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Scales of Online Learning Readiness: Empirical Validation of Factors Affecting EFL Learners in Online Learning during Covid-19 Pandemic

Ni Wayan Surya Mahayanti[1], Nur Hidayanto Pancoro Setyo Putro[2], Pratomo Widodo[3], Dennis Alonzo[4]
Yogyakarta State University, Indonesia[1,2,3]
Ganesha University of Education, Indonesia[1]
University of New South Wales, Australia[4]
Email Correspondence: ni0018pasca.2019@pasca.uny.ac.id

Abstract

Background:
Although extensive research has been carried out on university students' online learning readiness, very little attention has been paid to online learning readiness of foreign language learners. Examining the learners' readiness to get involved in online learning becomes more fundamental in this current Covid-19 pandemic since online learning is the only alternative to running educational programs at every level.

Methodology:
Both exploratory and confirmatory factor analyses were used to validate the scale empirically. A total of 682 undergraduate students from seven universities in Indonesia participated in the study by completing in the google form-based scale.

Findings:
The results of the study showed that the scale comprised of 24 items that converged into a five-latent factor with an acceptable fit. The dimensions are motivation, self-directed learning, attitude toward online interaction, attitude toward study management, and communication skills.

Conclusion:
The results are expected to contribute to the attention of instructors and policymakers in universities in preparing, conducting, and evaluating e-learning programs. These results can also be used to design active learning for EFL learners.

Originality:
Although extensive research has been carried out on university students' online learning readiness, very little attention has been paid to online learning readiness of foreign language learners. Also, the construction of the dimensions in the existing measures of online learning readiness does not include all factors from personal aspects of learning, namely (meta)cognitive (knowledge), affective (attitude), and psychomotor (skill).

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1. INTRODUCTION

The advancement of information and communication technology (ICT) has dramatically impacted educational practice. Evidence suggests that face to face learning is no longer the only choice in learning since each student can learn independently and flexibly through gadgets on their hands (Hu & McGrath, 2011; Milligan & Littlejohn, 2014). The rapid exchange of information and communication has also demanded language learning to adjust to the current trends. Fortunately, the existing body of research found that it is possible to conduct effective language learning practices in the form of e-learning (Hsu, 2016; Hung et al., 2010; Rafiee & Abbasian-Naghneh, 2021; Zandi et al., 2014).

Online learning requires careful planning, preparation, time, cost, infrastructure, and management (Aldhafeeri & Khan, 2016), despite its advantages, especially in the current Covid-19 Pandemic. Ensuring the readiness of all parties' readiness is an essential factor in building the foundation of e-learning programs. With the readiness test results, policymakers can determine more appropriate strategies for implementing e-learning to ensure overall success (Alem et al., 2014; Demir & Yurdugül, 2015; Mosadegh & Kharazi, 2011; Rasouli et al., 2016; Rosenberg, 2001). E-learning readiness is fast becoming a vital instrument in predicting the success of an online learning program. Thus, during a situation that demands a sudden shift, the student's readiness identification receives considerable critical attention from every educational institution.

With respect to the e-learning readiness, factors underlying students' online learning readiness have been explored in several studies (Aldhafeeri & Khan, 2016; Dray et al., 2011; Smith*, 2005; Watkins et al., 2008; Wei & Chou, 2020; Yu & Richardson, 2015). For instance, Smith (2005) validated a readiness for online learning Scale initially developed (McVay, 2000). The validation, which involved 107 undergraduate students in the US & Australia, found that there were two significant factors in defining students' readiness in online learning, namely comfort with e-learning and self-management learning. In the same vein, Watkins et al. (2008) investigated the validity and internal consistency of a self-assessment of online learning readiness. The study revealed that online learning readiness comprised several crucial dimensions, namely technological access, online skills and relationships, motivation, online audio/video, internet discussion, and the importance of the subject study. A slightly different focus is given in Dray et al. (2011) research, which divided the determinant dimensions of online learning readiness in using technology, namely necessary technological skills, access to technology, technology usage, and a relationship with ICT. A similar study by Yu & Richardson (2015) found that a model of students' online

learning readiness comprised four dimensions: social competencies with classmates, social competencies with instructors, communication competencies, and technical competencies.

Although extensive research has been carried out on university students' online learning readiness, very little attention has been paid to online learning readiness of foreign language learners. Also, the construction of the dimensions in the existing measures of online learning readiness does not include all factors from personal aspects of learning, namely (meta)cognitive (knowledge) and psychomotor (skill). To that end, by adding one aspect of technology (hardware, software, and accessibility) to its dimensions, this study sets out to validate the foreign EFL learners' online learning readiness Scale.

This paper begins by providing some theoretical and empirical reviews on online learning readiness and its dimensions. It will then go on to the framework and hypotheses followed by the methods of this study. Results and discussion will be presented separately before the conclusion and implication sections.

Online learning readiness naturally requires access to technology as a primary factor that supports students' readiness to participate in the program (Adams et al., 2018; Mattice & Dixon, 1999; Mercado, 2008; Ünal et al., 2014; Watkins et al., 2008; Winke & Goertler, 2008). In online learning, access to technology includes access to devices, computers and accessories, and internet connections. All of these fundamentals are the basic requirements for joining online learning. Primarily in language learning, several supporting devices such as microphones, headphones/headsets, and video recorders become more crucial compared to other online subject matters since these technological tools are important in online language skills practices. Limited access to technology in just one aspect will reduce or disengage the students with the course content.

In addition to the importance of access to technology, skills in operating the device become vital in the preparation of online learning (Hung et al., 2010; Mercado, 2008; T Subramaniam et al., 2019; Ünal et al., 2014; Watkins et al., 2008; Xiong et al., 2015; Yu, 2018). As the first aspect of personal readiness, skills in using technology plays a crucial role. Although skills such as emailing, diagramming, video editing, copy-pasting, and other technical skills in computing do not directly influence the achievement of online language learning, these factors still contribute to engaging students and decreasing anxiety in activities involving technologies. It may impose on satisfaction and confidence in online learning. With students' readiness for technical skills, direct learning to focus on mastering the language skills, not the technical skills anymore.

The second skill that is needed in online learning is communication skills. Especially for language learners, communication becomes the essential requirement to use and to develop before, during, and after the instruction. Communication in traditional learning is undoubtedly slightly different from the online environment situation (Palloff & Pratt, 1999). Some researchers of students 'online learning readiness put communication skills as the primary construct to guarantee the success of students' online learning (Caliskan et al., 2017; Hung et al., 2010; McVay, 2000; Yu, 2018). McVay (2000) pointed out that creating active-meaningful interaction and communication opportunities among students and teachers in online learning settings is essential. Student engagement can be maintained through scaffolded questions and other discussion forums even without face-to-face interaction. Of course, the form of communication must be adapted to written communication (McVay, 2000), because written discussion forums will be mostly done in this learning mode. Once they post the idea or issue, it will last, and of course, it needs to consider the dictionaries, structure, and tone more while keeping the fluency. By looking at the extent of students' communication skills, we will be able to predict their readiness for involvement in online learning.

The next personal aspect that is crucial in determining students' readiness in online learning is the affective aspect. In this study, attitude is considered as the most fundamental affective aspect as a construct of online learning readiness. Ching (2002) interpret attitude in online learning as acceptance and continued use of online learning, while Hayashi et al. (2020) focus on the students' expectation factor as causal of online learning satisfaction. Many scholars have confirmed that educational aspects influence students' adaptability to online learning (A. Brown & Green, 2003; Howard, 2009; Smyth et al., 2012; Tang, 2013). Tang (2013) confirmed that attitude toward those learning aspects predicts the students' readiness for online studies. Those learning aspects are learning flexibility, online/internet learning, study management, technology, classroom learning, and online interaction.

Cognitive is the last personal aspect that plays a role in determining the success of online learning. Students' readiness for cognitive aspects will predict well the success of learning. Beyond the cognitive level, two metacognitive dimensions are emphasized as crucial factors in preparing students to learn online, namely learning motivation (Caliskan et al., 2017; H.-H. Chiu & Chen, 2020; Hung et al., 2010; Ifinedo, 2017; Rafiee & Abbasian-Naghneh, 2021; Watkins et al., 2008; Xiong et al., 2015) and self-directed learning (Hung et al., 2010; Zhu et al., 2020). Learning motivation has been confirmed as a vital factor in the completion of face-to-face and online learning (Ryan & Deci, 2000; Yang et al., 2006).

Especially in the online learning mode, broad and flexible learning freedom becomes a separate context that requires strong learning motivation. It is certainly also related to how students can correct each other's learning. As a psychological process that directs students to gain knowledge and understanding of problem-solving ways, self-directed learning makes students able to actively participate in online learning (Kizilcec et al., 2017; Timothy et al., 2010) and collaborate well (Lee et al., 2014).

2. METHODOLOGY

This quantitative research aims to identify and validate the dimensions of EFL learners' online learning readiness at the university level. A total of 90 items which were proposed to converge in 11 dimensions were generated in the developed Scale. These items were generated from the scales of technological access and technical skills by Winke & Goertler (2008), attitudes toward learning flexibility, online learning, study management, technology, attitude toward classroom learning, and online interaction (Tang, 2013), Communication competencies and self-directed learning by (Subramaniam et al., 2019), and motivation by (Caliskan et al., 2017). Those items were translated into Bahasa Indonesia to make it easy to understand and avoid misconceptions about the meaning. The back-translation method was used to ensure that there is no meaningful error during the translation process. The blueprint of the scale can be seen in table 1.

Table 1. Blueprint of the Scale

Construct	Number of Items	Number	Adapted From
Technological Access	9	1-9	Winke & Goertler (2008)
Technical Skills	17	10-26	
Attitudes toward Learning Flexibility	4	27-30	Tang & Chaw (2013)
Attitudes toward Online Learning	8	31-38	
Attitudes toward study management	6	39-44	
Attitudes toward technology	4	45-48	
Attitude toward classroom learning	5	49-53	
Attitudes toward online interaction	7	54-60	
Communication competencies	8	61-68	Subramaniam et al. (2019)
Self-directed learning	15	69-83	
Motivation	7	84-90	Caliskan, Tugun, & Uzunboylu (2017)

There are two main sections in the Scale distributed in this study. Section 1 is about participants' demographics like university name, faculty, gender, age-range, and their major in senior high school (The detail of demographic statistics can be seen in Table 2). It was followed by the second section, which includes 11 dimensions and 90 items of online learning readiness. The Scales were distributed using a google form to the participants

selected based on convenience sampling since this type of sampling is believed to be appropriate following researchers' approachability to the respondents (Al-Gahtani, 2016). The submitted Scales were 682, and all were used as the primary data in this study.

Table 2. Participants' Demographic Statistic

Dimension	Demographic Information	Participants
University Name	Universitas Pendidikan Ganesha	417
	Universitas Negeri Manado	117
	Universitas Widya Gama Mahakam Samarinda	11
	Universitas Muhammadiyah Kalimantan Timur	17
	Universitas Negeri Yogyakarta	34
	Universitas Sarjanawiyata Tamansiswa	33
	Universitas Kristen Duta Wacana	59
Faculty	Language and Art Faculty	235
	Science Education Faculty	94
	Engineering and Vocational Faculty	189
	Math and Science Faculty	46
	Teacher Training and Education Faculty	44
	Computer Science Faculty	6
	Economic faculty	2
	Health Sciences and Pharmacy	15
	Social Science Faculty	2
	Education and Humanities Faculty	26
	Economics and Business Faculty	9
	Industrial Technology Faculty	17
	Biotechnology Faculty	4
	Architecture and Design Faculty	5
	Medical Faculty	2
Gender	Female	410
	Male	273
Age-Range	16-18 Years Old	116
	19-21 Years Old	514
	22-24 Years Old	55
Major in Senior High School	Natural Sciences	390
	Social Sciences	103
	Languages	59
	Others	134

Identification of the construct dimensions of the Scale was analyzed through EFA (Churchill, 1979) using the SPSS 24.0 version. EFA was conducted to determine the underlying dimensions of the Scale (Hong & Kim, 2018). Before conducting component analysis and reducing some factors with low factor loading (below 0.4), KMO and Bartlett's test values were seen to see the feasibility of the data. Cronbach's alpha satisfaction of each construct dimension was also seen below 0.6 to be included as the valid construct in the EFA result (Hair, 2009).

After obtaining the construct dimension and items with acceptable factor loading, CFA was conducted using SPSS AMOS 24.0 version to verify the Foreign EFL learners' Readiness for Online Learning. The main objective of conducting CFA is to examine the relationship between the latent and manifest variables developed from theories (Schreiber et al., 2006). Four relevant indices criteria, such as $\chi 2$ / df, TLI, CFI, and RMSEA, became the basis in analyzing and deciding the construct validity. The interval of TLI and CFI is 0 to 1, and the closer to 1 means there is a stronger relationship between the variance and covariance (Schreiber et al., 2006) or above 0.90. For RSMEA, the criteria to be accepted model fit is below 0.08. Besides, invalid items (below 0.4) were dropped based on the factor loading of each item.

3. FINDINGS

The results of EFA and CFA is presented chronologically in the following section. EFA analysis was performed on 90 items with oblique rotation. It is chosen because there is an assumption that those eleven dimensions are correlated (Brown, 2009; Field & Miles, 2009). It was found from the output results that the KMO shows excellent value since 0.955 was gained (Field & Miles, 2009). Bartlett's test of sphericity also shows the high value of $\chi 2$, which is 37602.863, with $p = 0.000$. It can be interpreted that the data set in this study was categorized as a significant factor (Field & Miles, 2009), and the correlation between items and dimensions were relatively large for principal component analysis (PCA). The detail of KMO and Bartlett's test result can be seen in table 3.

Table 3. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.955
Bartlett's Test of Sphericity	Approx. Chi-Square	37602.863
	Df	3570
	Sig.	0.000

From the data set in this study, further confirmation of the factor numbers was performed using a parallel analysis with 682 datasets. As a result, it was found 13 dimensions with items loading above 0.4. It is more than the proposed dimension. The items of technical skills loaded to two different dimensions, so it was named technical skills and multimedia technical skills. However, one dimension had an unsatisfactory Cronbach's alpha below 0.6 (0.319) and was not included as the construct (Hair, 2009).

Table 4. Summary of Factors and Item Loadings

Descriptors	Mean	SD	Components							
			SDL	MOL	MTS	Att. OL	TA	Att. TE	Att. LF	TS	Att. SM	CC	Att. CL	Att. OI
Q1 I set up my learning goals and study plan independently	3.50	.658	.826											
Q2 I am fully committed to my own study plan when learning	3.54	.634	.800											
Q3 I Manage my studies in accordance to my study plan	3.51	.644	.796											
Q4 I set my learning objectives myself.	3.60	.592	.762											
Q6 I identify appropriate sources and tools in the learning process.	3.47	.623	.710											
Q7 I determine my learning needs.	3.58	.591	.710											
Q8 I keep my learning desire high until learning is realized.	3.53	.623	.670											
Q9 I organize my current study plan according to new conditions.	3.46	.610	.665											
Q10 I direct my learning process when learning an online subject.	3.36	.626	.617											
Q11 I decide how intensely I will concentrate on the learning materials on the internet.	3.37	.635	.573											
Q12 I am independent in seeking for resources and completing my learning tasks	3.33	.709	.553											
Q13 I decide when to study online learning materials.	3.42	.632	.539											
Q14 I have high expectations for doing well in my studies	3.77	.512	.471											
Q15 I seek assistance when I am unable to solve problems on my own	3.67	.561	.446											
Q16 I think it is be fun learning lessons on the internet.	3.16	.789		.786										
Q17 I am eager to learn lessons on the internet.	3.13	.798		.738										
Q18 Learning the lessons on the internet is an effective way to learn.	3.10	.819		.727										
Q19 I am interested in learning lessons on the internet.	3.23	.765		.726										
Q20 I am self-confident in learning lessons on the internet.	3.17	.765		.714										
Q21 I like to share my opinions with others when learning on the internet.	3.22	.736		.589										
Q22 I learn from my mistakes learning on the internet.	3.35	.702		.486										
Q23 Edit video	2.82	.914			.795									
Q24 Upload a video recording to my computer from a camcorder and to a video editing software package	3.07	.943			.795									
Q25 Start or install a program directly from a DVD or CD	2.90	.945			.725									
Q26 Download and unzip a ZIP file	3.22	.908			.579									
Q27 Insert audio and video in my documents	3.18	.866			.559									
Q28 I find it very difficult to study online.	2.50	.918				.744								
Q29 I get bored when studying online.	2.44	.902				.717								
Q30 I am more likely to miss assignment due dates in an online learning environment.	2.78	.983				.717								
Q31 I feel isolated in an online learning environment.	2.44	.949				.671								
Q32 Webcam	.58	.935					.761							
Q33 Microphones	.68	.989					.743							
Q34 Printer	.86	1.131					.743							
Q35 Camera	.63	.973					.740							
Q36 I am familiar with Web technologies.	3.24	.735						-.731						
Q37 I find Web technologies easy to use	3.33	.692						-.675						
Q38 I believe the Web is a useful platform for learning	3.34	.664						-.618						
Q39 I am comfortable in using Web technologies to exchange knowledge with others.	3.26	.695						-.495						
Q40 I would like to decide when I want to study.	3.40	.794							.802					

Q41 I would like to decide where I want to study.	3.57	.656							.780						
Q42 I like to study at my own pace.	3.63	.616							.717						
Q43 Changing font and size of my document	3.78	.610								-.912					
Q44 Cut, Copy, and Paste in my document	3.71	.658								-.885					
Q45 Download and save files from internet	3.69	.649								-.787					
Q46 Insert pictures and graphs in my documents	3.49	.751								-.683					
Q47 Create tables in my documents	3.53	.749								-.677					
Q48 Posting messages in an online bulletin board (like Facebook, Twitter)	3.49	.782								-.635					
Q49 Play a video on a web site on my computer or stored on a DVD	3.53	.770								-.608					
Q50 Send emails to individual or groups, includes using reply and forward email	3.46	.764								-.605					
Q51 Copy files from my computer's hard drive to a CD or DVD and vice versa	3.51	.767								-.555					
Q52 Send emails with attachments and open emails with attachments	3.43	.775								-.540					
Q53 Online learning makes me more responsible for my studies.	3.19	.745									-.802				
Q54 Online learning encourages me to make plans.	3.19	.732									-.783				
Q55 Online learning motivates me to prepare well for my studies.	3.19	.747									-.780				
Q56 I organize my time better when studying online.	2.97	.806									-.590				
Q57 I can study over and over again online.	3.33	.744									-.589				
Q58 I can express myself easily in written communication (emotions, humour etc.).	3.35	.695										.757			
Q59 I am able to give constructive feedback to others	3.26	.687										.724			
Q60 I am able to express myself without offending people	3.29	.710										.722			
Q61 I am comfortable in seeking for help when necessary	3.44	.664										.620			
Q62 I am comfortable in expressing my opinion in writing to others	3.30	.744										.611			
Q63 I am comfortable in responding to other people's ideas	3.45	.633										.556			
Q64 I am confident in posting my questions online if I do not understand something	3.28	.768										.517			
Q65 I am able to connect with others (peers and tutors) with ease	3.46	.665										.491			
Q66 I find learning through collaboration with others face-to-face is more effective.	3.55	.630											-.711		
Q67 I have a sense of community when I meet other students in the classroom	1.43	.656											.694		
Q68 I like the fast feedback when I meet my lecturer in person	1.54	.689											.693		
Q69 I learn better through lecturer-directed classroom-based activities	1.61	.672											.656		
Q70 I learn better when someone guides me personally.	3.46	.693											-.553		
Q71 I find it easy to communicate with others online.	3.29	.751													.569
Q72 I appreciate easy online access to my lecturer	3.52	.596													.481
Q73 I would like to interact with my lecturer online	3.02	.791													.475
Q74 I can collaborate well with a virtual team in doing assignments.	3.20	.707													.456
% of variance explained			28.309	7.719	6.738	3.023	2.764	2.709	2.319	1.962	1.697	1.567	1.428	1.234	
Eigenvalue			24.063	6.561	5.727	2.569	2.349	2.303	1.971	1.668	1.442	1.332	1.214	1.049	
Cronbach's alpha			0.942	0.90	0.872	0.753	0.70	0.858	0.070	0.934	0.876	0.883	-0.818	0.784	

Note: SDL: Self-Directed Learning; MOL: Motivation in Online Learning; MTS: Multimedia Technical Skills; Att. OL: Attitude toward Online Learning; TA: Technical Access; Att. TE: Attitude toward Technology; Att. LF: Attitude toward Learning Flexibility; TS: Technical Skills; Att. SM: Attitude toward Study Management; CC: Communication Competency; Att. CL: Attitude toward Classroom Learning; Att. Online Interaction.

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Besides, fourteen items were deleted because they have less than 0.4-factor loading. Four items from technological access dimension ("Computer desktop PC/Laptop", "Speakers or Headphones", "Internet access", and "Smartphones"), two items from technical skills dimension ("Typing in English" and "Navigating the internet"), one from attitude toward learning flexibility dimension ("I want unlimited access to lecture material"), four from attitude toward online learning dimension ("I believe that face-to-face learning is more effective than online learning", "I am comfortable with self-directed learning", "I do not resist having my lessons online", and "I like online learning, as it provides richer instructional content"), one from attitude toward classroom learning dimension ("I have a sense of community when I meet other students in the classroom"), one from attitude toward online interaction dimension ("I find it easy to communicate with others online"), and one from self-directed learning dimension ("I decide for myself the order of online learning materials that I want to learn"). From the PCA, 12 dimensions with 76 items in combination explained 62.799% of the variance. Table 4 shows the factor loadings after rotations.

After the EFA was carried out and 12 dimensions emerged from a total 73 items, CFA was subsequently conducted. These 12 dimensions were assumed to be correlated and allowed to covary in the model. The construct validity was analyzed and decided based on four fit indices criteria: $\chi 2/df$, TLI, CFI, and RMSEA. Invalid items were dropped based on the factor loadings of each item. Furthermore, the picture representation of the final model is provided to give a better description of the structural model.

Several rounds of CFA with some modifications based on the modified indices show that out of 73 items, 24 items were valid with satisfactory factor loadings ranging from 0.40 to 0.86. Seven dimensions were dropped since the items for each dimension loaded with a factor loading of less than 04. Table 5 shows the factor loadings for the final five constructs.

Table 5. Factor Loadings for Each Item

Items	Dimension					R^2	p
	MOL	SDL	Att. OI	CC	Att. SM		
MOL1	0.84						0.000
MOL3	0.87						0.000
MOL4	0.86						0.000
MOL5	0.84						0.000
SDL1		0.64					0.000
SDL3		0.73					0.000
SDL6		0.80					0.000

SDL7	0.79				0.000
SDL8	0.66				0.000
SDL10	0.76				0.000
SDL14	0.67				0.000
Att. OI 1		0.70			0.000
Att. OI 2		0.65			0.000
Att. OI 3		0.69			0.000
Att. OI 4		0.74			0.000
CC1			0.69		0.000
CC3			0.75		0.000
CC5			0.63		0.000
CC7			0.64		0.000
CC8			0.76		0.000
Att. SM1				0.76	0.000
Att. SM3				0.89	0.000
Att. SM4				0.65	0.000
Att. SM5				0.69	0.000

Note: SM: Attitude toward Study Management; CL: Attitude toward Classroom Learning; LF: Attitude toward Learning Flexibility; RBL: Readiness of Blended Learning

Moreover, the correlation among the five dimensions to the latent variable EFL learners' Readiness of Online Learning Scale was examined. The result indicates that all dimensions are correlated with each other, showing that they were part of a larger construct of EFL learners' readiness for online learning. Table 6 below describes the correlation among the dimensions.

Table 6. Correlation of the Four Dimensions to the Latent Variable EFL learners' Readiness of Online Learning

Dimension	MOL	Att. SM	CC	Att. OI
SDL	0.447	0.555	0.781	0.683
MOL		0.692	0.569	0.690
Att. SM			0.607	0.741
CC				0.762

The correlational factor analysis examined four goodness of fit indices $\chi 2/df$, TLI, CFI, and RMSEA. The results show that all the goodness-of-fit indices were acceptable overall, as can be seen in table 7.

Table 7. The Goodness of Fit of Student's Readiness of Online Learning Construct

The goodness of Fit	Value	Remark
$\chi 2/df$	2.742	Acceptable
TLI	0.945	Acceptable
CFI	0.952	Acceptable
GFI	0.924	Acceptable
RMSEA	0.051	Acceptable

The $\chi 2/df$ is 2.742, meaning that it satisfies the cut off value of 3.000. The analyses of TLI and CFI also show a good fit with the value of 0.945 and 0.952. Meanwhile, the value of

0.051 for RMSEA provides additional support for model fit because it is below the conservative cut-off value of 0.08. In conclusion, the correlational factor model with the five-factor oblique model fits the data best. Figure 1 is presented with standardized estimates to describe the relationship among all factors and items clearly.

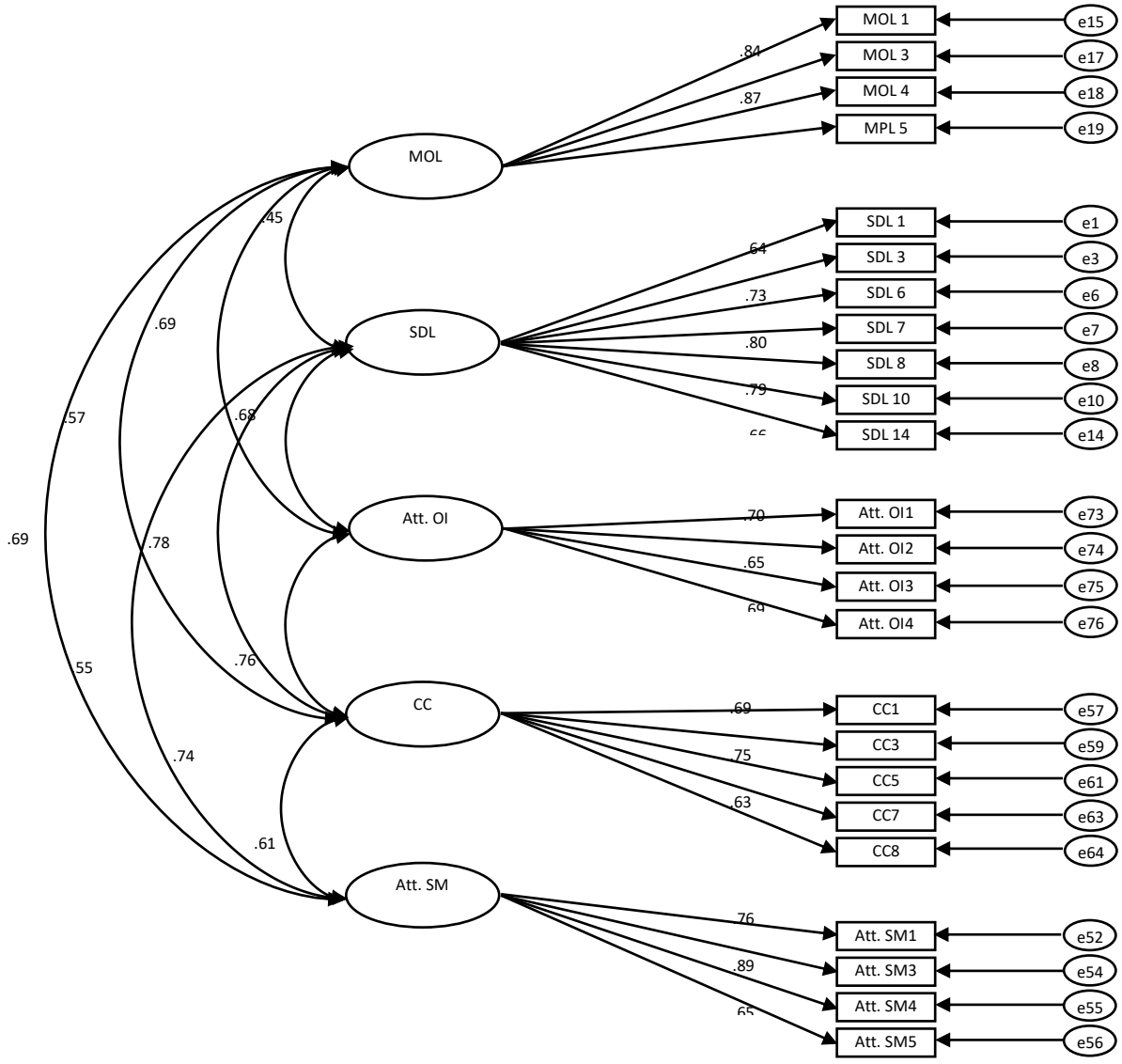

Figure 1. Correlational Factor Model for EFL learners' Readiness for Online Learning

Ensuring college students' readiness to join online learning is fundamental to ensuring their success during the learning process. Mainly in the context of foreign language learning, where there is a particular issue dealing with technological skills that are different from other subject matter. For this reason, this study aims to validate students' language readiness in online learning Scales generated from some previous scales developed. Three personal aspects are, psychomotor, affective, and (meta) cognitive that become the basis in determining the dimension or construct in this Scale. The EFA and CFA result obtained five latent dimensions or variables with 24 valid items with satisfactory factor loadings ranging from 0.40 to 0.86. The correlation among five latent variables shows that those variables are

parts of EFL learners' readiness for online learning constructs. Those five latent variables are Motivation in Online Learning, self-directed learning, Attitude toward Online Interaction, Attitude toward Study Management, and Communication Skills.

4. DISCUSSION

Motivation is the first dimension, which is an aspect of metacognitive learning. With four items with a loading factor above 0.8, the motivation dimension becomes the latent variable that determines the EFL learners' readiness to join online learning. This result confirmed several previous studies which emphasized motivation as a crucial factor in preparing students to learn online (Caliskan et al., 2017; C.-M. Chiu et al., 2007; Hung et al., 2010; Ifinedo, 2017; Rafiee & Abbasian-Naghneh, 2021; Watkins et al., 2008; Xiong et al., 2015). Although in face-to-face learning mode, motivation is also a vital factor in learning success (Deci & Ryan, 2013; Yang et al., 2006), its existence is becoming increasingly vital in online learning. As digital natives with no barriers to technology access and technical skills, their motivation to engage in learning becomes a more crucial factor.

The same interpretation goes for the self-directed learning factor. It is the second metacognitive dimension that influences students' online learning readiness. In online learning, students are required to plan, organize, determine strategies, and evaluate their learning. With the most loading items above 0.6, this dimension shows that students' ability to do self-management becomes fundamental in online learning (Hung et al., 2010; Zhu et al., 2020). With excellent SDL skills, students will be able to actively participate (Kizilcec et al., 2017; Timothy et al., 2010) and be able to ensure that they are involved in meaningful collaboration (Lee et al., 2014). This capability is not necessarily fully developed before online learning begins. Thus, the instructor needs to intervene in developing students' SDL through scaffolded instruction or tasks.

The next dimension that has items with a loading factor above 0.6 is the attitude toward online interaction. As foreign language learners, an attitude towards online interaction is essential to guarantee their success. With a positive attitude towards online interaction, there will be more chances of engaging in better learning. However, students with negative attitudes toward online interaction will experience obstacles in receiving instructions, suggestions, or criticism from classmates or instructors. It aligns with Ching (2002) and Hayashi et al. (2020), which revealed that when students have good acceptance and satisfaction with online learning implementation, their chances of successfully participating in the program will increase. Attitude toward study management is also essential in predicting students' adaptability to online learning. Students need a positive attitude towards self-study management with opportunities to engage in learning from anywhere and anytime (Al-Habies, 2020; Cooper & Corpus, 2009; Lan, 1998; Ley & Young, 1998; Wolters & Rosenthal, 2000). These two affective factors become latent variables in predicting EFL learners' readiness in online learning.

The last factor that is also very vital in preparing EFL learners to succeed in online learning is communication competencies. Especially for language learners, communication becomes the essential requirement to use and to develop before, during, and after the instruction (Caliskan et al., 2017; Hung et al., 2010; McVay, 2000; Yu, 2018). McVay (2000) pointed out that creating active-meaningful interaction and communication opportunities among students and teachers in online learning settings is essential. Student engagement can be maintained through scaffolded questions and other discussion forums even without face-to-face interaction.

However, some limitations of this study are needed to be acknowledged. Data were obtained through self-report and Scale instruments in this study. It requires qualitative support to be able to examine the learners' perceptions and opinions deeply. Through semi-structured interviews and online learning observations, they can see the phenomenon of their readiness in detail and in reality. The second limitation is the adequacy of the number of participants in this study. In future studies, a repeated study can be conducted with a more significant number of participants from universities in Indonesia to increase the generalizability of the findings. Besides, seeing the correlation between latent variables and demographic characteristics will increase the breadth of understanding of the factors that affect students' online learning readiness. The results are expected to contribute to the attention of instructors and policymakers in universities in preparing, conducting, and evaluating e-learning programs. These results can also be used to design active learning for EFL learners.

When all these teachers were asked (during the stimulated-recall discussion) about the problems they face in enhancing the learners’ self-confidence and strengthening their belief system in language learning, they responded almost similarly. They all stated that the topic of interest plays a significant role in asking them to speak in L2. They are interested because they are familiar with the topic, and it is within their area of knowledge. All types of exercises can easily be accomplished when the learners like the topic even though they have limited vocabulary to produce (Scull et al., 2021; H. Zhang & Koda, 2021).

Concerning topics of interest the teachers provide for their speaking class, one which was favored very much by the learners was when the topic of discussion was My Dream House. Classroom work was firstly assigned by the teacher (A), and everyone can raise their hand, followed by group discussion. All the HPS raised their hand at once, and the teacher pointed to only 3 of them to speak alternately. With fluent English, the three students completed the task at ease. Both HPS and LPS were excitedly participating in the discussion during the group work. When asked why they enjoyed this exercise, they responded similarly that the topic was very interesting. Everybody dreams of a lovely, comfortable house in

which they can enjoy living with their family. Selecting the right topic is one way of enhancing the learners' confidence in expressing their ideas. Teachers who stick to the syllabus can be hindered from creatively picking more authentic materials, and more updated issues to be discussed in the classroom, thus failing to stimulate the learners' engagement in classroom tasks. With proper teaching strategies, topics presented for language exercises, and the application of collaborative learning, learning goals can easily be achieved in addition to the provision of a more enjoyable classroom (Chung, 2022; Slaughter et al., 2022; Y. Zhang, 2022).

5. CONCLUSION

This study's main objective is to validate the construct dimensions or variables that predict online learning readiness from language learners. The study has shown that five dimensions have a positive and significant correlation. These dimensions are distributed in 24 valid items. The dimensions are motivation, self-directed learning, attitude toward online interaction, attitude toward study management, and communication skills.

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