ONLINE LEARNING MANAGEMENT IN THE ERA OF COVID-19 PANDEMIC AT JUNIOR HIGH SCHOOLS IN INDONESIA

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ABSTRACT

Aim/Purpose	The purposes of this research are to analyze online learning management activities conducted by the principals of junior high schools in Indonesia in facing COVID-19 as well as to discuss their perspective and expectations towards online learning activities when facing COVID-19 and after COVID-19 has passed.
Background	Due to the rapid spread of the COVID-19 pandemic, the Indonesian Minister of Education and Culture instructed that teaching and learning activities for all levels of education in Indonesia must be carried out online from home. There have been comprehensive reports about the various forms of online learning, its effects on students, the challenges, the learning transition from offline to online, and teachers' views on this new approach. Very few, if any, focus on how principals act upon the transition during this COVID-19 pandemic. Therefore, this research focuses on how principals overcome various problems that arise in the implementation of online learning activities.
Methodology	As many as 309 principals of junior high school from twelve districts in Indonesia were asked to give their responses to a set of questionnaires. The reliability of the questionnaire was analyzed using Cronbach's Alpha with the help of

	SmartPLS 3.0 software. The percentage was mainly used in the descriptive analysis. To obtain the influence among variables, the statistical inferential analysis was used.
Contribution	Although the sample size of this research is limited, the results may contribute to the existing theory and practice related to the implementation of online learning in Indonesia. The findings of this research could be a guide for principals to manage online learning in the future.
Findings	The data analysis showed that the constructs of organizing and monitoring-evaluation were found to play an important role as a mediator between the variables of planning with implementation of principal management in online learning. Path analysis demonstrated that the implementation variable was significantly influenced by the variables of planning, organizing and monitoring-evaluation, with a contribution value of 78.20%. Thus, it indicated that the planning, organizing and monitoring-evaluation variables contributed directly or indirectly to the implementation of principal management in online learning. Generally, the online learning management activities conducted by the principals of junior high schools in Indonesia have been carried out well, especially in the *Implementing* aspect. However, the aspects of *Planning,* as well as *Monitoring and Evaluation*, still need to be improved.
Recommendations for Practitioners	The government is recommended to provide adequate online learning supporting facilities as well as to facilitate teachers to increase insight and knowledge in terms of technology use, especially in designing, implementing, and providing assessments of online learning. So far, the government has provided some facilities and conveniences to principals and teachers. However, some information and ICT related trainings from the government during the COVID-19 pandemic is not widely known by the principals and the teachers. Socialization about these is needed.
Recommendations for Researchers	This work offers a theoretical understanding of the problems faced by school principals in facing COVID-19. Further research on how principals and teachers manage online learning activities needs to be carried out to solve various problems which might arise during the process of implementation.
Impact on Society	This research suggests that the principals in Indonesia have good online learning management. However, to reach the stated learning objectives efficiently and effectively, the principals need to collaborate with the teachers as the main facilitators of the teaching and learning process. Cooperation with parents is also highly recommended.
Future Research	Further research should focus on how the application of online learning can improve students' achievement through good management and collaboration with teachers, other administration staff at schools, and parents.
Keywords	online learning, management, COVID-19 pandemic, principals

INTRODUCTION

At the end of December 2019, the world was shocked by the Coronavirus Disease (COVID-19) in the city of Wuhan, China. Transmission of this virus was so fast that on January 30, 2020, WHO established COVID-19 status as Pandemic (WHO, 2020). Like in other countries, the presence of the

COVID-19 outbreak in Indonesia has caused many negative impacts in almost all sectors of life including education. Due to the high and fast spread of positive cases of COVID-19, the Indonesian Minister of Education and Culture instructed that teaching and learning activities for all levels of education in Indonesia must be carried out online from home (Djalante et al., 2020). Meanwhile, the sudden implementation of online learning activities from home caused various problems for teachers, students, parents, and other school members. Previously, the teachers used to teach in a classroom, in a school building equipped with various equipment to support the teaching and learning process. With this new policy, teachers were overwhelmed because they were still looking for the right patterns of how online learning from home could be implemented (Ferri et al., 2020). On the students' side, not all of them were familiar with how to participate in learning activities without face-to-face interaction. They faced difficulties in understanding their learning materials. Besides, many students did not have a laptop or smartphones. On the parents' side, assisting children in learning was a challenging task, as many of them had a limited time and were not familiar with the materials of all subjects their children learn. A series of other problems also appeared: internet connection, economic, social, and habitual (Bostan et al, 2020; Megatsari et al., 2020). Looking at the development of COVID-19 transmission in Indonesia, online learning activities will continue and it is not yet known when it will end. Behind the various problems that arise, teaching and learning activities must continue (Djalante et al., 2020). The principals, whose function is as the managers of their schools, must do something so that learning activities can take place well. It is important to analyze the management of online learning activities carried out by the principals. In other words, to analyze how the principals plan, organize, implement as well as monitor and evaluate online learning activities to achieve learning objectives during the COVID-19 pandemic.

In addition to the pandemic, the industrial revolution 4.0 has also had a significant influence on the implementation of the educational world. The industrial revolution 4.0 has caused the learning systems in schools that were originally paper-based or face-to-face learning to transform into ICT-based learning. It seems that the presence of ICT pioneered the realization of fun, active, and effective learning activities (Wang, 2009). In the meantime, the use of ICT by users, such as teachers, principals, and students, is generally classified into levels (Braak et al., 2004). The first level, ICT is utilized ineffectively, such as teacher support in classroom preparation. The second level, ICT is used effectively as a source of education. The combination of ICT with the center of education is involved in three phases. The first phase is the collection of infrastructures. The second phase is applying technology in the teaching and learning process. In the third phase, technology is used by teachers in various lessons (Gil-Flores et al., 2017). Implementation of Indonesian education in facing the industrial revolution 4.0 is fully stacked on the 2013 Curriculum, where the use of ICT must be integrated into the activities of teachers and students before, during, or after carrying out learning activities (Yusri & Goodwin, 2013). ICT can be used by the teachers to provide interesting, effective, and efficient teaching activities. Simultaneously, students must also be able to use ICT to improve their understanding properly. It seems clear that the use of ICT in learning activities has become a necessity in implementing the 2013 Curriculum (Mahdum et al., 2019).

Although there have been comprehensive reports about the various forms of online learning, its effects on students, the challenges, the learning transition from offline to online, and teachers' views on this new approach, very few, if any, focus on how principals act upon the transition during this COVID-19 pandemic. In fact, principals are one of the key elements ensuring the successful transition from the face-to-face classroom to online-based learning as their strategic thinking and leadership might significantly affect the performance of the school (Hale & Moorman, 2003). Therefore, this study sets out to investigate the management activities conducted by the principals of junior high schools in Indonesia in facing COVID-19 as well as to discuss their perspective and expectations towards online learning activities both when facing COVID-19 and after COVID-19 has passed. To answer this, the research questions are formulated as follows:

(1) Is there any contribution of planning activities towards organizing activities conducted by the principals?

(2) Is there any contribution of planning and organizing activities towards monitoring-evaluation activities conducted by the principals?

(3) Is there any contribution of planning and organizing activities towards the implementation activities done by the principals?

(4) What are perspectives and expectations of the principals towards online learning activities both when facing COVID-19 and after COVID-19 has passed?

REVIEW OF RELATED LITERATURE

THE CONCEPT OF MANAGEMENT AND LEARNING MANAGEMENT

In everyday life, the word 'management' is often heard. Its meaning may refer to a profession or a system. It refers to a profession because a person has to obtain special skills to be able to achieve the position of being a 'manager'. Management can be a system because it has several components or processes consisting of planning, organizing, implementing, as well as controlling, and evaluating actions that are carried out to determine and achieve predetermined goals through the use of available human resources (Terry, 2005). To achieve a goal, a manager must create good management. Terry also mentions that management activities carried out by a manager have various functions, namely: planning, organizing, actuating (implementing), and controlling.

Amtu (2013) has almost the same opinion as Terry (2005). According to him, management is the basic element that will always be there and will be used as a reference by a manager in carrying out activities to achieve goals. Amtu (2013) divides the management function into three parts: (1) *planning*, which is a process of making decisions on many alternatives or choices regarding objectives and ways to be implemented; (2) *implementation* (actuating) can be defined as the overall efforts, ways, techniques, and methods to encourage members of the organization to be willing to work for the achievement of organizational goals efficiently, effectively, and economically; and (3) *evaluating*, which is a process of monitoring and controlling performance to ensure that the conducted activities are under the plans that have been set. The active roles of the principal as a manager in the school he/she leads are very important so that the activities of the school can run well and produce good outcomes as well.

School management activities are called learning management. Learning management also refers to efforts to regulate learning activities based on the concepts and principles of assessment to achieve school goals that have been stated more effectively, efficiently, and productively (Amtu, 2013). As changes in education are inevitable, schools are required to be flexible and responsive towards them to achieve the perceived short-term and long-term school goals (Dean, 1993; Everard et al., 2004; Hamzah et al., 2018). In this current pandemic, for example, school principals have no choice but to adapt to the situation leading to the change of management styles (Harris & Jones, 2020). Thus, principals, as the schools' leaders, have to master management skills so they can effectively respond and make decisions in given situations (Gold & Evans, 1998; Jones, 2004; Wong & Ng, 2021). Principals who have good competence in carrying out their functions and roles will be able to work optimally with teachers and other school staff to achieve the stated goals with effective management and to ensure school effectiveness (Reid, 2020). Further, these principals will be able to encourage teachers to carry out their duties and obligations as an educator with full responsibility. Automatically, the teachers will work hard to realize the goals and will be motivated to work hard to gain maximum achievements.

INTEGRATING TECHNOLOGY INTO EDUCATION

Many studies have reported on the use of ICT in the learning process. Gil-Flores et al. (2017) proposed the role of school ICT infrastructure in education and involved a sample of 3339 teachers from 192 schools in Spain. This study found that the availability of educational software, ICT training, and collaboration between teachers and pedagogic concepts, were found to have a significant effect on the use of ICT in the classroom. Lindberg et al. (2017) have investigated comprehensively about views of teachers and students on the use of ICT in education. This study found that ICT contributed significantly to a better understanding for teachers in the use of ICT in schools and greatly provided new knowledge about concept building in the use of ICT. Other implementations of ICT in the learning process were utilized to analyze the impact of using ICT in teaching based on data from the Program for International Student Assessment (PISA) (Fernandez-Gutierrez et al., 2020), investigating the relationship between pedagogic belief practice and the use of ICT through a survey methodology (Deng et al., 2014), analyzing the use of ICT, motivation to use ICT, knowledge, and quality of learning (Lubis et al., 2018), assessing teachers' attitudes toward the use of ICT (Hernández-Ramos et al., 2014), investigating scientific concept in learning, assessing traditional learning towards the use of constructivism and developing ICT for science teachers (Alt, 2018), exploring perception and motivation of teacher about the use ICT in learning activities (Mahdum et al., 2019), and determining the use of ICT predictors by teachers in schools (Drossel et al., 2017).

The widespread use of the internet allows teachers to develop teaching and learning activities through the online system. The term 'online learning' has some equivalent terms that are often used such as e-learning, internet learning, virtual learning, computer-assisted learning, web-based learning, and distance learning, all of which refer to the existence of the distance between the teacher or instructor and students. The online learning system is used to improve the quality of learning. Simmon (2002) states that gradually, many organizations including educational institutions have begun to adopt online learning as a method of delivering information. The implementation of the online learning system is very varied, ranging from simple to integrated ones. A simple online learning system, for example, only consists of a collection of learning materials stored on a web server with communication facilities via WhatsApp, e-mail, or mailing list. The integrated one can be the form of an e-learning portal that contains various learning objects enriched with multimedia and integrated with academic information systems, evaluations, communication, discussion forums, and other various educational tools. The important concept of e-learning is that the distribution of learning material carried out via electronic media or the internet so that students can access it anytime and from anywhere. Furthermore, a flexible learning environment and atmosphere can be created.

Just like other learning models, online learning also has various benefits and weaknesses. Smaldino et al. (2005) mentions some benefits of online learning, namely: (1) internet use can contain text, audio, graphics, video animation; (2) can be updated, and students can access info without limits; (3) students can access information without going far away; (4) students can consult with teachers, experts or exchange opinions with other students without having to meet face to face; and (5) communication activities can be carried out easily. Nevertheless, Dhawan (2020) also mentions some weaknesses that cause obstacles. Some of the obstacles are: (1) technical problems, for example, electricity that often goes out and unstable internet networks; (2) time constraints, teachers do not have much time to be more creative in preparing learning materials by using interesting learning media; (3) limited operational staff, not all teachers can operate computers; (4) teacher competence in utilizing various ICT facilities that have been provided by the school; and (5) financing, limited funds to improve the facilities and infrastructure needed in the use of it.

PRINCIPALS' ROLES IN THE IMPLEMENTATION OF ONLINE LEARNING

Recently, many publications have extensively investigated online learning during the COVID-19 pandemic from various perspectives. Mishra et al. (2020) have analyzed the various forms of online learning conducted in universities during the COVID-19 pandemic. This work found that the forms

of online learning preferred by lecturers and students were email, WhatsApp, and learning management systems. Alawamleh et al. (2020) have reported the effects of online learning on communication between teachers and students during the COVID-19 pandemic and found the students prefer offline to online learning. This is because online learning has many problems such as lack of students' motivation, understanding of the topic, and feeling of alienation caused by online classes. Other studies have also explored online learning during the COVID-19 pandemic with specific objectives, such as to analyze students' adaptation from offline to online learning (Besser et al., 2020), to investigate factors and challenges in online learning (Almaiah et al., 2020), to evaluate students' perceptions toward online learning (Adnan & Anwar, 2020; Agarwal & Kaushik, 2020), to analyze online learning transitions based on students' perspectives (Khalil et al., 2020), to analyze the process of teaching and learning in universities level (Ali, 2020), to investigate satisfaction of students on platforms used in online learning (Chen et al., 2020), to assess the effects of lockdown on learning status of the students at universities level (Kapasia et al., 2020), and to see teachers' views on obstacles and challenges in online learning in Indonesia education (Mailizar et al., 2020).

To achieve the expected benefits from online learning, it is vital to ensure that every key agent in the process can work together hand in hand. One of the main actors in the implementation of online learning is school principals as they act as the major decision-makers in their schools. Thus, the success of this new learning approach is inseparable from the leadership models performed by the principals.

During the COVID-19 outbreak when education is forced to shift away from face-to-face delivery to an online form, more research is carried out regarding online learning which focuses on how it is conducted by teachers and how it is viewed by students. However, the research that investigates principals' views and leadership amidst this pandemic are somewhat under-theorized. While it is true that during the current situation the teaching and learning process is carried out online, the administrative tasks and decision-making, in general, are still in the hands of the principals. Therefore, their roles, though somewhat reduced, are not completely diminished by the recent change.

Before the pandemic, the principals' roles and leaderships are often researched to ensure and improve the integration of ICT into classrooms. It was often found that positive attitude of the principals towards ICT would positively impact the support given to the teachers in using the ICT (Mulwa & Kyalo, 2013; Neyland, 2011; Polizzi, 2011), the effectiveness of the implementation (Fessehatsion, 2017; Waxman et al., 2013) and the teachers' belief (Alghamdi & Prestridge, 2015). For example, a study conducted by Serhan (2007) on 200 principals in Arab countries suggests that principals have a willingness to apply technology. This study is in line with Papaioannou and Charalambous' (2011) findings on 250 principals in Cyprus. However, these positive responses towards ICT integration are followed by appropriate training and adequate facilities, especially in the Indonesian context (Owen et al., 2011). This raises a question as to whether the school leaders are equipped with adequate resources in this unprecedented situation as they have to manage the schools to adapt to the new learning system. That is why the research on principals' leadership and management amidst this pandemic is essential to answer such question.

RESEARCH FRAMEWORK AND HYPOTHESES DEVELOPMENT

This study extensively explored the online learning management which was conducted by the principals of junior high schools in Indonesia in the era of COVID-19 pandemic. The analyzed constructs included planning, organizing, monitoring-evaluation and implementation of online learning. The developed research model is illustrated in Figure 1.
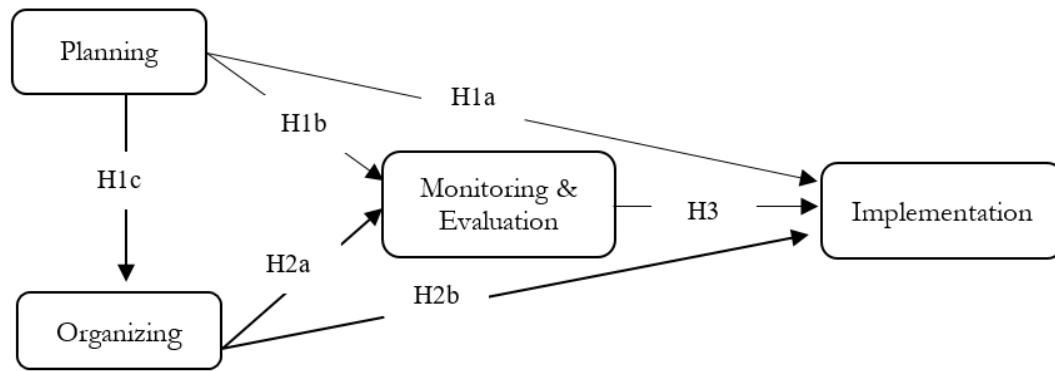
Figure 1. Research theoretical framework

The planning is goal setting in the organization and it is considered the best way to achieve the goal of an organization (Cleland & Gareis, 2006). The planning is very helpful in maintaining effectiveness of management. This is because the planning serves as a guide for future activities (Cleland & Gareis, 2006; Lamond 2004). Therefore, planning is often found as one of the key predictors for the success of implementation and supervision (Layland & Redding, 2020; Virgana & Lapasau, 2019). Thus, several hypotheses are formulated as follows:

H1a: Planning system has a positive and significance influence towards the implementation of online learning management.

H1b: Planning system has a positive and significance influence towards the monitoring-evaluation in online learning management.

H1c: Planning system has a positive and significance influence towards the organization in online learning management.

Meanwhile, organizing is a management function consisting of developing structures and allocating human resources to ensure the achievement of an organization's goals (Cavicchi & Vagnoni, 2018; Cleland & Gareis, 2006; Lamond, 2004). Organizing is also involved for the design of work in an organization. It is used to make decisions about the duties and responsibilities of individuals in their work. Therefore, it is hypothesized:

H2a: Organizing system has a positive and significance influence towards the monitoring-evaluation in online learning management.

H2b: Organizing system has a positive and significance influence towards the implementation in online learning management.

The controlling is used to ensure a performance conducts well and does not go out from the set work standards. Where the term of work standard is expressed in terms of revenue, cost profit and units produced, good control is needed for the effective planning, due to the planning provides standard and goals to be achieved (Cleland & Gareis, 2006). Meanwhile, evaluation is focused on collecting, analyzing, and using information regularly about the work being carried out. Some studies found that both monitoring and evaluation can impact to school overall performance to some degree (Eshetu, 2020; Rees et al., 2020; Vijayabanu & Therasa, 2016). Therefore, a hypothesis is suggested as follows:

H3: Monitoring-evaluation system has a positive and significance influence towards the implementation in online learning management.

METHODOLOGY

RESEARCH DESIGN

This research was quantitative research conducted from May to October 2020; however, the data were collected during the second week of July 2020 until the second week of August 2020. The purposes are to analyze online learning management activities carried out by the principals of junior high schools in Indonesia in facing COVID-19 as well as to discuss their perspectives and expectations towards online learning activities both when facing COVID-19 and after COVID-19 has passed.

PARTICIPANTS

The population of this research was the principals of all junior high schools in Indonesia. By using a simple random sampling technique, 309 principals coming from 12 districts volunteered to be the sample of this research. Based on the government's database, the total number of principals of junior high schools in Indonesia was approximately 40,538 people (BPS-Statistics Indonesia, 2021). The sample was chosen using a stratified simple random sampling technique involving all principals of junior high schools (SMPs) from twelve districts in Indonesia. With 95% confidence level and 5 percent margin of error, the sample size for this study should be at least 384 (Denscombe, 2010). Initially, 415 principals were contacted to ask for their consent to participate in this study, but only 330 of them responded positively. After the questionnaires were distributed by email to 330 principals, (124 paper-based and 206 online), it was found that not all of the questionnaires had returned. The returned rate was as many as 97.20% (321). The other nine were not sent back to the researchers within the timeframe, while the other 12 responses were invalid because some questions were blank. As a result, there were only 309 valid responses for the analysis. As confidence level and margin of error are adjustable depending on researchers' willingness to accept the chance of being wrong (Hair et al., 2009; Hazelrigg, 2009), the sample size in this study (309) satisfied the minimum requirement for valid statistical analysis with 95% confidence level and 6% margin of error, which required at least 266 sample size.

INSTRUMENT OF RESEARCH

The data were collected by using a set of questionnaires that were adapted from Terry (2005) and Amtu (2013). The questionnaire consists of 45 statements related to four aspects of online learning management activities; namely, planning (12 items), organizing (16 items), implementing (9 items), and monitoring and evaluation (8 items). The instrument (Appendix) consisted of three parts. Part A was intended to obtain teachers' demographic data. Part B was intended to obtain data about online learning management activities done by the principals. Part C consisted of two questions intended to obtain the data related to the principals' perspectives and expectations towards online learning activities both when facing COVID-19 or after COVID-19 has passed. The items in Part B used a 5-point Likert scale which consisted of 1 = never, 2 = seldom, 3 = sometimes, 4 = often and 5 = very often.

In collecting the data, the questionnaire was translated using the back-translation method proposed by Brislin (1980). First, it was translated into Indonesian by a professional translator. It was then translated back into English by a different translator. A new translator was appointed to compare both the English versions and to revise the Indonesian version of the questionnaire. Before the questionnaire was distributed to the sample principals, a try-out was carried out on 30 non-sampled principals to check the reliability. Cronbach's Alpha was used to measure the internal consistency of the instrument. The reliability obtained 0.895. As the scores were higher than 0.700, the questionnaire was used as a research instrument (Muijs, 2011).

TECHNIQUE OF DATA ANALYSIS

Data analysis was performed through descriptive and inferential statistics using the SmartPLS 3.0 program. The descriptive analysis was conducted to describe the demographic of research samples in terms of percentages and frequencies, which were calculated using MS Excel. Meanwhile, inferential analysis was carried out to evaluate the validity and reliability of the instruments. Correlation analysis was used to investigate the relationship between the tested variables. As the study aimed to investigate the management activities conducted by the principals of junior high schools in Indonesia in an exploratory manner and test the theoretical framework predicted from the activities using a limited number of samples (N=266), Partial Least Square Structural Equation Modelling (PLS-SEM) was considered suitable for this purpose (Hair et al., 2017).

FINDINGS

DEMOGRAPHICS OF RESPONDENTS

In this study, the demographics of school principals include the number of years working as school principals, educational level, availability of computers and internet access, level in controlling computers, and mastered computer program. The detailed demographic profile is summarized in Table 1. The data demonstrate that the majority of principals participating in this study have been leading their schools for 5-10 years, which accounted for 46.60%. Meanwhile, the highest educational level obtained was the undergraduate level. The availability of computers and internet access in school was found to be in good condition, and the level of mastery in using computers was dominated by users. The computer programs mastered by all principals in this study were Microsoft Word, Excel, and PowerPoint.

Table 1. Demographic profile of the participants

No	Demographics	Frequencies	Percentages (%)
1	Years working as a principal		
	> 10 years	36	11.65
	5 – 10 years	144	46.60
	< 5 years	129	41.75
	Total	**309**	**100.00**
2	Educational level		
	Bachelor (SPd)	243	78.64
	Master (MSc)/Philosophy Doctor (PhD)	66	21.36
	Total	**309**	**100.00**
3	Availability of computers and internet access		
	Very good	7	2.27
	Good	138	44.66
	Moderate	92	29.77
	Less	72	23.30
	Total	**309**	**100.00**

No	Demographics	Frequencies	Percentages (%)
4	Mastery level in using computers		
	User	301	97.41
	Programmer	8	2.59
	Total	**309**	**100.00**
5	The mastered program (could be filled in more than one).		
	Microsoft Word	309	100.00
	Multimedia	206	66.67
	Microsoft Excel	309	100.00
	Microsoft PowerPoint	309	100.00
	Microsoft Access	28	9.06
	Website page coaching/prototype	17	5.50

ANALYSIS OF ONLINE LEARNING MANAGEMENT

Planning for online learning management in schools. Descriptive analysis of planning in online learning management conducted by the principals is summarized in Table 2. The highest value was found on the indicator of the principals 'did not specify the schedule of activities' (58.58%) with never category. It was followed by 'designing the goals and objectives of activities' (55.34%) with the often category. The next highest indicator value was acquired in the range of 52.00-54.69% with never categories on the item that the principals 'did not specify the budget required' and 'did not determine the effective ways to achieve the learning objectives'. The indicator of 'the principals designed forms and types of activities to be carried out and identified the availability of supporting facilities' came fifth (52.00-53.07%) with often categories.

Table 2. Planning for online learning management organized by the principals

No	Statements	Responses (%)				
		Never	Seldom	Sometimes	Often	Very often
	Before online learning activities were carried out, I ….					
71	reviewed policies that are used as the basis for activities.	1.29	1.29	17.80	49.19	30.42
2	designed goals of activities to be achieved.	0.32	0.97	11.33	55.34	32.04
3	designed forms and types of activities to be carried out.	0.65	1.62	11.33	52.75	33.66
4	did not identify the person in charge of carrying out activities and their responsibilities.	46.93	32.36	10.68	8.74	1.29
5	identified the availability of supporting facilities.	0.65	1.29	7.12	53.07	37.86

No	Statements	Responses (%)				
		Never	Seldom	Sometimes	Often	Very often
	Before online learning activities were carried out, I ….					
6	did not specify the budget required.	52.43	28.16	10.03	7.44	1.94
7	identified availability of funds.	0.65	1.62	9.06	46.93	41.75
8	did not specify the type of ICT platform and equipment to be used.	44.98	34.30	13.92	6.15	0.65
9	determined the required learning resources.	0.32	1.29	4.21	53.40	40.78
10	did not specify the schedule of activities.	58.58	27.83	8.09	3.24	2.27
11	did not determine the effective ways to achieve the learning objectives.	54.69	34.30	6.80	3.24	0.97
12	determined the procedure used to implement the activities.	0.32	1.62	7.77	48.87	41.42

The organizing stage in online learning management. The implementation of online learning at the organization level carried out by the principal is shown in Table 3. The responses of online learning management at the organizing stage achieved a percentage value of >50% on 10 of 16 available indicators. The highest value was found on the indicator of 'the principal did not make a schedule of learning activities' (63.11%) in the never category. The second highest indicator value was gained on the indicator that 'principals did not play active roles in providing guidance to develop the abilities of teachers and staff' (60.84 %) with never category. Furthermore, the three indicators, namely 'principals set up work procedures to achieve goals that have been set', 'principal arranged the completeness of the necessary facilities and equipment', 'principal formed an organizational structure to carry out the activities and principal made corrective if there is an error made by the teachers in designing online learning activities' obtained the highest scores in the often category in the range of 50.00-53.50%. The very often category was found to be the highest response on three indicators, such as 'principal provided directions to all teachers and staff regarding the activities that would be carried out', 'principal determined the work to be carried out by teachers and staffs according to the organizational structure', and 'principal divided tasks for teachers and staff on duty' (50.00–53.00%).

Table 3. Organizing activities conducted by the principals

No	Statements	Responses (%)				
		Never	Seldom	Some-times	Often	Very often
	In organizing online learning activities, I ….					
1	formed an organizational structure to carry out the activities.	0.97	0.97	7.77	51.78	38.51
2	divided tasks for teachers and staff on duty.	0.65	0.32	4.21	42.07	52.75

No	Statements	Responses (%)				
		Never	*Seldom*	*Some-times*	*Often*	*Very often*
	In organizing online learning activities, I ….					
3	determined the work to be carried out by teachers and staff according to the organizational structure.	0.65	0.97	4.53	43.37	50.49
4	outlined the responsibilities of teachers and staff according to their functions and authorities.	0.65	0.97	5.18	48.54	44.66
5	did not regulate the techniques of working to achieve goals that have been set.	48.22	34.63	9.06	5.83	2.27
6	set up work procedures to achieve goals that have been set.	0.97	2.27	6.80	50.81	39.16
7	did not arrange good coordination according to the established mechanism among personnel involved.	50.49	34.30	11.33	2.91	0.97
8	arranged the completeness of the necessary facilities and equipment.	1.29	0.65	8.41	51.13	38.51
9	did not make a schedule of learning activities.	63.11	28.16	3.56	2.91	2.27
10	provided directions to all teachers and staff regarding the activities that would be carried out.	0.65	0.65	2.27	45.95	50.49
11	provided standard operational that should be followed.	0.97	1.29	5.18	49.51	43.04
12	provided guidance on the implementation of activities.	0.97	1.94	6.47	49.19	41.42
13	did not make guidelines for the implementation of online learning activities done by the teachers.	50.81	35.28	9.06	3.56	1.29
14	became an effective model for teachers	0.65	2.59	18.45	49.84	28.48
15	made corrective if there is an error made by the teachers in designing online learning activities.	0.65	0.65	10.36	53.07	35.28
16	did not play active roles in providing guidance to develop the abilities of teachers and staff.	60.84	28.48	6.80	2.91	0.97

The implementation stage in online learning management. Implementation of online learning management performed by principals is summarized in Table 4. Percentage values for implementation of online learning have obtained a response of >50% on six out of nine existing implementation indicators. The highest percentage value was found on the indicator of 'I communicated with teachers and staff to check and organize the process of online learning activities' (52.75%) with often

category. The percentage values were also achieved in the range of 50.00-5.50% in the same categories for indicators such as communicating with teachers and staff 'to improve the cooperative relationship', 'to find out and measured the goals that had been achieved', 'to compare the carried out activities with the existing standards of online learning activities', and 'to coordinate the implementation of online learning activities'. Another percentage value obtained was 51.13 % in the very frequent category for indicator of 'I communicated with teachers and staff to give motivation'.

Table 4. Implementation of online learning management by the principals during the COVID-19 pandemic

No	Statements	Responses (%)				
	During the implementation of online learning activities, I communicated with teachers and staff to …	*Never*	*Seldom*	*Some-times*	*Often*	*Very often*
1	improve a cooperative relationship.	0.32	1.94	5.18	50.16	42.39
2	find out and measured the goals that had been achieved.	0.65	1.62	7.77	52.10	37.86
3	compare the carried out activities with the existing standards of online learning activities.	0.65	3.24	13.92	52.10	30.10
4	find out if there was an error occurred in implementing the online learning activities.	0.32	3.24	13.59	48.87	33.98
5	coordinate the implementation of online learning activities.	0.65	1.62	4.85	52.43	40.45
6	organize the process of learning activities.	0.65	1.62	3.56	49.19	44.98
7	Foster cooperation to mobilize teachers and staff in the implementation of online learning activities.	0.32	2.27	7.12	48.87	41.42
8	give motivation.	0.32	0.97	1.94	45.63	51.13
9	check and organize the process of online learning activities.	0.97	0.65	4.21	52.75	41.42

The monitoring and evaluation of online learning in schools. Monitoring and evaluation for online learning management performed by principals are shown in Table 5. The responses were found to be >50% on six out of eight available indicators. The highest percentage value was 52.75% on the indicator of 'I make a systematic assessment of the results and benefits that had been achieved' in the frequent category. Other high percentage values in the categories were in the range of 50.00-52.00% on three indicators, namely 'I monitored the implementation of online learning activities to prevent procedural errors and provide corrective actions if any', 'I make a systematic assessment of limitations and problems faced by teachers', and 'I monitored the implementation of online learning activities to ensure the suitability between the plans that have been set and the implementation of online learning activities'. A high response value was also found in the very frequent category (51.13%) on the indicator of 'I make a systematic assessment of the implementation of online learning activities in every aspect'. A high percentage value in the never category was found on 'I did not find solutions to the problems faced by teachers and staff'.

Online Learning Management

Table 5. Monitoring and evaluation of online learning management carried out by the principals

No	Statements	Responses (%)				
		Never	Seldom	Some-times	Often	Very often
1	I monitored the implementation of online learning activities to prevent procedural errors and provide corrective actions if any.	0.97	0.65	11.33	51.13	35.92
2	I monitored the implementation of online learning activities to ensure the suitability between the plans that have been set and the implementation of online learning activities.	0.97	2.27	11.00	51.78	33.98
3	I monitored the implementation of online learning activities to make sure that online learning activities run smoothly.	0.97	6.15	15.21	44.34	33.33
4	I make a systematic assessment of the implementation of online learning activities in every aspect.	0.32	0.97	1.94	45.63	51.13
5	I make a systematic assessment of the results and benefits that had been achieved.	0.97	0.65	4.21	52.75	41.42
6	I make a systematic assessment of limitations and problems faced by teachers.	0.97	0.65	11.33	51.13	35.92
7	I did not find solutions to the problems faced by teachers and staff.	51.78	33.98	11.00	0.97	2.27
8	I did not give appreciation to teachers and staff who have successfully carried out activities well.	44.34	33.33	15.21	0.97	6.15

The principals' responses towards online learning management based on the constructs of planning, organizing, implementing, and monitoring-evaluation are summarized in Table 6. Overall, the response of the online learning management in the frequent and very often categories gained an average value of >30%, while the never, seldom, and sometimes categories were >13%. The implementation construct had the highest response (>50%) in the frequent category. Other online learning management responses, such as planning, organizing, and monitoring-evaluation, were found to be >35% in the frequent categories.

A very frequent contribution for the constructs of implementation and evaluation-control in online learning might be caused by the principals' role as school leaders, which require them to be responsible for the implementation of online learning in schools as mandated by the government. In this case, the principals are instructed to give directions to teachers in providing explanations to students' guardian about the students' assignments, providing feedback on assignments to students, checking and evaluating the online learning process. Controlling and evaluation are also carried out by the principals to provide feedback to teachers related to the online learning tasks performed, assist in online learning, and perform monitoring towards online learning to achieve the predetermined learning objectives (Sumintono et al., 2015).

Table 6. The level of principal management in carrying out online learning during the COVID-19 pandemic

Management online learning	Responses (%)				
	Never	Seldom	Sometimes	Often	Very Often
Planning activities	21.82	13.89	9.84	32.36	22.09
Organizing activities	17.66	10.88	7.46	34.59	29.41
Implementing activities	0.54	1.91	6.90	50.23	40.42
Controlling and evaluation activities	10.32	8.47	10.63	39.69	30.90
Average	12.59	8.79	8.71	39.22	30.70

ANALYSIS OF THE MEASUREMENT MODEL

Validity and reliability of instruments. The validated instruments were analyzed using the SmartPLS 3.0 program. The validation of instruments was measured by using a correlation between an item and construct values. The expected validity was >0.70 based on Cronbach's Alpha value and corroborated by the average variance extracted (AVE) value of >0.50 (Peterson, 2000). Several AVE values were <0.05 on the items in each construct. The six items in both planning and organizing constructs had an AVE value of <0.50 with invalid categories. The implementation variable had one item invalid, while the evaluation-monitoring obtained four items invalid with AVE value of <0.50. All invalid items were excluded and not analyzed. Statement items were tested for reliability and validity to obtain the legality of the research instrument. The validity and reliability values based on the AVE and Cronbach's alpha values after several questions discarded are summarized in Table 7. All analyzed variables demonstrated the AVE values in the range of 0.651–0.716 and Cronbach's Alpha values of 0.893–0.943, which means that all variables could be accepted as reliable constructs (Hair et al., 2017; Peterson, 2000).

Table 7. Reliability and validity of instrument evaluated from values of Cronbach's Alpha and AVE

No	Variables	Cronbach's Alpha	rho A	Composite Reliability	AVE
1	Implementation	0.923	0.925	0.937	0.651
2	Monitoring and Evaluation	0.893	0.895	0.921	0.701
3	Organizing	0.943	0.945	0.953	0.716
4	Planning	0.897	0.900	0.921	0.661

In addition, the reliability test was also measured using SmartPLS 3.0 program, whose values were represented by Cronbach's Alpha value (>0.60) and were strengthened by the composite reliability value (>0.80), which has a high-reliability value. Overall, the analyzed variables had composite reliability values and Cronbach's Alpha of >0.80 and >0.60 respectively (Table 7). This means that the developed instrument is classified as valid and reliable.

Multicollinearity test. Multicollinearity analysis of planning, organizing, monitoring-evaluation and implementation variables in principals' management during online learning are summarized in Table 8.

Table 8. The results of multicollinearity test obtained from the VIF values

Variables	Implementation	Monitoring and Evaluation	Organizing	Planning
Implementation	-	-	-	-
Monitoring and Evaluation	2.510	-	-	-
Organizing	2.913	2.247		-
Planning	2.490	2.247	1.000	-

As shown in Table 8, the variance inflating factor (VIF) values for all principal management indicators in online learning obtained were less than 10.000 (VIF value < 10.000). As acceptable VIF values should be lower than 10 (Hair et al., 2014), this showed that the multiple regression model was found to be free of multicollinearity cases.

Discriminant validity test. Discriminant validity values obtained from Fornell-Larker criterion is demonstrated in Table 9. The implementation variable obtained a value of 0.827, which was the highest variable compared to other variables in the same column. Furthermore, the planning was cited to have a value of 0.813, which was the highest variable compared to implementing, monitoring-evaluation, and organizing on the same row. Overall, the square root values of AVE were higher than the correlation values between latent variables. This showed that the latent variable did not have a discriminant problem and the latent variable in this model passed the validity test.

Table 9. Discriminant validity values obtained from Fornell-Larcker criterion

Variables	Implementation	Monitoring and Evaluation	Organizing	Planning
Implementation	0.807	-	-	-
Monitoring and Evaluation	0.814	0.837	-	-
Organizing	0.819	0.747	0.846	
Planning	0.679	0.695	0.745	0.813

Heterotrait-Monotrait ratio test. The heterotrait-monotrait ratio for the variables of planning, organizing, monitoring-evaluation is summarized in Table 10. Distribution of the Heterotrait-Monotrait ratio values for all variables were clearly found to be <0.85. This showed that all constructs were used as indicators of principal management in online learning and classified as valid discriminants. This means that the used constructs were valid and could be trusted to provide quality information (Henseler et al., 2015).

Table 10. Validity test obtained from the measurement of Heterotrait-Monotrait ratio

Variables	Implementation	Monitoring and Evaluation	Organizing	Planning
Implementation	-	-	-	-
Monitoring and Evaluation	0.821	-	-	-
Organizing	0.806	0.804	-	-
Planning	0.744	0.773	0.802	-

STRUCTURAL MODEL ESTIMATION

Hypotheses testing results. The relationship between principal management and online learning in various construct aspects is shown in Table 11. It can be seen that the organizing construct and the combined variable of monitoring and evaluation in online learning were found to have a significant effect on the implementation of teaching and learning during the COVID-19 pandemic, with the Coefficient β values of 0.485 and 0.467 respectively. This means that Hypotheses H2b and H3 are supported in this study. Furthermore, Hypotheses H1b, and H2a are also supported as monitoring and evaluation in online learning were found to be significantly influenced by organizing (β=0.515) and planning (β=0.312). The planning construct also showed a significant impact on the organizing variable (β=0.745), which supports hypothesis H1c.

Regarding the influence of planning towards implementation, this study proposed that the former construct had significant influence towards the latter. However, Table 11 depicts that planning variable showed a negative Coefficient β value (β=-0.007), which implied that it did not have a significant impact on the implementation of online learning during the COVID-19 pandemic. Thus, hypothesis H1a is not supported.

Table 11. Structural model and hypotheses testing

Hypothesis	Path	Coefficient β	t-test	Sig. (p values)	Results
H1a	Planning → Implementation	-0.007	0.120	0.904	Not Supported
H1b	Planning → Monitoring and Evaluation	0.312	3.260	0.001	Supported
H1c	Planning → Organizing	0.745	12.895	0.000	Supported
H2a	Organizing → Monitoring and Evaluation	0.515	4.988	0.000	Supported
H2b	Organizing→ Implementation	0.485	7.341	0.000	Supported
H3	Monitoring and Evaluation → Implementation	0.467	8.240	0.000	Supported

Note: p = 0.05, 95%

Contribution of principal management in online learning. The correlation coefficient of principal management in online learning is shown in Table 12. A positive relationship was acquired between the construct of monitoring-evaluation and implementation of online learning, which was 0.467 with a significant correlation category. The variable of organizing and implementing online learning was also gained to have a positive relationship (0.486) with a quite significant category. Meanwhile, the planning variable was obtained to have a negative relationship with the implementation of online learning (-0.007) with a very low correlation category. The organizing variable was procured a positive relationship with monitoring-evaluation variable (0.515) with a moderate correlation category, while the planning construct has a positive relationship with the monitoring-evaluation construct (0.312) with a weak correlation category. Finally, a positive relationship was found between the construct of planning (0.745) and organizing with a strong correlation category.

Table 12. The correlation coefficient of principal management on online learning presented during the COVID-19 pandemic

Variable	Implementation	Monitoring and Evaluation	Organizing	Planning
Implementation	-	-	-	-
Monitoring and Evaluation	0.467	-	-	-
Organizing	0.486	0.515	-	-
Planning	-0.007	0.312	0.745	-

Mediation analysis for the learning management construct. The result of path analysis to see the impact of organizing and monitoring-evaluation variables as mediators in the implementation of principal management in online learning is shown in Table 13. As mentioned in Table 13, the variables of organizing and monitoring-evaluation were significant mediators for the implementation of principal management in online learning ($p < 0.05$). This shows that the constructs of organizing and monitoring-evaluation were effectively contributed as mediators in the principals' learning management in the era of COVID-19 pandemic.

Table 13. Path analysis of organizing and monitoring-evaluation variables as mediators applied to the principal management in the era of COVID-19 pandemic

Mediated Pathway	Path coefficient ß	t-test	Sig. (p values)
Planning → Organizing → Implementation	0.361	7.560	0.000
Planning → Organizing →Monitoring and Evaluation	0.384	5.730	0.000
Planning→ Organizing→Monitoring and Evaluation→Implementation	0.179	5.461	0.000
Organizing→Monitoring and Evaluation→ Implementation	0.240	4.677	0.000
Planning→ Monitoring and Evaluation→ Implementation	0.145	2.878	0.004

The result of PLS analysis used to estimate principal management on online learning is illustrated in Figure 2. The organizing construct was influenced by the planning variable of 55.5% and other constructs have not been studied in this research giving an effect of 44.5%. The monitoring-evaluation construct was affected by the planning and organizing variable about 60.2% and other variables have not been investigated contributing an effect of 39.8%. Finally, the implementing variable was influenced by the construct of planning, organizing, and monitoring-evaluation of 78.2% and other constructs have not been tested in this study giving an effect of 21.8%.
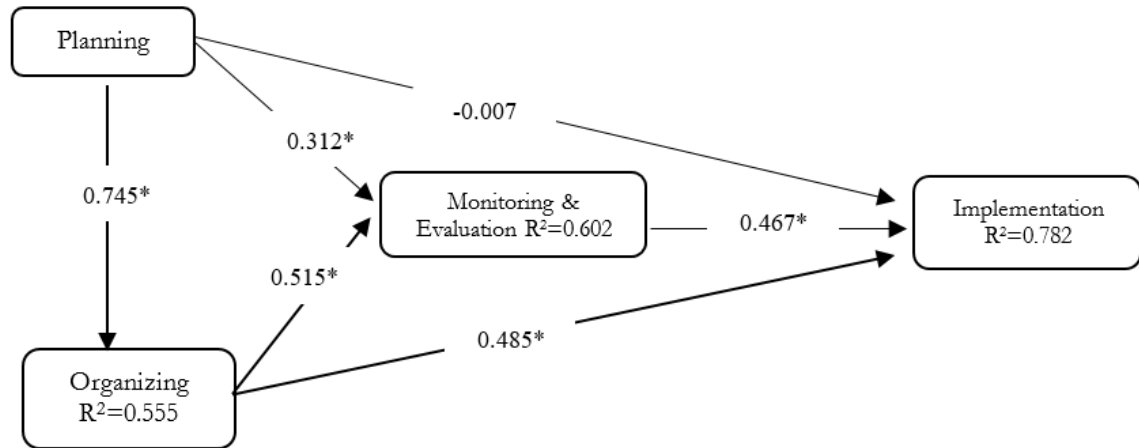
Figure 2. Estimation of principal management on online learning analyzed using SmartPLS (Note: *p≤0.001)

Principals' perspectives. In general, the principal's perspective on online learning management was summarized as follows:

(1) Online learning is not effective because there are so many problems found: unavailability of computers; unstable internet network; limited knowledge of human resources, limited funds, even in some areas the electricity often goes out.

(2) Limited supporting devices cause many problems for teachers and students. The teachers cannot deliver the materials well and the students faced difficulties to understand the lesson.

(3) Communication errors sometimes appear because there is no direct face-to-face interaction that can lead to misunderstanding and confusion.

(4) Online learning is less effective for junior high school students because basically, they have not been able to organize themselves yet.

(5) Many of the teachers have not been able to design, implement, and assess students' learning outcomes of online learning activities. Teachers were not used to carrying out online learning activities before the COVID-19 occurrence.

(6) Online learning activities can provide solutions for teachers and students during the COVID-19 pandemic so that the learning process can continue. For simple online learning, the teachers prepare teaching materials and practice questions, then send them via computer or smartphone to students or parents.

(7) The implementation of online learning activities is good and needs to be accustomed to as long as it is supported by the availability of adequate facilities and funds.

(8) Online learning is both a challenge and an opportunity for teachers. It is a challenge because the teachers can continue to be creative and innovate with the learning methods they are going to implement. It is an opportunity because at the same time the teachers have the opportunity to improve individual abilities in using technology.

(9) Online learning activities are very useful both during the pandemic and after the pandemic because teachers, students, and parents, consciously or not, are learning to solve various problems they are facing.

(10) Online learning activities are good because they can be done anytime and anywhere without being limited by distance and time.

(11) Online learning activities can improve students' abilities in the field of technology and at the same time increase their creativity in learning.

(12) Online learning activities during the COVID-19 must be carried out seriously, well planned, well-coordinated, and regularly evaluated for weaknesses so that teachers can provide good educational services.

(13) Online learning activities motivate teachers to be more creative in designing various teaching techniques.

(14) Involvement and support from parents are really important for the success of students in participating in online learning activities.

Principals' expectation. The principals' expectations for online learning management during the COVID-19 pandemic are formulated as follows:

(1) Government support for facilities and infrastructure is urgently needed for the implementation of good online learning activities.

(2) If COVID-19 has passed, the government needs to hold training for teachers to improve their insight and knowledge in designing, implementing, and assessing learning outcomes of online learning activities.

(3) All teachers should have the same view about online learning activities. Further, they must be optimistic and full of enthusiasm in carrying out the learning process and at the same time should be able to foster students' enthusiasm for learning.

(4) Either through government support or not, teachers are expected to be able to increase their competence related to the use of technology, both as a learning resource and as instructional media.

(5) Support and care from parents are really important, both in assisting their children in learning and in providing learning facilities.

(6) Online learning activities should only be used as an additional reference for teaching techniques. Face-to-face learning activities remain the main technique in the future.

(7) Online learning activities can continue to be carried out even though COVID-19 has passed because this activity can motivate teachers and students to continue to innovate.

(8) Online learning activity is not only carried out during the COVID-19 pandemic, but it also can be carried out during normal situations later on when the teachers and students cannot see each other due to certain obstacles. Thus, learning activities can be carried out in any condition.

(9) The government has to publish a special curriculum that can be used during the COVID-19 pandemic.

DISCUSSION

This study aimed to explore the management activities carried out by the principals of junior high schools in Indonesia during the COVID-19 outbreak, and their perspectives and expectations towards current online learning system. The findings of this study show that principals have carried out learning management well. However, the relationships between each stage of the management process were mixed, as not all hypotheses proposed in this study were supported.

Educationalists believe that the use of technology such as computers and the internet has provided many conveniences in carrying out activities in the field of education. These conveniences can be felt by teachers in carrying out teaching activities, by students in learning, and by principals and other education staff in carrying out school administration activities. Therefore, the use of computers and the internet provide a significant contribution to teaching, learning, and administration activities in

schools (Shah, 2013). The importance of having the ability and insight in using technology is very much aware of by all school members this year. The COVID-19 pandemic has caused all teaching and learning activities to be carried out online from home. This sudden and unexpected event is a difficult problem for all parties. As a manager at the school, the principals have to do something so that online teaching and learning activities can run well. Rupp (2016) states that implementing and maintaining the success of technology-based learning, such as online learning, is a complex process that requires leaders who have a broad spectrum of knowledge and skills. The leader must be able to act as a catalyst in which, without the leader, positive results and the full potential capacity that exists in school cannot be achieved (Leithwood et al., 2008).

Although the implementation of online learning in Indonesia happened suddenly and unexpectedly, the implementation has become commonplace in other countries. Gilbert (2015) says that the expansion of online learning takes place in elementary schools, middle schools, and even higher education continues to develop rapidly without any signs of slowing down. One of the reasons there is so much discussion around online learning is that there are many benefits and uses of online learning. Some of the most important are: their effectiveness in educating students, their use for professional development, and cost efficiency (Lorenzetti, 2013). Online learning management done by the principals of junior high school can be seen from four aspects: *Planning, Organizing, Implementing, Controlling, and Evaluation.* The finding of this research shows that online learning management activities done by the principals in each aspect can be categorized as good. It can be seen from the responses they gave toward the given questionnaire. More information about online learning management in each aspect can be seen in Figure 3.
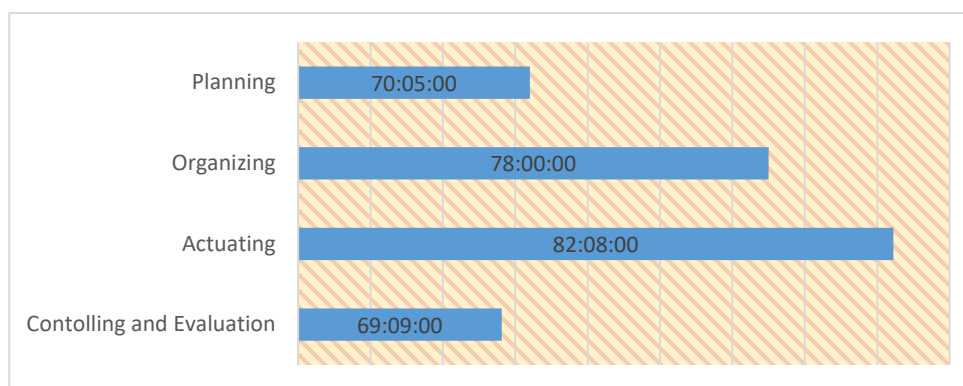

Figure 3. Percentage of management activities in each aspect

In the *Planning* aspect, the results of the data analysis show that the online learning management activities conducted by the principals of public junior high schools in Indonesia can be categorized into good level (70.50%). The percentage of 'often' and 'very often' answers were given to most of the statements. For example, most school principals have determined procedures for implementing activities properly, by first identifying the availability of supporting facilities and determining learning resources before online learning activities are carried out. The components that still need to be improved in these aspects are that the principal must review the policies used as the basis for activities before online learning activities are carried out. Rupp (2016) stated that one of the biggest challenges faced by school principals is trying to redefine existing rules and assessing school needs as designing the programs properly.

Many researchers have put emphasis on the importance of *Planning* in educational management, as it is believed the threshold for the other three stages; namely, *Organization, Implementation,* and *Monitoring-Evaluation* (Cleland & Gareis, 2006; Lamond, 2004). This is in line with some of the findings in this study, which suggest that *Planning* had a significant influence towards *Organizing* (H1c) and *Monitoring-Evaluation* (H1b). However, the relationship between *Planning* and *Implementation* was not supported (H1a). One of the reasons behind this might be that the school leaders in Indonesia receive lack of

assistance in translating the standards set in the national education policies, which make them difficult to align the plan with the implementation process (Muhdi, 2019).

The online learning management activities by principals of public junior high schools in Indonesia in the *Organizing* aspect is already in a good category (78%). Most of the school principals have done activities needed for the implementation of online learning such as constructed a committee, divided tasks, and outlined the responsibilities of teachers and staff based on their respective functions and authorities. However, what still needs to be improved is that the principal should be able to become an effective model for teachers in carrying out online learning activities. Then, the principals should also provide regulation as guidance to achieve predetermined objectives. To be an effective model, the principal needs to direct the teachers and staff through good communication. According to Gilbert (2015), communication is one of the most important elements in the implementation of effective online learning. Also, Fullan (2001) argues that a leader must have explicit goals and be able to use strategies that can mobilize many people to overcome difficult problems.

Regarding the relationships of *Organizing* towards other factors of learning management, the findings showed that it had a significant influence towards *Monitoring* (H2a) and *Implementation* (H2b). These findings speak to previous studies which suggest that the way classroom is organized would impact the success of the learning process and its outcome (Cleland & Gareis, 2006; Martin & Escabias, 2006).

Online learning management activities by the principal in the *Actuating* aspect received the best response. The frequency of the principals who responded "Often" and "Very often" to the given questionnaire was at an average of 82.80%. The school principals have arranged the implementation of learning activities and fostered cooperation to mobilize existing human resources. The principals also provide motivation and collaborate with teachers and other staff in carrying out learning activities. Collaboration carried out by school principals may give a positive impact. Ketterlin-Geller et al. (2015) emphasize that the principal is responsible for being able to create a culture of collaboration in the school which will ultimately affect student academic achievement. Collaboration itself can be defined as individuals who deliberately come together to share responsibility and authority for decisions. Bredeson (2000) says that principals collaborate with teachers to design, convey plans, and align professional needs with school goals and student needs.

The teachers are the main implementers of online learning activities, but what they do cannot be separated from the direction given by the principals. Together the principals and teachers must maintain the quality of online learning. Learning approaches and methods must be modified and adopted (El-Seoud et al., 2014). Modification and adoption are necessary because the implementation of online learning is somewhat different from the implementation of face-to-face learning. In other words, teachers need to rearrange the method of delivery of the subject matter they care for, which of course requires attention and hard work so that the teaching material to be delivered is following the requirements for implementing online learning. In online learning, the instructions given to students must be detailed and clear to anticipate potential misunderstandings. This activity takes a lot of time and increases the workload. Of course, the direction and guidance of the principal are needed.

In online learning management activities, *Monitoring and Evaluation* activities are also needed. The percentage score of principals in this aspect was only 69.90%. This is due to the significant number of 'sometimes' responses given by the principal to the components of management activities carried out in this aspect. For example, in the aspect of monitoring, around 20-30% of school principals mentioned that they only monitor the process of learning activities conducted by the teachers sometimes. Sometimes they do not know if there are procedural errors in online learning activities and they sometimes do not know if the plans that have been prepared are adhering to the implementation of learning activities. Further, there are 28.50-33.80% of principals who only 'sometimes' evaluate the implementation of learning activities, the results and benefits that have been achieved in learning activities, and the limitations and constraints faced by the teachers. According to Sahlberg (2013), the

qualities of effective leadership include having goals, promoting teamwork and collegiality, monitoring activities, and providing frequent feedback.

Despite the high percentage in the 'sometimes' category, *Monitoring and Evaluation* showed a significant influence towards *Implementation,* which supported the hypothesis proposed in this study (H3). However, it should not be forgotten that the implementation process in Indonesia still needs to be improved (Muhdi, 2019), as implementing new policies or programs such as online learning requires leaders who have an understanding of complex change processes. Principals must be prepared to guide teachers through a difficult reciprocal adaptation process and to provide ongoing support (Fowler, 2013). Research conducted by Garrison and Vaughan (2013) has proven that the transformational adoption of the blended learning approach requires a clear school work plan, strong leadership, and continuous commitment. The key to institutional leadership is collaboration and sustainable distribution.

Regarding the principals' perspectives and expectations, this research found their perspectives on online learning activities are quite varied. Some school principals view the online learning activities as less effective, while others think that they provide great benefits. According to the principals, the main cause of the ineffectiveness of online learning activities is due to limited supporting devices such as computers, the internet, and the availability of electricity in schools. This is in line with Ekwonwune et al.'s (2019) opinion that among the obstacles in implementing e-learning in developing countries are connectivity and equipment.

Another cause of the ineffectiveness of online learning activities, according to the principals' perspectives, is insufficient knowledge and ability of teachers and staff to carry out online learning activities. Research conducted by El-Seoud et al. (2014) has proven that the success of online learning depends on the effectiveness of delivery and adequate teacher ability to apply e-learning. Teachers who are not adequately trained can become a hindrance in the learning process and can cause problems both in application use and student perceptions. On the other hand, many school principals also have the perspective that online learning activities are both a challenge and an opportunity as well as a solution for teachers and students so that the learning process can continue. This is a challenge because teachers can continue to be creative, innovative, and increase creativity in applying new learning methods. It is also an opportunity as it allows teachers to improve their abilities in utilizing technology in learning activities. The principals expect that teachers should have the same view of online learning activities: they must be optimistic, full of enthusiasm and, at the same time, able to foster students' enthusiasm for learning. The role of a teacher in online learning is as a facilitator, technology expert, designer, administrator, advisor, assessor, and researcher (Goodyear et al., 2001).

When it is observed in detail, it appears that the ineffectiveness of online learning activities is mainly caused by limited supporting facilities. That is why the principals hope that the government will equip the schools with good and sufficient supporting facilities for online learning activities. This way, the obstacles that occur can be minimized. This is important because there is an expectation that online learning will be able to provide a world-class education to anyone, anywhere and anytime, as long as they have internet access (Nguyen, 2015). Nguyen further finds that online learning is just as effective, if not better than traditional or face-to-face learning. Therefore, whether through government support or not, teachers must continue to strive to improve competence and insight into the use of technology as a media and learning resources so that the implementation of teaching and learning activities becomes easier and memorable for students. Through the direction and support of the principals, the ability of teachers will be improved. Teachers need school principals' management support and sufficient time to implement a change (El-Seoud et al., 2014). Success in implementing online learning depends on the principal in preparing competent teachers and providing adequate funds.

It is not only teachers who get benefits from online learning activities that occur suddenly in Indonesia, but also students and parents. Whether it is realized or not, teachers, students, and parents all

learn about the benefits and use of technology in education. They learn how to solve various problems they encounter so that learning activities can take place and learning objectives can be achieved. Therefore, the principals hope that when the COVID-19 pandemic has passed, online learning activities can continue to be carried out, especially in situations in which the teachers face certain obstacles; for example, when teachers are unable to teach due to illness or are absent due to other needs. Thus, learning activities continue in any condition.

Another perception of the principals is that online learning activities are good, useful, and can provide motivation for teachers and students. The use of interactive e-learning features increases students' motivation in the learning process (El-Seoud et al., 2014). Online learning provides more student-centered and individualized learning so that it is enabling students to take responsibility for their learning (Christensen et al., 2008). Self-regulation and motivation have been identified as two important factors for determining success in online learning activities (Matuga, 2009). Online learning has also proven to be conducive for students who like independent learning (You & Kang, 2014).

The involvement, support, and care of parents for the implementation of online learning activities are other hopes of the principals; for example, in providing students' learning facilities such as computers/laptops/tablets/smartphones and internet packages, as well as assisting students in learning. The principals' expectations are in line with the opinion of Brown et al. (2020) who mention that the roles of parents during the COVID-19 pandemic are to provide computer equipment, information sources, and needed stationery for their children. Equally important, parents should also provide a room for the children so that they can learn and do the tasks independently. It is even better if parents ask their children to demonstrate briefly regarding the topic they learn and, more preferably, provide feedback.

CONCLUSIONS

This study aimed to explore the online learning management activities conducted by principals of junior high schools in Indonesia during the COVID-19 pandemic, as well as to discuss their perspective and expectations towards the online learning activities. Based on the data analysis, it can be concluded that online learning management activities by the principals of public junior high school in Indonesia in four aspects has been carried out well, especially in the *Actuating* aspect. However, the aspects of *Planning*, *Monitoring*, and *Evaluation* still need to be improved. The principals generally see online learning as an effective alternative to face-to face learning during the pandemic. The challenges they see are due to limited supporting facilities, such as: (1) internet network that is often unstable, (2) electricity that occasionally goes out, (3) insufficient technological equipment and applications, and (4) teachers' insights and abilities in designing, implementing and assessing the implementation of online learning activities that still need to be improved. Therefore, the principals expect the government to complete online learning supporting facilities as well as to facilitate teachers to increase insight and abilities in terms of technology use.

Despite the limited sample size, the results of this study may contribute to the existing theory and practice related to the implementation of online learning in Indonesia. The findings of this research could be a guide for principals to manage online learning in the future. Nevertheless, further research is required to focus on how the application of online learning can improve students' achievement through good management and collaboration with teachers, other administration staff at schools, and parents in Indonesian context.

The online learning management activities need to be taken seriously by the principals as a manifestation of their function in carrying out their duties as a manager at their school. However, during the COVID-19 pandemic outbreak, the continuity of good learning activities is not only the responsibility of the principals. Principals, teachers, parents, education practitioners, government, and all related parties must take a part in overcoming various problems that arise. In any situation, learning activities

must take place without burdening students with various obstacles. For this reason, some suggestions can be given as follows:

(1) If it is viewed from the aspects of online learning management activities, several important activities need to be done by the school principals, such as the principal must review the policies that are used as the basis of activities. This is important so that principals can make policies in their school, especially in determining the platforms and devices to be used. Further, the principals must frequently monitor the implementation of online learning activities carried out by the teachers to ensure that the activities run smoothly.

(2) Teachers as the main facilitators in implementing online learning activities must continue to improve their abilities in designing, implementing, and providing assessments of online learning activities, both with and without financial support from schools or the government. Teachers must be more creative in finding and using learning links available on internet resources.

(3) In addition to accompanying children to study at home, it is highly recommended for parents to be able to provide various facilities for online learning such as a laptop, smartphone, internet connection, stationery, and room for studying.

(4) The government has indeed provided various facilities and conveniences to principals and teachers. For example, the principals have been given concessions to allocate a portion of School Operational Assistance Funds for the sake of overcoming learning problems during the COVID-19 pandemic. The government has also provided various distance learning applications such as *Rumah Belajar, Belajar Online, Kelas Pintar,* and *Sekolahmu*. However, the information about these is not widely known by the teachers. Socialization about these by the government and related parties is needed.

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APPENDIX: RESEARCH INSTRUMENT

Part A: Demographic Information

1. Full name (if you don't mind) : _____

2. Experience being a school principal :
        a. Less than 5 years
        b. 5–10 years
        c. 11–15 years

3. Education background:
        a. Undergraduate degree
        b. Postgraduate

4. Availability of computers and internet access at school:
        a. poor
        b. moderate
        c. good
        d. very good

5. The level of mastery of your computer usage ...
        a. User
        b. Programmer

Part B: Online Learning Management

Please tick (√) the extent to which you feel that best fits for the following statements:
      N = Never   S = Seldom   SM = Sometimes
      O = Often   VO = Very Often

No	Statements	Response				
		N	S	SM	O	VO
	Planning Activities					
	Before online learning activities were carried out, I ….					
1	reviewed policies that are used as the basis for activities.					
2	designed goals of activities to be achieved.					
3	designed forms and types of activities to be carried out.					
4	did not identify the person in charge of carrying out activities and their responsibilities.					

No	Statements	Response				
		N	S	SM	O	VO
5	identified the availability of supporting facilities.					
6	did not specify the budget required.					
7	identified availability of funds.					
8	did not specify the type of ICT platform and equipment to be used.					
9	determined the required learning resources.					
10	did not specify the schedule of activities.					
11	did not determine the effective ways to achieve the learning objectives.					
12	determined the procedure used to implement the activities.					
	Organizing Activities					
In organizing online learning activities, I ….						
13	formed an organizational structure to carry out the activities.					
14	divided tasks for teachers and staff on duty.					
15	determined the work to be carried out by teachers and staff according to the organizational structure.					
16	outlined the responsibilities of teachers and staff according to their functions and authorities.					
17	did not regulate the techniques of working to achieve goals that have been set.					
18	set up work procedures to achieve goals that have been set.					
19	did not arrange good coordination according to the established mechanism among personnel involved.					
20	arranged the completeness of the necessary facilities and equipment.					
21	did not make a schedule of learning activities.					
22	provided directions to all teachers and staff regarding the activities that would be carried out.					
23	provided standard operational that should be followed.					
24	provided guidance on the implementation of activities.					
25	did not make guidelines for the implementation of online learning activities done by the teachers.					
26	became an effective model for teachers					
27	made corrective if there is an error made by the teachers in designing online learning activities.					

No	Statements	Response				
		N	S	SM	O	VO
28	did not play active roles in guiding to develop the abilities of teachers and staff					
	Implementing Activities					
	During the implementation of online learning activities, I communicated with teachers and staff to ….					
29	improve a cooperative relationship.					
30	find out and measured the goals that had been achieved.					
31	compare the carried out activities with the existing standards of online learning activities					
32	find out if there was an error occurred in implementing the online learning activities.					
33	coordinate the implementation of online learning activities					
34	organize the process of learning activities.					
35	Foster cooperation to mobilize teachers and staff in the implementation of online learning activities.					
35	give motivation.					
37	check and organize the process of online learning activities					
	Controlling and Evaluation Activities					
38	I monitored the implementation of online learning activities to prevent procedural errors and provide corrective actions if any.					
39	I monitored the implementation of online learning activities to ensure the suitability between the plans that have been set and the implementation of online learning activities.					
40	I monitored the implementation of online learning activities to make sure that online learning activities run smoothly.					
41	I make a systematic assessment of the implementation of online learning activities in every aspect.					
42	I make a systematic assessment of the results and benefits that had been achieved.					
43	I make a systematic assessment of limitations and problems faced by teachers.					
44	I make a systematic assessment of I did not find solutions to the problems faced by teachers and staff.					
45	I did not give appreciation to teachers and staff who have successfully carried out activities well.					

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