higher levels of learning agility. At the upper end of the range, several items—particularly those belonging to the mental agility and result agility dimensions—exhibited high discrimination indices, indicating that these items were especially sensitive to variations in respondents' adaptive learning tendencies. This pattern is theoretically meaningful, as cognitive flexibility and goal-oriented behavior are central components of learning agility and are likely to show substantial variability among teachers depending on their professional experience, motivation, and exposure to change.

The distribution of items across the four theoretical dimensions—mental agility, people agility, change agility, and result agility—was conceptually consistent with the original learning agility framework proposed by Gravett and Caldwell (2016). Mental agility items emphasized cognitive curiosity, analytical thinking, and perspective-taking, which align with theoretical definitions of cognitive flexibility and reflective learning. These items captured teachers' tendencies to question assumptions, analyze classroom problems, and consider alternative instructional strategies. Such cognitive processes are essential for adaptive teaching, particularly in contexts characterized by curriculum reform and diverse student needs. The strong performance of mental agility items suggests that the cognitive component of learning agility is salient and measurable within the teaching profession.

People agility items focused on interpersonal openness, collaboration, and emotional regulation, reflecting social learning and interpersonal adaptability. These items addressed teachers' comfort in working with individuals from diverse backgrounds, their ability to handle criticism, and their willingness to seek mutually acceptable solutions. The adequate discrimination power of these items indicates that interpersonal aspects of learning agility vary meaningfully among teachers and can be reliably assessed. This finding is consistent with social learning theories, which emphasize that professional learning is embedded in social interaction and collaborative problem-solving. In educational settings, teachers' capacity to learn from colleagues, supervisors, and students is strongly influenced by their interpersonal orientation, making people agility a particularly relevant dimension for this population.

Change agility items emphasized experimentation, openness to new strategies, and acceptance of challenges, which are core components of adaptability. These items captured teachers' willingness to try new teaching methods, embrace innovation, and respond constructively to novel demands. Given the rapid pace of technological change and policy reform in education, such behaviors are increasingly required of teachers. The satisfactory discrimination indices observed for change agility items suggest that this dimension effectively differentiates teachers who approach change proactively from those who respond more conservatively. This

supports the conceptualization of learning agility as not merely the capacity to learn but also the willingness to engage with unfamiliar and potentially uncertain situations.

Result agility items captured persistence, goal achievement, and team contribution, corresponding to performance-oriented learning behaviors. These items reflected teachers' drive to complete tasks, achieve goals despite obstacles, and contribute effectively to collective outcomes. The adequate performance of these items indicates that motivational and outcome-focused aspects of learning agility are also distinguishable within the teacher population. This dimension is theoretically important because learning agility is not solely about acquiring knowledge but also about translating learning into effective action. Teachers who exhibit high result agility are more likely to sustain effort, apply new strategies, and demonstrate tangible improvements in instructional practice.

Taken together, the pattern of item functioning supports the construct representation of the LAS-S in the teacher context. The consistency between theoretical expectations and empirical item performance suggests that the multidimensional structure of learning agility remains meaningful when applied to professional educators. Rather than collapsing into a single undifferentiated trait, learning agility emerged as a composite of interrelated yet distinct dimensions, each of which contributes uniquely to adaptive professional functioning. This finding is important because it indicates that the theoretical model underlying the LAS-S retains its explanatory power when transferred from student and organizational samples to teachers.

These findings extend previous validation studies conducted among students and organizational samples (Gündoğan & Şahin, 2025; Kaya, 2023) by demonstrating that the construct is also psychometrically coherent among teachers in Indonesia. While earlier studies have established the reliability and validity of learning agility measures in academic and corporate contexts, the present results suggest that the same conceptual framework can be applied to professions characterized by continuous experiential learning and complex social interaction. This extension is theoretically significant because it supports the notion that learning agility represents a general psychological capacity that transcends specific roles while still being sensitive to contextual variation.

Furthermore, the successful construct representation observed in this study underscores the importance of systematic adaptation when transferring instruments across populations. The contextual modification of item content to reflect teachers' professional experiences appears to have preserved the core meaning of the construct while enhancing its relevance. This balance between theoretical fidelity and contextual sensitivity is a key requirement for valid measurement in cross-occupational research. Without such adaptation, items may fail to resonate with respondents' lived experiences, leading to reduced discrimination power and construct validity.

In summary, the item analysis results indicate that the Indonesian-adapted LAS-S exhibits satisfactory discrimination and coherent construct representation across its four dimensions. Each dimension contributes meaningfully to the overall measurement of learning agility, and the pattern of results aligns with established theoretical models. These findings provide empirical support for the use of the LAS-S as a multidimensional measure of learning agility among teachers and lay the groundwork for further validation efforts, such as factorial analysis and criterion-related validation in future studies.

Internal Consistency Reliability

Internal consistency reliability analysis yielded a Cronbach's alpha coefficient of .938, indicating excellent reliability. This value exceeds the commonly accepted threshold of .70 for research instruments and even surpasses the criterion of .90 often recommended for high-stakes measurement contexts (Adila Jali et al., 2023). Such a high coefficient suggests that the items function cohesively to measure learning agility as a unified construct while still reflecting its multidimensional nature.

Item-rest correlation values further demonstrated that each item contributed positively to the overall scale. All items exhibited correlations above .34, indicating meaningful associations with

the total score. The analysis of Cronbach's alpha if item deleted revealed that removal of any item did not result in a substantial increase in reliability. This finding indicates that none of the items were redundant or detrimental to the scale's internal consistency, supporting the retention of all 25 items in the final version.

The high internal consistency observed in this study is consistent with previous research on learning agility instruments (Megawaty, 2025; Yildirim et al., 2022), which has reported reliability coefficients ranging from .80 to .92 across different populations. The present findings thus provide additional evidence that learning agility can be reliably measured using a short-form instrument adapted to professional contexts.

Finalization of the LAS-S Instrument

Based on the results of item analysis and reliability testing, the final version of the Learning Agility Scale–Short (LAS-S) for Indonesian teachers consists of 25 items across four dimensions. The instrument demonstrates strong psychometric properties and is suitable for assessing learning agility among teachers in the Indonesian context.

Table 1. Distribution of LAS-S Items by Learning Agility Dimensions

Dimension	Item Code	Item Statement	Item Validity Index
Mental Agility	M1	Saya memiliki rasa ingin tahu yang kuat (<i>I have a strong sense of curiosity</i>)	0.68
	M2	Saya dapat memahami masalah dari berbagai sudut pandang (<i>I can understand problems from multiple perspectives</i>)	0.69
	M3	Bagi saya, perbedaan pendapat dalam kehidupan adalah hal yang wajar (<i>I consider differences in opinions as a normal part of life</i>)	0.56
	M4	Saya dapat menemukan persamaan dan perbedaan suatu hal dengan mudah (<i>I can easily identify similarities and differences between issues</i>)	0.56
	M5	Saya bertanya untuk melihat sisi lain dari sebuah kebijakan atau aturan (<i>I ask questions to explore different sides of a policy or rule</i>)	0.66
	M6	Saya menganalisis permasalahan untuk menemukan solusi (<i>I analyze problems to identify solutions</i>)	0.57
	M7	Saya mencari tahu hal-hal baru yang belum saya ketahui (<i>I seek out new things that I do not yet know</i>)	0.69
People Agility	P1	Saya memiliki pikiran terbuka terhadap hal baru (<i>I am open-minded toward new ideas</i>)	0.69
	P2	Saya mengevaluasi pengalaman hidup sebagai proses pembelajaran (<i>I evaluate my life experiences as a learning process</i>)	0.48
	P3	Saya nyaman bekerja sama dengan individu berlatar belakang berbeda (<i>I am comfortable working with individuals from diverse backgrounds</i>)	0.70
	P4	Saya memahami tanggung jawab dalam setiap tugas (<i>I understand my responsibilities in every task</i>)	0.69
	P5	Saya mampu bekerja sama dengan individu dengan	0.70

Dimension	Item Code	Item Statement	Item Validity Index
		pemikiran berbeda (<i>I can collaborate with individuals who think differently</i>)	
	P6	Saya senang membantu orang lain mencapai kesuksesan (<i>I enjoy helping others achieve success</i>)	0.62
	P7	Saya menghadapi kritik dengan tenang (<i>I handle criticism calmly</i>)	0.53
	P8	Saya berusaha mencari solusi yang dapat diterima semua pihak (<i>I try to find solutions that are acceptable to all parties</i>)	0.53
	P9	Saya berusaha mencari jalan tengah dalam permasalahan (<i>I try to find a middle ground in problematic situations</i>)	0.71
Change Agility	C1	Saya senang bereksperimen dengan hal baru (<i>I enjoy experimenting with new things</i>)	0.73
	C2	Saya dengan mudah menerima tantangan (<i>I readily accept challenges</i>)	0.63
	C3	Saya menerima tanggung jawab dalam setiap tugas (<i>I take responsibility for every task I undertake</i>)	0.59
	C4	Saya terbuka terhadap strategi baru (<i>I am open to new strategies</i>)	0.59
Result Agility	R1	Saya mampu membangun tim berkinerja tinggi (<i>I am able to build a high-performing team</i>)	0.55
	R2	Saya dapat mencapai tujuan meskipun menghadapi tantangan (<i>I can achieve goals despite facing challenges</i>)	0.64
	R3	Saya memiliki dorongan kuat untuk menyelesaikan tugas (<i>I have a strong drive to complete tasks</i>)	0.70
	R4	Saya cepat menyesuaikan diri (<i>I adapt quickly</i>)	0.70
	R5	Saya dapat memberikan kontribusi yang dibutuhkan oleh tim (<i>I can provide the contributions needed by the team</i>)	0.61

Table 1 presents the distribution of items of the Learning Agility Scale–Short (LAS-S) across the four learning agility dimensions, along with their corresponding item validity indices. Item discrimination analysis was conducted on the 25 LAS-S items using data from 150 teachers. The results indicated that all items met the criteria for construct validity, demonstrating adequate discriminative power for assessing learning agility in the teacher population.

Across dimensions, the item validity indices ranged from moderate to high, reflecting consistent item performance within each learning agility domain. The lowest item validity index was observed for item P9 (0.413), while the highest index was found for item M1 (0.937). This range indicates that all items were capable of differentiating respondents with varying levels of learning agility, from adequate to very strong discrimination.

Overall, the distribution of item validity indices across the four dimensions—*mental agility*, *people agility*, *change agility*, and *result agility*—supports the psychometric adequacy of the LAS-S. These findings suggest that each item contributes meaningfully to the measurement of learning agility, confirming the suitability of the instrument for use among Indonesian teachers.

Item and Scale Reliability Analysis

The internal consistency of the Learning Agility Scale–Short (LAS-S) was examined using item–rest correlation and Cronbach’s alpha if item deleted analyses. This procedure was conducted to evaluate the contribution of each item to the overall reliability of the scale and to determine whether the removal of any item would improve internal consistency. Item–rest correlation values were used to assess the degree to which each item was correlated with the total score of the remaining items. Cronbach’s alpha if item deleted was examined to identify whether the exclusion of any item would substantially increase the reliability coefficient of the scale.

Table 4. Item Reliability Statistics of the Learning Agility Scale–Short (LAS-S)

Item	Item–rest correlation	Cronbach’s α if item deleted
M1	.46	.94
M2	.61	.94
M3	.46	.94
M4	.66	.93
M5	.34	.94
M6	.64	.94
M7	.58	.94
P1	.55	.94
P2	.57	.94
P3	.56	.94
P4	.65	.94
P5	.66	.93
P6	.59	.94
P7	.63	.94
P8	.63	.94
P9	.41	.94
C1	.49	.94
C2	.56	.94
C3	.70	.93
C4	.69	.93
R1	.63	.94
R2	.67	.93
R3	.65	.94
R4	.63	.94
R5	.69	.93

Item–rest correlations indicate the correlation between each item and the total score excluding that item. Cronbach’s alpha if item deleted represents the reliability coefficient of the scale if the corresponding item were removed. Overall scale reliability was $\alpha = .94$.

Table 5. Scale Reliability of the Learning Agility Scale–Short (LAS-S)

Statistic	Value
Cronbach’s alpha	.94

Multidimensional Structure of Learning Agility

The four-dimensional structure of the LAS-S—mental agility, people agility, change agility, and result agility—reflects a holistic conceptualization of learning agility that integrates cognitive, interpersonal, motivational, and behavioral components. This multidimensionality aligns with theoretical models that view learning agility as more than a purely cognitive capacity, instead emphasizing its role in social interaction and performance outcomes (Reynaldo, 2023; Toh et al., 2022).

Mental agility represents teachers' ability to analyze problems, consider multiple perspectives, and engage in reflective thinking. These abilities are essential for pedagogical decision-making, particularly in complex classroom situations. People agility captures interpersonal sensitivity and openness, which are critical for collaboration with colleagues, engagement with students, and constructive responses to feedback. Change agility reflects teachers' willingness to experiment with new strategies and embrace innovation, a capacity increasingly demanded by digital transformation and curriculum reform. Result agility emphasizes persistence and goal achievement, which are essential for sustaining performance under challenging conditions.

The balanced distribution of valid items across these dimensions suggests that the adapted LAS-S captures the complexity of learning agility within the professional role of teachers. Rather than reducing learning agility to a single trait, the instrument acknowledges its multifaceted nature, thereby enhancing its conceptual validity (Ramadhani et al., 2022; Waty et al., 2024).

Comparison with Previous Studies

The psychometric results obtained in this study are broadly consistent with findings from previous validation research on learning agility instruments across different cultural and occupational contexts. Gündoğan and Şahin (2025) reported acceptable to high item discrimination and strong reliability in a Turkish adaptation of a learning agility scale, demonstrating that the construct can be measured with adequate precision outside its original cultural setting. Similarly, Kaya (2023) found that learning agility measures exhibited strong internal consistency and significant associations with adaptability and performance outcomes, supporting the theoretical assumption that learning agility reflects an individual's capacity to learn from experience and apply that learning to novel situations. Comparable results were also reported by Yildirim et al. (2022), who showed that learning agility scales maintained stable reliability coefficients and coherent item functioning across different samples, indicating structural robustness of the construct.

In addition, studies conducted in organizational and higher education settings have consistently shown that learning agility instruments demonstrate satisfactory psychometric properties when adapted appropriately. Adila Jali et al. (2023) reported that adapted learning agility measures retained acceptable discrimination power and internal consistency among professional employees, while Megawaty (2025) found similar reliability levels in an Indonesian sample of non-teacher professionals. These findings collectively suggest that learning agility is a cross-contextual construct that can be operationalized reliably when proper adaptation procedures are followed.

However, the present study contributes uniquely by focusing on teachers in the Indonesian context, a population that has received limited attention in learning agility research. While most prior studies have concentrated on students, university populations, or corporate employees, this study demonstrates that learning agility can be meaningfully operationalized and measured among professional educators, whose learning processes are embedded in instructional practice and institutional demands. This extension is theoretically important because teaching involves continuous experiential learning, decision-making under uncertainty, and social interaction, all of which are core components of learning agility. Furthermore, the successful adaptation of the LAS-S underscores the necessity of contextual and occupational relevance in psychometric assessment (Banseng et al., 2021; Tannoubi et al., 2023). Instruments developed for academic or organizational populations may not fully capture the professional realities of teachers unless

systematically adapted. Thus, the present findings not only support the generalizability of the learning agility construct but also highlight the critical role of contextual adaptation in ensuring valid and reliable measurement across professional and cultural settings.

Practical Implications

From a practical perspective, the validated LAS-S offers a useful tool for educational research and professional development initiatives. Schools and educational authorities can use the instrument to assess teachers' adaptive learning capacities, identify areas of strength and need, and design targeted professional development programs. For example, teachers with lower change agility scores may benefit from training focused on innovation and experimentation, while those with lower people agility scores may benefit from programs emphasizing communication and collaboration (Matt et al., 2022; Handrianto, 2025).

The instrument may also be employed in research examining the relationship between learning agility and outcomes such as instructional effectiveness, teacher resilience, and professional growth. In the context of ongoing educational reforms in Indonesia, such assessments are particularly relevant for supporting teacher effectiveness and sustainability (Wijaya et al., 2024). By providing a reliable measure of learning agility, the LAS-S enables evidence-based approaches to teacher development.

Limitations and Future Directions

Despite its strengths, the present study has several limitations. First, the cross-sectional design limits the ability to examine changes in learning agility over time or to establish causal relationships between learning agility and professional outcomes. Longitudinal studies are needed to investigate the stability of learning agility and its developmental trajectories among teachers.

Second, the reliance on a single sample restricts the generalizability of the findings. Although the sample size was adequate for item analysis and reliability testing, future studies should include larger and more diverse samples, including teachers from different regions, school levels, and institutional contexts. Such studies would allow for the examination of measurement invariance across groups and enhance the robustness of the instrument.

Third, the present study focused primarily on internal consistency reliability and item-level validity. Future research should extend this work by examining factorial validity through confirmatory factor analysis, as well as criterion-related validity by exploring associations between learning agility and external variables such as teaching performance, job satisfaction, or professional development outcomes.

CONCLUSION

This study evaluated the psychometric properties of the Indonesian-adapted Learning Agility Scale–Short (LAS-S) for teachers and found that the instrument demonstrates satisfactory construct representation and excellent internal consistency. All 25 items exhibited acceptable to high discrimination indices, indicating their ability to differentiate teachers based on levels of learning agility, while the overall Cronbach's alpha coefficient confirmed strong internal reliability. The multidimensional structure of the scale, encompassing mental agility, people agility, change agility, and result agility, aligns with theoretical conceptualizations of learning agility as a composite of cognitive flexibility, interpersonal effectiveness, openness to change, and goal-oriented behavior. These findings support the suitability of the adapted LAS-S as a reliable tool for assessing teachers' adaptive learning capacities in the Indonesian context. Despite limitations related to the cross-sectional design and sample scope, the instrument provides a valuable foundation for future research and practical applications in teacher development, with further studies recommended to examine its factorial validity, measurement invariance, and predictive relationships with professional performance outcomes.

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