DEVELOPING AND VALIDATING THE ELEMENTARY STUDENT LEARNING AGILITY SCALE (ESLAS) FOR MEASURING KEY LEARNING TRAITS IN ELEMENTARY EDUCATION

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Accepted: 21-08-2024 Published: 30-10-2024 Received: 12-06-2024 Abstract: This study aimed to develop an elementary student learning agility scale (ESLAS) to measure elementary school students' perseverance, tenacity, interest, and independence in accomplishing the learning process. This study also focused on examining translational validity and internal consistency reliability to construct a valid and reliable scale. There were 90 elementary students chosen using voluntary random sampling as the respondents and five experts invited as the validators. The study developed ESLAS using a five-point Likert's scaling method with twenty items measured. The study used a five-point Likert scale with 20 items and included 90 elementary students and five expert validators. Data obtained from ESLAS were used to examine internal consistency reliability, while data from the validation sheet were used to judge the content validity index (CVI) and content validity ratio (CVR). Results showed that the developed ESLAS was considered very valid by the validators (CVI = +1.00, CVR = 1.00) and was categorized as a very high reliability (Cronbach's $\alpha = .879$). Another result depicted that there was no negative value in inter-item correlation, meaning that all items measured a similar construct. The results implied that the developed ESLAS is considered a valid and reliable scale for measuring elementary students' learning agility. Keywords: learning agility scale; learning perseverance; learning tenacity; learning interest; learning independence.

INTRODUCTION

Learning agility has been one of the significant factors in determining the success of the learning process (De Meuse & Harvey, 2021). It promotes a culture of continual growth by keeping students receptive to new ideas and experiences, which improves performance and flexibility. High learning agility bears the capacity to cope with occurring learning issues and hinders students from unsuccessful learning performance (De Meuse & Harvey, 2021). On the contrary, low learning agility causes subdued progression of comprehending learning materials and, consequently, inhibited creates learning development. For instance, students with high learning agility can be flexible in coping with different learning atmospheres that are contributively affected by teacher's characteristics, learning facilities, and school programs (Tripathi et al., 2020). They further can showcase strengths in handling confrontations or negotiations that are prominent skills in the twenty-first-century

education era. In coping with the advancement of technology, these students can possess an adaptive behavior to different technological-enhanced learning platforms, and thus convey an agility to master the technology-based tools (Makhloufi & Messaif, 2021). Therefore, learning agility is considered to be a vital learning trait in succeeding in the process of acquiring new knowledge (Smith & Watkins, 2024).

Within a scheme of elementary education, learning agility must be closely paid attention to as it helps form elementary students' characteristics. When it has been perceived at the early age of education, it can construct a good individual character, such as perseverance, tenacity, interest, and independence (De Meuse & Harvey, 2021). Learning perseverance refers to the willpower to continue completing learning tasks by means of achieving the desired learning outcomes. Learning tenacity, while related to perseverance, emphasizes the dogged determination and refusal to give up on learning, even in the face of various learning

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obstacles (Mrazek et al., 2018). It is often associated with a single-minded focus and unwavering commitment to a goal. To support the strength of learning perseverance and tenacity, learning interest is found to be an additional factor in successful academic performance (York et al., 2019). For instance, students with less interest in learning mathematics might show extra learning efforts as there is a psychological force within themselves that learning mathematics might be difficult and complicated (Abramovich et al., 2019). At last, elementary students can construct their independence because they know that the learning agility conceived forms them to be more autonomous in solving problems. Therefore, as learning agility contributes to the formation of good character building, this issue must be undertaken in early education namely in elementary school.

To compile the information on learning agility perceived by elementary school students, it is beyond necessary to use authentic measurement. Many studies have developed a valid and reliable measurement for learning agility, however, few of them involved the setting of elementary school students and included the four precious characteristics for Indonesian students such as perseverance, tenacity, interest, and independence. For instance, De Meuse et al. (2011) developed a valid and reliable scale to measure learning agility under the dimension of mental, people, change, results, and self-awareness subskills (Cronbach's α = .88). However, this learning agility might be not relevant to elementary school students in which the scale items refer to working performance and life experience, which tends to be more in a business scope. Bouland-van Dam et al. (2022) developed a leadership learning agility scale (LLAS) consisting of eighteen items, and it is categorized as very valid (*Cronbach's* $\alpha = .89$). This LLAS is also not applicable to the setting of elementary school student as it measures how a leader of a company shows the agility in facing various business problems. Other related studies also develop a valid and reliable learning agility scale in business and enterprise (Lee & Song, 2022), technology mastery (Ghosh et al., 2021), organizational management (Milani et al., 2021; Tripathi & Dhir, 2023), and school administration (Özgenel, 2021). Yet, these prior studies have not provided a reliable measurement of elementary school students' learning agility.

Following the explanations above, it is demonstrated by taking part in all learning necessary to develop a learning agility scale for activities and by being industrious and persistent elementary school students by focusing on their (Ng, 2021). A strong inclination toward something,

perseverance, tenacity, interest, and independence. This expanded scale helps elementary school teachers understand the condition of their students' learning agility, and the information can be used as feedback in advancing their learning perseverance, tenacity, interest, and independence. The future handling of improving learning agility can be advantageous in building more autonomous and stronger learners amid a volatile era. Therefore, at an early age, teachers have prepared students with learning characteristics that are more adaptive, flexible, and sustainable. Thus, this study aims to develop a valid and reliable Elementary Student Learning Agility Scale (ESLAS) with four subskills of learning perseverance, tenacity, interest, and independence.

The capacity to pick up new abilities rapidly, adjust to changing circumstances, and use information in novel ways is familiarly recognized as learning agility (De Meuse & Harvey, 2021). In fast-paced and dynamic today's school environment, where school boards must be nimble and creative due to ongoing disruption and technological breakthroughs, this is an essential ability. Mental agility, people agility, outcomes agility, and change agility are just a few of the essential components of learning agility (Galés & Gallon, 2019). People agility refers to interpersonal and successful communication abilities, whereas mental agility is the capacity for critical thought and the creation of new connections (Tripathi et al., 2020). Change agility is the ability to adjust to novel circumstances and conditions, whereas results agility is the ability to perform consistently under novel or difficult circumstances (Tripathi et al., 2020).

However, the present study rather uses four factors of learning agility that correspond to the effort of good character building, covering learning perseverance, tenacity, interest, and independence (De Meuse & Harvey, 2021; Ellala et al., 2022). Acquiring perseverance requires a serious mindset to comprehend the subject matter being studied. Achieving the best learning outcomes requires a strong commitment to learning, particularly in disciplines challenging like mathematics. Persistent students will face learning problems with greater caution and wisdom and be better equipped to meet their objectives. The capacity to maintain concentration and to work hard through all of the difficulties we face is persistence in learning (Ng, 2021). Persistence in learning can be demonstrated by taking part in all learning activities and by being industrious and persistent along with enthusiasm or a strong desire for it, is a high sense of interest in learning (Filgona et al., 2020). Students who are interested in learning tend to be highly enthusiastic or driven to pursue certain goals. A student's enduring propensity to focus and retain certain tasks is known as their learning interest (Rahiem, 2021). Student learning interest is defined as a desire or willingness on the part of the students, combined with purposeful attention and activity, that eventually generates a sense of behaviour, pleasure in altering including knowledge, attitudes, and abilities (Robertson & Padesky, 2020). At last, the capacity to guide and control one's own ideas, emotions, and actions during the learning process is known as independence. The ability to set goals, select learning techniques, and efficiently manage learning time are all components of learning independence (Shi & Fan, 2023). To enhance learning achievement, students must demonstrate initiative, activity, and involvement in the learning process when learning independence. Gaining independence also entails having the selfassurance to complete tasks, be able to make decisions on one's own, and not rely on others.

Learning agility can be measured using a variety of tests. Harvey's Personality Test assesses learning agility as a competency made up of seven characteristics and offers scoring standards (Harvey & De Meuse, 2021). This evaluation can be used in conjunction with other instruments, including cognitive ability tests, to give a thorough picture of a candidate's learning agility. Supervisors can also evaluate workers' learning agility by rating their overall job performance and promotability. Another tool for measuring learning agility is the Choices Questionnaire. It evaluates a person's capacity to pick up new skills and function in novel contexts. This assessment gauges a person's capacity for learning and performance in novel, difficult circumstances. It is based on the idea of learning agility.

Besides the above measuring technique, many studies have developed specific learning agility scales. For instance, De Meuse et al. (2011) developed a valid and reliable scale to measure learning agility under the dimension of mental, people, change, results, and self-awareness subskills (*Cronbach's* $\alpha = .88$). However, this learning agility might be not relevant to elementary school students in which the scale items refer to working performance and life experience, which tends to be more in a business scope. Bouland-van Dam et al. (2022) developed a leadership learning agility scale (LLAS) consisting of eighteen items

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A crucial part of the educational process is character education. Students with strong moral principles will grow up to be successful, moral, and ethical individuals (Pring, 2021). Students can develop virtues like patience, kindness, and honesty with the aid of character education. Students who exhibit high character can go on to become productive members of society and raise their standards of living (Pring, 2021). Those who receive character education may also find it easier to overcome difficulties and roadblocks in their daily lives. As a result, character education ought to be covered in full in the curriculum (Pike et al., 2021). Students can grow into successful adults who benefit society in this way. Today's essential traits for educators include freedom in learning, curiosity, and perseverance. When it comes to learning, perseverance refers to the capacity to maintain concentration and hard work in the face of numerous setbacks and difficulties (Salisu et al., 2020). To be persistent in learning, one must possess a strong sense of resolve and a commitment to achieving learning objectives. A strong sense of interest and purposeful participation in the learning process are indicators of interest in learning (Ernawati et al., 2022). The capacity to guide and control one's ideas, emotions, and actions during the learning process is known as independence. Students can enhance their academic performance and make better contributions to society by possessing these qualities. Learning agility refers to a student's capacity to pick up new skills quickly and adjust to complicated situations to develop positive character traits (De Meuse & Harvey, 2021). As the world becomes more interconnected and technologically advanced, students need to be able to draw lessons from their experiences, adjust to

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new circumstances, and put those lessons to use. Learning agility encompasses several qualities, including adaptability, the capacity to let go of outdated solutions in favor of fresh approaches that will better serve current and future demands, and the capacity to learn from errors (De Meuse & Harvey, 2021). Students who possess learning agility are more able to acquire new abilities, enhance existing ones, and adapt to changing circumstances.

METHOD

This study used a cross-sectional survey research design with a quantitative approach. A crosssectional study was chosen because the present study did not focus on the changing learning agility that might be interfered with by surrounding environment traits. There were 90 elementary school students in Central Java Province,

Indonesia, who voluntarily participated in the study. These respondents were 48 female students and 42 male students who were in the sixth grade since they had been confronted by many activities such as preparing for their final academic evaluations or examinations, preparation for secondary school tests, and undertaking courses to support their graduation and enrollment tests. The respondents were from four state elementary schools in the urban area of cities in Central Java Province. As the respondents were children, the present study upheld the ethical issue, described in the last sub-section of this methodology. In addition, there were five experts invited to validate the developed elementary student learning agility scale (ESLAS). Table 1 portrays the background information of the validators.

Validator Codes	Expertise	Academic and Professional Backgrounds					
E1	Research instrument	A senior lecturer with education background whose research interest was in research and development including developing					
	development	reliable research instruments					
E2	Elementary education	A senior lecturer with elementary education background whose research interest was in teaching and learning process in primary education					
E3	Educational psychology	A lecturer of Psychology Department whose expertise was in educational psychology					
E4	Psychology measurement	An assistant lecturer of Psychology Department who mostly gave assistance in developing psychometrics					
E5	Teaching for young learners	A senior teacher at an outstanding elementary school in Central Java Province					

Data were obtained by using two instruments product of this study, and a validation sheet. Table namely a developed elementary student learning 2 shows the details of the data collection technique agility scale (ESLAS), which also became the used in the present study.

Research instruments	Objectives	Formats/Contents	References	
ESLAS	Measuring learning agility, including the four subskills of learning perseverance, tenacity, interest, and	The scale consisted of twenty items with five items for each subskill. A five-point Likert's scale was employed from strongly disagree (1) to strongly agree (5) with twenty items disseminated by four subskills namely learning perseverance,	(De Meuse & Harvey, 2021; Ellala et al., 2022)	
Validation sheet	independence Examining translational validity carried out by five experts	tenacity, interest, and independence. The validation sheet consisted of 10 items with four-point format from strongly disagree (1) to strongly agree (4).	(Asún et al., 2016)	

Table 2. Details of data collection technique

The obtained data from ESLAS were then the respondents' responses on each item. The analyzed using descriptive statistics and internal obtained M score was classified into Swanson's consistency reliability tests (Pallant, 2020). The quartile categorization by transforming it into M%descriptive statistics test was employed to describe (Swanson, 2014). The M% was obtained by dividing the M score by the maximum score of items (6) and the result was multiplied by 100%. The obtained M% was then categorized in the following quartile: Q1/very low (M% < 25%), Q2/low (25% $\leq M\% <$ 50%), Q3/high (50% $\leq M\%$ < 75%), and O4/very high ($M\% \ge 75\%$) (Swanson, 2014). Moreover, the obtained data from the validation sheet was analyzed in its content validity

ratio (CVR) and content validity index (CVI) to generate the level of content validity. The higher the CVR score (CVR_{max} = +1), the greater the experts' agreement and the better the validity result, and CVI > 0.78 was considered very highly valid. Table 3 shows the blueprint of the developed ESLAS.

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Variable	Sub-skills/	Item	Item Examples	References
	Aspects	Numbers	-	
Personal	- Gender	1	- What is your gender?	(Pratama et al.,
information	- Grade	2	- What grade are you in?	2024)
Learning Agility	Learning perseverance	1-5	I am committed to learn persistently to attain desired learning goals.	(De Meuse & Harvey, 2021;
	Learning tenacity	6-10	I do not give up when I face difficulty in accomplishing learning tasks.	Ellala et al., 2022)
	Learning interest	11-15	I get excited to learn new things and apply the knowledge in reality.	
	Learning independence	16-20	I take initiative to find and use resources to learn when I learn something new.	

Table 5. Divediting of developed ESLAS	Table 3.	Blueprint	of develo	ped ESLAS
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The main concern of ethics was the fact that the required to click the agreement box to indicate respondents participating in this study were children aged between 11-12 years old, which they should be still under parents' full monitoring. This study provided parental consent that allowed their children to participate in the study. By employing this parental consent form, the parents agreed that their children could participate in the study. Moreover, as the main actors in the research, the children were informed about the brief of the research along with the information on how they could participate in it. To provide participants with practical guidance and assurance throughout their involvement in this study, the brief also included information about data sharing and confidentiality. To prevent misunderstandings and ambiguity, all information was stated clearly in the questionnaire's cover letter. Due to an online administration framework, respondents were then

their assent. The acquired data were kept online in a Google database that belonged to the relevant author. To prevent testing fallacies and incorrect data interpretations, the researchers analyzed with the assistance of qualified statistics specialists.

RESULTS AND DISCUSSION

Results of the translational validity test

The present study used a translational validity test encompassing content and face validity. The content validity was to measure the relevance of the contents contained in the developed elementary student learning agility scale (ESLAS) and the face validity measured how the contents were constructed and displayed. Table 4 conveys the results of the translational validity test.

Item –		Scores				CVP
Item	E1	E2	E3	E4	E5	CVK
ESLAS consists of materials relevantly to learning agility	4	4	4	4	4	+1.00
concept.						
ESLAS measures learning perseverance experienced by	4	4	4	4	4	+1.00
elementary school students.						
ESLAS measures learning tenacity experienced by elementary	4	4	4	4	4	+1.00
school students.						
ESLAS measures learning interest experienced by elementary	4	4	4	4	4	+1.00
school students.						
ESLAS measures learning independence experienced by	4	4	4	4	4	+1.00
elementary school students.						

Table 4. Results of translational validity test

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ESLAS contents are relevant to theory and practice for	4	4	4	4	4	+1.00	
elementary school students.							
ESLAS has an interesting look that can attract elementary	4	4	4	4	4	+1.00	
students to complete it.							
ESLAS uses simple and understandable languages for	4	4	4	4	4	+1.00	
elementary students.							
ESLAS uses fonts and design that makes the items easily	4	4	4	4	4	+1.00	
readable.							
ESLAS provides clear instruction and no ambiguity.	4	4	4	4	4	+1.00	

By Table 4, every expert firmly agreed that ESLAS had satisfied the validity requirements. Due to the agreement level, the CVR value was ± 1.00 , exceeding the minimum requirement for five panelists (CVR > 0.99). Given that the CVI value was 1.00 and the CVR value was ± 1.00 , both of which were higher than 0.78 and, thus, classified as having a high validity. This result implied that ESLAS contained relevant contents of learning agility, including the four subskills of learning perseverance, tenacity, interest, and independence. Even the validators quantitatively agreed that ESLAS was very valid, they had several responses toward its form. The short interview script was used as data triangulation confirming the quantitative agreement.

"This measure is sufficient to be used to examine learning agility. Not only for elementary students, it can be used for examining learning agility perceived by the first-grade student in secondary school. Both still share similar conditions of constructs." (snippet 1, E1)

Snippet 1 by E1 shows that the developed ESLAS each can be used to reveal learning agility conceived by students in the first-year study time at lower result secondary school level. This might be because item.

By Table 4, every expert firmly agreed that LAS had satisfied the validity requirements. e to the agreement level, the CVR value was .00, exceeding the minimum requirement for e panelists (CVR > 0.99). Given that the CVI ue was 1.00 and the CVR value was ± 1.00 , both which were higher than 0.78 and, thus, classified having a high validity. This result implied that

"The four subskills of ESLAS are important to help build Indonesian students' good character education. The results of each subskill can be a reference for many teachers to the condition of their students, especially in the domain of perseverance, tenacity, interest, and independence." (snippet 2, E2)

Results of the internal consistency reliability test

The study undertook an internal consistency reliability test with the assistance of IBM SPSS 25. Beforehand, the study intended to look at the descriptive statistics of the ESLAS items administered to the 90 respondents. The objective was to showcase the trend of the given answers for each item and portray the distribution of answers stated by the respondents. Table 5 depicts the results of the descriptive statistics test for each item.

Subskills	ESLAS Items	М	SD	<i>M%</i>	Swanson's Q Categorization
Learning Perseverance	Item 1	4.8756	1.13492	81.26%	Q4
	Item 2	4.8320	1.52982	80.53%	Q4
	Item 3	4.9020	.72947	81.70%	Q4
	Item 4	4.4536	.80036	74.22%	Q3
	Item 5	4.5588	1.38928	75.98%	Q4
Learning Tenacity	Item 6	4.4224	1.45792	73.70%	Q3
	Item 7	4.0598	.79971	67.66%	Q3
	Item 8	5.6420	1.22394	94.03%	Q4
	Item 9	4.4536	1.87274	74.22%	Q3
	Item 10	4.8832	1.12332	81.38%	Q4
Learning Interest	Item 11	4.8664	1.19388	81.10%	Q4
	Item 12	4.8832	1.67283	81.38%	Q4
	Item 13	5.5756	.94366	92.92%	Q4
	Item 14	4.9020	1.18489	81.70%	Q4

Table 5. Results of descriptive statistics test on ESLAS items

Subskills	ESLAS Items	М	SD	M%	Swanson's Q Categorization
	Item 15	4.4536	1.18489	74.22%	Q3
Learning Independence	Item 16	5.4326	1.34858	90.54%	Q4
	Item 17	4.8320	.94366	80.53%	Q4
	Item 18	4.4536	1.3497	74.22%	Q3
	Item 19	5.6922	.97869	94.87%	Q4
	Item 20	5.0544	1.54869	84.24%	Q4

categorized in Q3 namely item 4, item 6, item 7, item 9, item 15, and item 18. This implied that the six items had a high respondent' agreement. Moreover, the rest items were in a very high category (Q4), meaning that the items were very highly agreed upon by the respondents. Respondents showed that their learning tenacity and per sub-skill.

Regarding Table 5, there were six items was lower than the other subskills due to there being three items (e.g., items 6, 7, and 9) found to be in the Q3 category. However, overall items showed in a high to very high category, in which the respondents' agreement towards the items was very positive. Afterward, Table 6 shows the results of internal consistency reliability tests, aggregately

Table 6. Cronbach's a values for ESLAS including the sub-skills

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Variables	α Value	N_{items}	N participants
Aggregate ESLAS	.879	20	90
Sub-skill 1: Learning perseverance	.843	5	90
Sub-skill 2: Learning tenacity	.790	5	90
Sub-skill 3: Learning interest	.847	5	90
Sub-skill 4: Learning independence	.815	5	90

consistency reliability test for the aggregate ESLAS was in the very high reliability ($\alpha > .70$). This meant that the developed ESLAS was able to be used as the main reference for measuring elementary school students' learning agility that focused on the four sub-skills namely learning perseverance, tenacity, interest, and independence. Regarding the sub-skills, all sub-skills were also considered as very highly reliable due to α values > .70. Even the second sub-skill got a lower α value, this factor was still very highly reliable. Hence, the developed ESLAS could be used to measure elementary school students' learning agility.

This study found that the developed ESLAS was categorized as very valid and very highly reliable. This meant that ESLAS could be used to measure elementary school student learning agility by focusing on four emphasized sub-skills as character education, namely perseverance, tenacity, interest, and independence. Learning agility for elementary school students to effectively adjust to changing contexts and situations, thus, they must develop an aptitude for learning agility as it can determine factors influencing their learning blockades (Novianti et al., 2023). Students must be able to pick things up quickly and adapt to new knowledge, technologies, and social conventions in today's fast-paced, constantly like difficulty with a particular subject,

Per Table 6, the result of the undertaken internal evolving environment. For elementary school pupils in particular, this ability is crucial since it sets the stage for their future academic and professional success. The capacity to pick things up rapidly and adjust to novel circumstances, settings, and technological advancements is known as learning agility (De Meuse & Harvey, 2021). It calls for curiosity, open-mindedness, and a willingness to take chances (De Meuse & Harvey, 2021; Tripathi et al., 2020). Thinking analytically, problem-solving, and navigating complicated and difficult situations are all skills that students with learning agility possess (Tan & Ho, 2023).

> Students in elementary school need to learn perseverance and tenacity because these help them get over challenges and accomplish their objectives. The capacity for perseverance in the face of difficulties, disappointments, and setbacks is a crucial quality that students must learn early in life (Wheatley, 2010). Students who learn to endure develop growth mindsets, resilience, and confidence-all of which are essential for both their academic and personal success. Additionally, perseverance fosters critical thinking, problemsolving abilities, and situational flexibility in students (Tan & Ho, 2023). Additionally, persistence helps people feel proud of and accomplished, which can increase their motivation and self-worth. Students can overcome challenges

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dissatisfaction with a task, or disappointment with a failure by developing perseverance. As students learn to accept accountability for their choices and results, this capacity also aids in the development of students' feelings of accountability and responsibility. Teaching elementary school children to persevere will enable them to grow into successful, self-assured people who are better suited to face the difficulties of the twenty-first century.

In addition, the basis for lifelong learning and personal development is laid throughout elementary school years when they gain independence and enthusiasm for studying. First of all, encouraging students to have a sincere interest in studying pushes them to learn about topics outside of textbooks (Barkley & Major, 2020). Students are more inclined to ask questions, look for solutions, and make connections between what they learn in the classroom and real-world applications when they are interested. Their insatiable curiosity turns into a motivating factor that advances their academic path (Watters, 2021). Developing young learners' independence is equally crucial. Independence encourages selfreliance and critical thinking abilities in pupils by enabling them to take charge of their education (Ekeh & Venketsamy, 2023). Children gain resilience and self-confidence when they can handle problems independently, make decisions, and efficiently manage their time. Their academic performance is improved, and this sense of autonomy also gets them ready for difficulties outside of the classroom in the future. Furthermore, fostering independence and an enjoyment of learning in elementary school paves the way for a lifetime desire for learning (Maluleka, 2021). Students who are encouraged to follow their passions and develop their ideas are more likely to grow up to be driven lifelong learners who actively seek out information and make valuable contributions to society. As a result, parents and teachers are essential in fostering an atmosphere that supports these traits and gives every student the chance to realize their greatest potential both intellectually and emotionally.

CONCLUSION

The developed elementary student learning agility scale (ESLAS) is considered very valid by the five validators (CVI = +1.00, CVR = 1.00) and very highly reliable (*Cronbach's* $\alpha = .879$). There is no negative value in the inter-item correlation, so all items measure the same underlying construct. In addition, the validators agree that the developed

ESLAS is relevant to be administered to elementary students as it consists of fewer but sufficient items with simple and understandable languages. The administration using online mode might attract elementary students' interest in completing the scale as it is supported with colorful background setups and pictures and readable and casual fonts. Moreover, the validators also believe that this scale can be justifiably used in the first grade of secondary school setting due to generally basic items constructed in ESLAS. Hence, this implies that the constructed ESLAS can be used to measure elementary school students' learning agility that focuses on four subskills used as good character education, namely perseverance, tenacity, interest, and independence. The result of this scale can be used by elementary teachers to initiate a program of good character education by knowing students' perseverance, tenacity, interest, and independence and creating relevant actions. As an implication, the successfully developed ESLAS is suggested to be further employed by teachers to examine students' learning agility with bigger numbers of respondents. Future studies are also invited to expand the scale when dealing with the school's core values, such as religiosity, because the present ESLAS is constructed more generally than specific to the school's backgrounds.

REFERENCES

- Abramovich, S., Grinshpan, A. Z., & Milligan, D. L. (2019). Teaching mathematics through concept motivation and action learning. *Education Research International*, 2019(1), 3745406.
- Asún, R. A., Rdz-Navarro, K., & Alvarado, J. M. (2016). Developing multidimensional Likert scales using item factor analysis: The case of four-point items. *Sociological Methods & Research*, 45(1), 109-133.
- Barkley, E. F., & Major, C. H. (2020). Student engagement techniques: A handbook for college faculty. John Wiley & Sons.
- Bouland-van Dam, S. I., Oostrom, J. K., & Jansen, P. G. (2022). Development and validation of the leadership learning agility scale. *Frontiers in Psychology*, 13, 991299.
- De Meuse, K. P., & Harvey, V. S. (2021). Learning agility. *The age of agility: Building learning agile leaders and organizations*, 1.
- De Meuse, K. P., Dai, G., Eichinger, R. W., Page, R. C., Clark, L. P., & Zewdie, S. (2011, January). The development and validation of a self assessment of learning agility. In *Society for Industrial and Organizational Psychology Conference, Chicago, Illinois.*

- Ekeh, M. C., & Venketsamy, R. (2023). Enhancing Early Grade Learners' Critical Thinking Skills for Self-Reliance. Profesi Pendidikan Dasar, 72-81.
- Ellala, Z. K., Attiyeh, J. H. A., Alnoaim, J. A., Alsalhi, N. R., Alqudah, H., Al-Qatawneh, S., ... & Abdelkader, A. F. (2022). The Role of Students' Agility and Students' Interest in the Linguistic Intelligence among Gifted Students in Higher Education Institutions. Eurasian Journal of Educational Research, 100(100), 206-221.
- Ernawati, M. D. W., Asrial, A., Perdana, R., Septi, S. E., Rohana, S., & Nawahdani, A. M. (2022). Evaluation of Students' Interest, Attitudes, and Science Process Skills in Science Subjects. Journal of Education Research and Evaluation, 6(1), 181-194.
- Filgona, J., Sakiyo, J., Gwany, D. M., & Okoronka, A. of Education and social studies, 10(4), 16-37.
- Galés, N. L., & Gallon, R. (2019). Educational agility. Rethinking Teacher Education for the 21st Century. Trends, Challenges and New Directions, 98-111.
- Ghosh, S., Muduli, A., & Pingle, S. (2021). Role of elearning technology and culture on learning agility: An empirical evidence. Human systems management, 40(2), 235-248.
- Harvey, V. S., & De Meuse, K. P. (2021). The age of agility: Building learning agile leaders and organizations. Oxford University Press.
- Joiner, B. (2019). Leadership Agility for organizational agility. Journal of Creating Value, 5(2), 139-149.
- Lee, J., & Song, J. H. (2022). Developing a learning measurement of employee agility. European Journal of Training and Development, 46(5/6), 450-467.
- Makhloufi, W. O., & Messaif, D. (2021). Distance Learning during the Pandemic: Students' Perceptions of the Challenges and Opportunities (Doctoral dissertation, Université Ibn Khaldoun-Tiaret-).
- Maluleka, K. J. (2021). Education for self-reliance and its relevance to lifelong learning in the previously colonised countries. International Journal of Lifelong Education, 40(2), 129-141.
- Milani, R., Setti, I., & Argentero, P. (2021). Learning agility and talent management: A systematic prospects. Consulting review and future Psychology Practice Journal: and Research, 73(4), 349.
- Mrazek, A. J., Ihm, E. D., Molden, D. C., Mrazek, M. D., Zedelius, C. M., & Schooler, J. W. (2018). Expanding minds: Growth mindsets of selfregulation and the influences on effort and perseverance. Journal of Experimental Social Psychology, 79, 164-180.
- Ng, C. (2021). What kind of students persist in science of learning in the face academic Teaching, 58(2), 195-224.

- Novianti, P. A., Yudiana, W., & Novita, S. (2023). Can Learning Agility Predict Students' Academic Burnout During Distance Learning?. Journal of Educational, Health & Community Psychology (JEHCP), 12(1).
- Özgenel, M. (2021). Learning agility of school administrators: An empirical investigation. International Journal of Progressive Education (IJPE).
- Pallant, J. (2020). SPSS survival manual: A step by step guide to data analysis using IBM SPSS. Routledge.
- Pike, M. A., Hart, P., Paul, S. A. S., Lickona, T., & Clarke, P. (2021). Character development through the curriculum: teaching and assessing the understanding and practice of virtue. Journal of Curriculum Studies, 53(4), 449-466.
- U. (2020). Motivation in learning. Asian Journal Pratama, R. D., Imaniar, F., Lestari, L. A., & Rochmawati, L. (2024). EFL teacher self and collective efficacy scale (ETSCE): Developing efficacy measures in teaching EFL. Englisia: Journal of Language, Education, and Humanities, 11(2), 161-180.
 - Pring, R. (2021). Education as a moral practice. In The RoutledgeFalmer Reader in the Philosophy of Education (pp. 195-205). Routledge.
 - Rahiem, M. D. (2021). Remaining motivated despite the limitations: University students' learning COVID-19 propensity during the pandemic. Children and youth services review, 120, 105802.
 - Robertson, D. A., & Padesky, C. J. (2020). Keeping students interested: Interest-based instruction as a tool to engage. The Reading Teacher, 73(5), 575-586.
 - Salisu, I., Hashim, N., Mashi, M. S., & Aliyu, H. G. (2020). Perseverance of effort and consistency of interest for entrepreneurial career success: does resilience matter?. Journal of Entrepreneurship in Emerging Economies, 12(2), 279-304.
 - Shi, L., & Fan, C. (2023). A New Learning Resource Recommendation Method for Improving the Efficiency of Students' Online Independent Learning. International Journal of Emerging Technologies in Learning, 18(5).
 - Smith, B. A., & Watkins, K. E. (2024). Measuring learning agility: a review and critique of learning agility measures. Personnel Review, 53(3), 704-720.
 - Swanson, P. (2014). The power of belief: Spanish teachers' sense of efficacy and student performance on the National Spanish Examinations. Hispania, 5-20.
 - Tan, S. I. W., & Ho, M. H. R. (2023). Learning Agility and Learning Organizations in Disruptive Times. Handbook on In International Education Development in Asia-Pacific (pp. 1-24). Singapore: Springer Nature Singapore.
- challenges?. Journal of Research in Science Tripathi, A., & Dhir, S. (2023). HRD interventions, learning agility and organizational innovation: a

Developing and validating the elementary student learning agility scale for measuring key learning traits in elementary education

- PLS-SEM modelling approach. *International Journal of Organizational Analysis*, *31*(6), 2322-2336.
- Tripathi, A., Srivastava, R., & Sankaran, R. (2020). Role of learning agility and learning culture on turnover intention: an empirical study. *Industrial and Commercial Training*, *52*(2), 105-120.
- Watters, J. (2021). Why is it so? Interest and curiosity in supporting students gifted in science. *Handbook* of giftedness and talent development in the Asia-pacific, 761-786.
- Wheatley, M. J. (2010). *Perseverance*. Berrett-Koehler Publishers.
- York, T. T., Gibson, C., & Rankin, S. (2019). Defining and measuring academic success. *Practical assessment, research, and evaluation, 20*(1), 5.