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Self-Efficacy Scales In Online Learning: Construction And Validation

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ABSTRAK

Rendahnya semangat serta hasil belajar siswa selama proses pembelajaran daring dipengaruhi oleh beberapa faktor, salah satunya adalah faktor Self-efficacy. Hanya saja kenyataan dilapangan menunjukkan bahwa guru belum dapat mengukur tingkat Self-efficacy siswa selama proses pembelajaran daring, sehingga penelitian ini dilakukan dengan tujuan untuk mengembangkan dan memvalidasi item yang menilai empat sumber self-efficacy dalam pembelajaran online. Penelitian ini tergolong kedalam jenis penelitian pengembangan, yang dilaksanakan melalui tahap pengkajian literatur, menurunkan butir-butir instrument, mengujicobakan instrumen terhadap sampel, menyeleksi butir instrumen dan menganalisis reliabilitas dan validitas instrument. Subjek yang terlibat dalam penelitian ini yakni 1 orang pakar bidang evaluasi pendidikan, 1 orang pakar pembelajaran online, serta 176 mahasiswa. Pengumpulan data dalam penelitian dilakukan dengan menggunakan metode non tes, dengan instrumen penelitian berupa lembar validitas instrument dan kuisioner self-efficacy mahasiswa. Data yang diperoleh dalam penelitian kemudian dianalisis dianalisis dengan uji validitas dan reliabilitas butir instrumen menggunakan analisis partial least square (PLS). Hasil analisis penelitian menunjukkan bahwa instrument yang dikembangkan telah mencapai nilai valid dan reliabel untuk tiga belas butir item pada pengukuran self-efficacy dalam pembelajaran online. Sehingga instrumen ini dapat digunakan dalam penelitian yang melibatkan self-efficacy sebagai salah satu variable yang telah memperlihatkan empat sumber/dimensi dari self-efficacy.

ABSTRACT

Low enthusiasm and student learning outcomes during the online learning process are influenced by several factors, one of which is the self-efficacy factor. The reality on the ground shows that teachers have not been able to measure students' self-efficacy level during the online learning process, so this research was conducted to develop and validate items that assess four sources of self-efficacy in online learning. This research belongs to the type of development research carried out through the literature review stage, deriving instrument items, testing instruments on samples, selecting instrument items, and analyzing the reliability and validity of the instrument. The subjects involved in this research were one expert in educational evaluation, one in online learning, and 176 students. Data collection in the study was carried out using the non-test method, with research instruments in the form of instrument validity sheets and student self-efficacy questionnaires. The data obtained in the study were then analyzed by testing the validity and reliability of the instrument items using partial least squares (PLS) analysis. The research analysis results show that the instrument developed has achieved valid and reliable values for thirteen items on self-efficacy measurement in online learning, so this instrument can be used in research involving self-efficacy as a variable that has shown four sources/dimensions of self-efficacy.

1. INTRODUCTION

Education is one of the efforts made by an individual to improve the quality of education so that it can be well-received in society (Pane & Dasopang, 2017; Sujana, 2019). Education is generally carried out through teaching and learning directly in a learning environment. It's just that during the spread of Covid-19, the implementation of education, which was initially carried out through a face-to-face process between teachers and students, has now been transferred to an online learning process (Syachtiyani & Trisnawati, 2021; Tafdhila & Marleni, 2021). Online learning is a distance learning process that utilizes various learning applications such as Google Classroom, Google Meet, Zoom Meetings, etc. (Robandi & Mudjiran, 2020; Saumi et al., 2021). Online learning allows students to learn anywhere and anytime, according to the situation and conditions (Aldiyah, 2021; Muawanah & Muhid, 2021). In addition, online learning also does not cause crowds, so that it can prevent virus transmission. In the implementation process, students' enthusiasm for participating in online learning tends to vary, where student enthusiasm

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for learning is influenced by external and internal factors (Agustiningtyas & Surjanti, 2021). External factors are factors that come from outside the learner, for example, coming from the environment, both the social environment and the non-social environment. Meanwhile, internal factors come from within the learner, including self-efficacy or self-efficacy.

Self-efficacy is a person's belief in his ability to succeed in certain tasks, which relates to individual beliefs in their abilities and capabilities (Saputro, 2021; Ulpah, 2019). Individuals with high self-efficacy will achieve better performance because these individuals have strong motivation, clear goals, stable emotions, and the ability to successfully perform activities or behaviors (Dewi & Nuraeni, 2022; Hendriana & Kadarisma, 2019). In contrast, individuals with low self-efficacy tend to want to avoid trying and prefer to avoid cooperation in difficult situations and high levels of task complexity. Self-efficacy becomes especially important in challenging learning environments, such as online learning environments where learners do not have opportunities to interact with others and so can be socially isolated and easily lost (Afifah & Kusuma, 2021; Lestari, 2021; Taufik & Komar, 2022). The dropout rate among students in an online learning environment is higher than in a face-to-face learning environment. It indicates that online learning raises many problems. Requires high learning independence, so it is important to measure the self-efficacy possessed by students.

Measuring self-efficacy can be challenging because it is a specific task, so there is no standard measure of self-efficacy. In the online learning process, teachers rarely know student self-efficacy, so the learning process that is carried out could be more effective. In addition, in the online learning process, students' motivation and enthusiasm for learning still need to be higher due to the lack of attention from teachers and parents. If left continuously, these problems will certainly impact student learning outcomes. One of the efforts that can be made to overcome this problem is to know the level of self-efficacy through the development of instruments. An instrument is a tool used to carry out assessments or evaluations, assessment instruments can be in the form of tests or non-tests, and observations can be made using systematic and non-systematic observations (Bulfone et al., 2020; Hadiat & Karyati, 2019). The instrument must be good as a measuring tool to achieve the goal effectively and efficiently. Self-efficacy measurement instruments are obtained, developed, or derived through one or from a combination of four sources consisting of performance accomplishments (experiences about mastery), vicarious experience (representative experience), verbal persuasion (verbal persuasion), and physiological information (information physiological) (Gómez et al., 2022; Slater & Main, 2020).

Several previous studies have revealed that the 10 General Self-Efficacy Scale (GSES) items are unidimensional, which means that all General Self-Efficacy Scale (GSES) items can be accepted and used properly (Novrianto et al., 2019). The results of other studies reveal that self-efficacy instruments can show high and low student enthusiasm for learning (Ferdyansyah et al., 2020). The results of subsequent research revealed a positive and significant influence between self-efficacy on elementary mathematics learning achievement in online learning (Ningrum & Rahmawati, 2021). Based on some of these research results, self-efficacy instruments are feasible to develop because they measure students' enthusiasm and interest in learning. In previous studies, no studies specifically discussed the development of self-efficacy scale instruments in online learning. So this research is focused on this study to develop and validate items that assess four sources of self-efficacy in online learning.

2. METHOD

This research belongs to the type of development research which focuses on developing self-efficacy instruments. This development research was carried out in several stages, including reviewing the literature on self-efficacy to obtain conceptual and operational definitions. At this stage, elaborating self-efficacy sources determines the components needed to measure self-efficacy in online learning. Second, by deriving the instrument items from the operational definition with the help of experts, in this second stage, the self-efficacy instrument in online learning that several researchers have previously developed is adapted to each dimension of the four sources of self-efficacy. In this case, two experts help validate the content and language of the instruments that have been developed. After experiencing content improvements, the instruments are ready to be tested. Third, testing the instrument on a sample of Universitas Terbuka students. This stage is intended to test the validity of the instrument items and the reliability of the instrument that has been formed by involving a sample of students who experience online learning (online tutorial learning assistance services) and, fourth, selecting instrument items and analyzing reliability and validity using PLS-SEM. This stage is necessary to produce valid and reliable instruments so that if instrument items are found that do not meet the calculation requirements, they will be discarded from the analysis results.

The research was conducted at the FKIP Universitas Terbuka FKIP during the 2022 online tutorial period. The subjects involved in conducting the content validity test of the instrument were two experts, namely, one expert in the field of educational evaluation and one expert in online learning. At the same time, the research subjects to test the validity and reliability of the items were 176 students of the FKIP Universitas Terbuka who came from various study programs registered in the online tutorial learning assistance service. Data collection in this study was carried out using the non-test method, with research instruments in the form of instrument validity sheets and student self-efficacy questionnaires. Data was collected online by asking students to complete a research questionnaire distributed via email and student groups.

The data obtained in the study were analyzed by testing the validity and reliability of the instrument items using partial least squares (PLS) analysis. In particular, validity and reliability tests were carried out through construct reliability tests to see the construct reliability of latent variables (dimensional and final variable constructs). Values that are considered reliable must be >0.70. Construct reliability is the same as Cronbach alpha; discriminant validity test, to see how far the true latent construct differs from other constructs. A high value of discriminant validity indicates that a construct is unique and able to explain the phenomenon being measured. A construct is valid if the root value of the average variant value (average extract variant or AVE) is greater than the correlation value between latent variables. The minimum value to a state that the construct has discriminating power is 0.50, as well as a concurrent validity test to see the validity of the indicator through the outer loading value of each statement item in the related dimension. The outer loading value indicates the validity of each statement item's degree of influence/correlation. An indicator is considered valid if the outer loading value for each indicator is >0.70.

3. RESULT AND DISCUSSION

Result

This research was conducted to develop student self-efficacy instruments. Some of the findings in this study are as follows: the first finding relates to the results of the stage of defining variables from the four sources/dimensions of self-efficacy obtained key components/aspects that can be used to measure self-efficacy based on the four sources. The results of key aspects of the self-efficacy dimension, key aspects for measuring self-efficacy in online learning that has been developed by previous researchers such as OLSES and SeQoL, as well as two instrument items with four items on each source/dimensional self-efficacy can be seen in Table 1, Table 2, and Table 3.

Table 1. Key Aspects of the Sources/Dimensions of Self-Efficacy

Dimensions	Key Aspects
Performance Achievements	The learner's previous successful experience in performing the task
Vicarious Experience	The learner's observation of a role model doing the task
Verbal Persuasion	The existence of encouragement/encouragement that is meaningful and accurate from people who are considered competent by the learner
Physiological Information	Mood / physical state of the learner

Table 2. Key Components/Aspects in OLSES and SeQoL

No	OLSES	SeQoL
1	Learning in the Online Environment (e.g., Learning without being in the same room as the instructor)	Self-efficacy to complete an online course
2	Time Management (e.g., Meeting deadlines with very few reminders)	Self-efficacy to interact socially with classmates
3	Technology Use (e.g., Find the course syllabus online)	Self-efficacy in handling tools in a CMS Self-efficacy to interact with instructors in an online course Self-efficacy to interact with classmates for academic purposes

Table 3. Items of the Statement

Dimensions	Statement	Item Number
Performance Accomplishments	I know that I can successfully navigate online learning materials efficiently	1
	I'm not sure I can navigate online learning materials efficiently	2
	I know that I am used to using technology for various needs in online learning independently	3
	I'm not sure I can use technology for various needs in online learning independently	4
	I know that I can communicate effectively with tutors via chat/email features in online learning	5
	I'm not sure that I can communicate effectively with the tutor through chat/email features like face-to-face learning	6
	I know that I am used to independently accessing online learning needs	7
	I am not sure that I can independently access online learning needs	8
Vicarious Experience	I know that I can like my friends who complete all online assignments on time	9
	I'm not sure I can be like my friend who has completed all online assignments on time	10
	I know that I can, like my friends, manage time effectively in online learning	11
	I'm not sure I can be like my friend, who is successful in managing time effectively in online learning	12
	I know that I can, like my friends, complete group assignments/projects entirely online	13
	I'm not sure I can be like my friends who have completed group/project assignments entirely online	14
Verbal Persuasion	I know that I can, like my friends, be able to learn efficiently using new types of technology in online learning	15
	I'm not sure I can be like my friend, who can learn to use new types of technology in online learning efficiently	16
	I know that I can come up with a strategy to complete all online learning as the tutor suggests	17
	I'm not sure that I have the strategy to complete all the online learning as the tutor suggests	18
	I know that I can find the right supporting materials online; the tutor suggests	19
	I'm not sure I can find the right supporting teaching materials online, as the tutor suggests	20
	I know that I can use the online library as an online learning resource as efficiently as the tutor suggests	21
	I'm not sure I can use the online library as an online learning resource as efficiently as the tutor suggests	22
	I know that I can review my answers that have been uploaded online as the tutor directs	23
	I'm not sure I can review my answers that have been uploaded online, as the tutor has directed	24
Physiological Information	I enjoy and stay focused on studying online despite distractions or problems	25
	I feel anxious and unable to focus on studying online when faced with distractions or problems	26
	When I encounter difficulties, I can communicate online with other students or tutors	27

Dimensions	Statement	Item Number
	I feel anxious when I encounter difficulties and cannot communicate directly with other students or tutors	28
	I remain active in learning even without directly interacting with tutors in the same room	29
	I feel unenthusiastic about learning because I don't directly interact with tutors in the same room	30
	I remain active in learning even without directly interacting with students in the same room	31
	I feel unenthusiastic about learning because I don't directly interact with students in the same room	32

The second finding relates to the analysis of construct reliability tests and discriminant validity on 32 instrument items, which show that Cronbach's Alpha coefficient values on all dimensions are >0.7 and even >0.8. It shows that the whole instrument's construction is quite reliable in explaining the 'self-efficacy' variable. Likewise, the Composite Reliability values are all >0.8, indicating no problem measuring the 'self-efficacy' variable through the developed instrument. However, the Average Variance Extracted (AVE) value on the 'performance accomplishment' dimension has an AVE value <0.5. That is, the indicator of this dimension has no discriminating power in measuring 'self-efficacy.' In other words, this instrument could have better discriminant validity. To reaffirm the non-discriminatory values of several dimensions, discriminant validity tests were also performed using the Fornell-Larcker criterion analysis. The analysis results show that the correlation value in each dimension with its dimension is smaller than the correlation between indicators in different dimensions. The results of this analysis confirm that the instrument as a whole needs better discriminant validity. Then to investigate the problem further, a convergent validity test was carried out. By looking at the outer loading value of each statement item on the appropriate dimension as a result of the test, if the result still has a value <0.7, then a test is repeated until all items have a value >0.7. This concurrent validity test was carried out four times with the item deletion stage, as seen in Table 4.

Table 4. Convergent Validity Test Recap

Stages of Convergent Test	Deleted items	Total item
The first stage	1,2,3,5,9,17,21,25,26,27,28	11
Second stage	7,11,13,15,23	5
Third phase	19,29	2
Fourth stage	31	1

After deleting 19 of the 32 statement items, 13 statement items were obtained that had a value > 0.7. And the coefficient value of both Alpha Cronbach and Composite Reliability > 0.7 means that the instrument with 13 statement items also has good validity and reliability. In addition, the AVE value with these 13 statement items has >0.7, which indicates that the instrument as a whole also has good discriminant validity. The test is repeated with the Fornell-Larcker criteria To ensure this. The analysis results using the instrument's final version with 13 statement items were declared valid, as seen in Table 5, and the final instrument is presented in Table 6.

Table 5. The Results of the Discriminant Validity Test Using the Fornell-Larcker Criteria

Dimensions	1. Performance Accomplishments	2. Vicarious Experience	3. Verbal Persuasion	4. Physiological Information
1. Performance Accomplishments	0.880			
2. Vicarious Experience	0.847	0.895		
3. Verbal Persuasion	0.822	0.893	0.895	
4. Physiological Information	0.721	0.719	0.758	0.950

Table 6. Vinal Instruments

Dimensions	Statement	Item Number
Performance Accomplishments	I'm not sure I can use technology for various needs in online learning independently	04
	I'm not sure that I can communicate effectively with the tutor through chat/email features like face-to-face learning	06
	I am not sure that I can independently access online learning needs	08
Vicarious Experience	I'm not sure I can be like my friend who has completed all online assignments on time	10
	I'm not sure I can be like my friend, who is successful in managing time effectively in online learning	12
	I'm not sure I can be like my friends who have completed group/project assignments entirely online	14
	I'm not sure I can be like my friend, who can learn to use new types of technology in online learning efficiently	16
Verbal Persuasion	I'm not sure that I have the strategy to complete all the online learning as the tutor suggests	18
	I'm not sure I can find the right supporting teaching materials online, as the tutor suggests	20
	I'm not sure I can use the online library as an online learning resource as efficiently as the tutor suggests	22
	I'm not sure I can review my answers that have been uploaded online, as the tutor has directed	24
Physiological Information	I feel unenthusiastic about learning because I don't directly interact with tutors in the same room	30
	I feel unenthusiastic about learning because I don't directly interact with students in the same room	32

Furthermore, the analysis results show that the R-Square value for the dimensions of performance accomplishments is 0.843. The acquisition of this value explains that the variability of the endogenous variables can be explained by the variability of the exogenous variables of 84.3%, likewise for other dimensions: vicarious experience (91.4%), verbal persuasion (91.6%), and physiological information (69.9%).

Discussion

This research aims to develop and validate items assessing four sources of online learning self-efficacy. The development of self-efficacy instruments that display various dimensions in online learning, such as OLSES and SeQoL, have been used to measure self-efficacy in online learners (Stephen & Szapkiw, 2021; Yavuzalp & Bahçivan, 2020). In the results of this study, indicators on the dimensions of performance accomplishments left items showing the ability to use technology, communicate in online learning, and access learning needs independently. It indicates that experiences regarding mastery, namely past performances related to these three indicators, can influence online learner self-efficacy. Although performance accomplishments are the most influential source of self-efficacy information, it can be seen that the indicators for the dimensions of vicarious experience and verbal persuasion in the results of this study have a higher value so that the predictors of this dimension are stronger than the dimensions of performance accomplishments (Lau et al., 2018; Saputro, 2021; Ulpah, 2019). The vicarious experience dimension, which is a source of confidence that online learners will succeed if they try intensively and diligently, is shown by modeling other friends in online learning (Afifah & Kusuma, 2021; Lestari, 2021; Taufik & Komar, 2022). So the online learner's confidence in completing all assignments on time, managing time effectively, completing group assignments/projects, and using new types of technology can have a powerful effect. Self-efficacy can also be achieved or weakened through social persuasion, which can be observed in verbal persuasion indicators (Dewi & Nuraeni, 2022; Hendriana & Kadarisma, 2019). Suggestions and encouragement from tutors as facilitators and lecturers in online learning are modeled in these dimension indicators.

The effect of advice on self-efficacy is closely related to the status and authority of the adviser. Therefore the belief in success in completing online learning, finding supporting teaching materials, using online libraries, and studying the results of answers independently can be given reinforcement by tutors in verbal form (Gómez et al., 2022; Slater & Main, 2020). The last source of the self-efficacy dimension is physiological information from several indicators that have been developed, leaving only statements indicating enthusiasm for learning in online learning (Bulfone et al., 2020; Hadiat & Karyati, 2019). In this dimension, humans have low self-efficacy expectations when experiencing great fear, strong anxiety, and high stress. So observing indications of students having high self-efficacy from sources of physiological information can be observed in their enthusiasm for learning in online learning even though they don't interact directly with tutors and other friends. The test results that have been displayed coherently and rigorously in the results section illustrate that the self-efficacy instrument in online learning that has been developed is stated to be valid and reliable. Thus, the 13 statement items can be an alternative to reveal learners' self-efficacy level in online learning with integrated sources of self-efficacy.

The results obtained in this study are in line with the results of previous studies, which revealed that 10 General Self-Efficacy Scale (GSES) items are unidimensional, which means that all General Self-Efficacy Scale (GSES) items can be accepted and used properly (Novrianto et al., 2019). The results of other studies reveal that self-efficacy instruments can show high and low student enthusiasm for learning (Ferdyansyah et al., 2020). The results of subsequent research revealed a positive and significant influence between self-efficacy on elementary mathematics learning achievement in online learning (Ningrum & Rahmawati, 2021). Based on some of the results of these studies, self-efficacy instruments are very feasible to develop because they can measure student enthusiasm and interest in learning.

4. CONCLUSION

Testing this development instrument has achieved valid and reliable values for thirteen items on self-efficacy measurement in online learning. This instrument can be used in research involving self-efficacy as a variable showing four sources/dimensions of self-efficacy.

5. REFERENCES

Afifah, S. N., & Kusuma, A. B. (2021). Pentingnya Kemampuan Self-Efficacy Matematis Serta Berpikir Kritis Pada Pembelajaran Daring Matematika. *Jurnal Mathedu (Mathematic Education Journal)*, *4*(2), 313–320. https://doi.org/10.37081/mathedu.v4i2.2642.

Agustiningtyas, P., & Surjanti, J. (2021). Peranan Teman Sebaya dan Kebiasaan Belajar Terhadap Hasil Belajar Melalui Motivasi Belajar Di Masa Covid-19. *Edukatif : Jurnal Ilmu Pendidikan*, *3*(3), 794–805. https://doi.org/10.31004/edukatif.v3i3.454.

Aldiyah, E. (2021). Perubahan Gaya Belajar Di Masa Pandemi Covid-19. *Cendekia: Jurnal Ilmu Pengetahuan*, *1*(1), 8–16. https://doi.org/10.51878/cendekia.v1i1.24.

Bulfone, G., Vellone, E., Maurici, M., Macale, L., & Alvaro, R. (2020). Academic self-efficacy in Bachelor-level nursing students: Development and validation of a new instrument. *Journal of Advanced Nursing*, *76*(1), 398–408. https://doi.org/10.1111/jan.14226.

Dewi, M. W. K., & Nuraeni, R. (2022). Kemampuan Komunikasi Matematis Siswa SMP ditinjau dari Self-Efficacy pada Materi Perbandingan di Desa Karangpawitan. *Plusminus: Jurnal Pendidikan Matematika*, *2*(1), 151–164. https://doi.org/10.31980/plusminus.v2i1.1586.

Ferdyansyah, A., Rohaeti, E. E., & Suherman, M. M. (2020). Gambaran Self Efficacy Siswa Terhadap Pembelajaran. *Fokus (Kajian Bimbingan & Konseling Dalam Pendidikan)*, *3*(1), 16. https://doi.org/10.22460/fokus.v3i1.4214.

Gómez, D. G., Jeong, J. S., & Cañada-Cañada, F. (2022). Enhancing science self-efficacy and attitudes of Pre-Service Teachers (PST) through a flipped classroom learning environment. *Interactive Learning Environments*, *30*(5), 896–907. https://doi.org/10.1080/10494820.2019.1696843.

Hadiat, H. L., & Karyati, K. (2019). Hubungan kemampuan koneksi matematika, rasa ingin tahu dan self-efficacy dengan kemampuan penalaran matematika. *Jurnal Riset Pendidikan Matematika*, *6*(2), 200–210. https://doi.org/10.21831/jrpm.v6i2.26552.

Hendriana, H., & Kadarisma, G. (2019). Self-Efficacy dan Kemampuan Komunikasi Matematis Siswa SMP. *JNPM (Jurnal Nasional Pendidikan Matematika)*, *3*(1), 153. https://doi.org/10.33603/jnpm.v3i1.2033.

Lau, C., Kitsantas, A., Miller, A. D., & Drogin Rodgers, E. B. (2018). Perceived responsibility for learning, self-efficacy, and sources of self-efficacy in mathematics: a study of international baccalaureate

primary years programme students. *Social Psychology of Education*, *21*(3), 603–620. https://doi.org/10.1007/s11218-018-9431-4.

Lestari, A. (2021). Strategi Mahasiswa dalam Meningkatkan Minat Belajar, Self-Efficacy, Self Regulated pada Pembelajaran Daring di Masa Pandemi Covid-19. *Didaktis: Jurnal Pendidikan Dan Ilmu Pengetahuan*, *21*(3). https://doi.org/10.30651/didaktis.v21i3.10019.

Muawanah, E. I., & Muhid, A. (2021). Strategi Meningkatkan Motivasi Belajar Siswa Selama Pandemi Covid – 19 : Literature Review. *Jurnal Ilmiah Bimbingan Konseling Undiksha*, *12*(1). https://doi.org/10.23887/jjbk.v12i1.31311.

Ningrum, P., & Rahmawati, R. D. (2021). Pengaruh Self Efficacy Terhadap Prestasi Belajar Matematika Siswa SD Dalam Pembelajaran Daring. *Prima Magistra: Jurnal Ilmiah Kependidikan*, *3*(1), 41–47. https://doi.org/10.37478/jpm.v3i1.1394.

Novrianto, R., Marettih, A. K. E., & Wahyudi, H. (2019). Validitas Konstruk Instrumen General Self Efficacy Scale Versi Indonesia. *Jurnal Psikologi*, *15*(1), 1. https://doi.org/10.24014/jp.v15i1.6943.

Pane, A., & Dasopang, M. D. (2017). Belajar Dan Pembelajaran. *Fitrah:Jurnal Kajian Ilmu-Ilmu Keislaman*, *3*(2), 333. https://doi.org/10.24952/fitrah.v3i2.945.

Robandi, D., & Mudjiran, M. (2020). Dampak Pembelajaran Dari Masa Pandemi Covid-19 terhadap Motivasi Belajar Siswa SMP di Kota Bukittinggi. *Jurnal Pendidikan Tambusai*, *4*(3), 3498–3502. https://doi.org/10.31004/jptam.v4i3.878.

Saputro, A. A. (2021). Pengaruh Self-Efficacy Terhadap Setres Mahasiswa Dalam Pembelajaran Jarak Jauh Selama Pandemi. *Jurnal Porkes*, *4*(2), 81–86. https://doi.org/10.29408/porkes.v4i2.4369.

Saumi, N. N., Murtono, M., & Ismaya, E. A. (2021). Peran Guru Dalam Memberikan Motivasi Belajar Siswa Sekolah Dasar Pada Masa Pandemi Covid-19. *Jurnal Educatio FKIP UNMA*, *7*(1), 149–155. https://doi.org/10.31949/educatio.v7i1.892.

Slater, E. V., & Main, S. (2020). A measure of classroom management: validation of a pre-service teacher self-efficacy scale. *Journal of Education for Teaching*, *46*(5), 616–630. https://doi.org/10.1080/02607476.2020.1770579.

Stephen, J. S., & Szapkiw, A. R. (2021). A high-impact practice for online students: the use of a first-semester seminar course to promote self-regulation, self-direction, online learning self-efficacy. *Smart Learning Environments*, *8*(1), 6. https://doi.org/10.1186/s40561-021-00151-0.

Sujana, I. W. C. (2019). Fungsi Dan Tujuan Pendidikan Indonesia. *Adi Widya: Jurnal Pendidikan Dasar*, *4*(1), 29. https://doi.org/10.25078/aw.v4i1.927.

Syachtiyani, W. R., & Trisnawati, N. (2021). Analisis Motivasi Belajar Dan Hasil Belajar Siswa Di Masa Pandemi Covid-19. *Prima Magistra: Jurnal Ilmiah Kependidikan*, *2*(1), 90–101. https://doi.org/10.37478/jpm.v2i1.878.

Tafdhila, T., & Marleni, L. (2021). Pengaruh Pembelajaran Daring Terhadap Motivasi Belajar Di Masa Pandemi Covid 19 Pada Mahasiswa Keperawatan STIK Siti Khadijah Palembang. *Jurnal Perawat Indonesia*, *5*(1). https://doi.org/10.32584/jpi.v5i1.832.

Taufik, T., & Komar, N. (2022). Hubungan Self Efficacy Terhadap Peningkatan Motivasi Belajar Dan Hasil Belajar Matematika Siswa Di Sekolah. *Andragogi: Jurnal Pendidikan Islam Dan Manajemen Pendidikan Islam*, *3*(2), 183–200. https://doi.org/10.36671/andragogi.v3i2.220.

Ulpah, M. (2019). Self-Efficacy Dalam Pembelajaran Matematika Siswa Madrasah Aliyah. *Jurnal Pemikiran Alternatif Kependidikan*, *24*(1), 167–176. https://doi.org/10.24090/insania.v24i1.2808.

Yavuzalp, N., & Bahçivan, E. (2020). The Online Learning Self-Efficacy Scale: Its Adaptation into Turkish and Interpretation According to Various Variables. *Turkish Online Journal of Distance Education*, *1*(1), 31–44. https://doi.org/10.17718/tojde.674388.