

## Implementation of Training Management and Adaptation of Karate Exercise during the COVID-19 Pandemic



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**ABSTRACT:** This study aims to find out (1) How to training management is performed by karate trainers during the pandemic. (2) How was the degree of adaptability of karate trainers during the pandemic. (3) There is any connection between adaptability and karate training management during the Covid-19 pandemic. (4) What obstacles did the trainer face in the exercise during the pandemic.

This type of research is quantitative descriptive research with a survey method. Research sites in Dojo/Clubs/Forki across Indonesia. The timing of this study was carried out from late February 2021 to March 2022. The population of this study is all karate martial sports trainers who belong to FORKI spread throughout Indonesia. Sample research incidental sampling was taken, and 108 respondents were obtained. Data collection techniques used questionnaires in the form of Google Forms. Validity of the instrument is performed through expert judgment, and reliability using Alpha Cronbach's. Data analysis is performed descriptively quantitatively, using SPSS.

Research results show (1) Karate training management in the Covid-19 pandemic was in the "quite high" category (75.93%), with the highest average aspect in the planning aspect and the lowest in the actuating aspect, as well as the implementation of health protocols at the time of exercise in the Covid-19 pandemic, being high. (2) Adaptability of karate trainers in times of the Covid-19 pandemic was in the "adequate" category (74.07%), with the highest adaptation to the learning innovation skills aspect, and the implementation of karate exercises during the Covid-19 pandemic period in both online and offline ways. (3) There is a relationship between adaptability and karate training management during the Covid-19 pandemic. (4) Obstacles encountered on the problem of signals and quota availability, the lack of satisfaction of trainers in the exercise implementation, and the technical aspects of training movements that are very difficult to carry out online.

**KEYWORDS:** Trainer, Exercise, Karate, Pandemic, Covid-19, Training Management, Adaptability

### INTRODUCTION

The COVID-19 pandemic calls for changes in both exercise and learning patterns in the field of sports (Garcia-Garcia et al., 2020). In Indonesia, the implementation of the 2020 PON has also been postponed to 2021. This postponement certainly impacts all athletes and sportsmen, given that the periodic implementation of events has an important role in the lives of athletes (Grix et al., 2021); (Oblinger-Peters & Krenn, 2020); (Stambulova et al., 2022). Cancellation and postponement of sports events can have an impact on athletes including on their mental health of athletes (Şenışık et al., 2021); (Terry et al., 2020). A trainer as one of the management players in sports is required to be able to solve problems in carrying out training, therefore the imagination and creativity of a trainer must continue to develop and improve in the exercise. The trainer is the spearhead in carrying out the training of the younger generation (Susilawati, 2020). In this 21st century, the world is undergoing very rapid change. These changes cover all walks of life, i.e. areas of economics, transportation, technology, communications, information, etc. Such changes are attributed to the presence of pandemic COVID-19. This results in trainers having to have high adaptability and faster. The competition is intensifying, so even training children need new demand. Therefore, trainers are required to have new ways that are more creative and meaningful in training to impact trainees both physically and mentally positively. The trainer is required to be courageous to make decisions, and courageous to communicate all the problems faced, both to his trainees and to parents. Creative thinking about how exercises should be implemented in order to keep safety awake. That decision-making has an impact on how and methods are carried out if the trainer chooses to carry out the exercise in times of the Covid-19 pandemic. In deciding matters the trainer is required to manage the exercise based on skills and ability to obtain an outcome in order to achieve the goal

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through the activities. The adaptability and managerial ability of a trainer are two interesting factors to examine, so through this study, it is desirable to reveal how the adaptability of trainers and exercise management was implemented during the pandemic period of COVID-19. This variable disclosure is essential to study to ensure certainty that sports training, which is the spearhead of quality training of superior human resources, remains enforceable, under any circumstances and conditions. This study aims to find out how to exercise the management and adaptability of the trainer in the pandemic COVID-19 period.

### METHODOLOGY

This type of study is quantitative, judging by its method including survey research, judging by its level of exposure including descriptive research. This study was conducted at Dojo/Club/Forki throughout Indonesia, which carried out karate exercises during pandemic times. The research time was conducted from late February 2021 to early March 2022. The research population is all karate martial sports trainers who belong to FORKI, the membership of FORKI consists of 28 karate colleges spread across districts/cities in Indonesia. Samples were taken based on region samples.

Random sampling technique, with incidental sampling technique of 108 respondents. Data collection techniques are used in the form of questionnaires. The use of questionnaires is a technique that is a staple for the data collection of this study to find out how the management performed by karate trainers during the period of COVID-19 was implemented. The use of questionnaires in the current google form is becoming very effective today. Instruments for implementing health protocols using the Guttman scale. Alternative answers are arranged in the form of a Guttman scale that is: (a) yes and (b) no. Categories for positive statements are Yes = 1 and No = 0, while categories for negative statements are Yes = 0 and No = 1.

Training management instruments were developed based on indicators of planning, actuating, leading, and controlling (Mujahidin et al., 2021) using the Likert scale. Alternative answers are arranged in the form of a Likert scale which is: very often, often, sometimes, never. The Likert scale score was the highest score of "four" and the lowest score of "one."

The questionnaire was composed based on a grid of research Instruments, which aims to facilitate the preparation of research instruments. On the instrument grid, the points of essential indicators to be used as the basis for preparing the research questionnaire are outlined. The following is a questionnaire grid used in networking data on how to exercise management was conducted by karate trainers during the pandemic period of COVID-19. The research instrument for measuring training management consisted of 26 statements, each of which statement items consisted of positive statements and negative statements as well as 12 Statements related to the implementation of health protocols in exercises that have been compiled based on existing requirements. Each statement submitted corresponds to a theoretical study that has examined various sources. For more details, see the following table:

**Table No. 1: Management Instrument Grid**

Variable	Indicator	Sub Indicator	Item	
			Favourable	Unfavourable
Training Management	Planing	Develop a training program	1, 4	2, 3
		Set a final goal of the exercise	6, 7	5
	Actuating	Method	9, 10	8
		Tools / Resource	11	12
		Strategy	13	14
	Leading	Giving directions	15	16
		Motivating	17	18
		Managing conflict	20	19
	Controlling	Assess the success	21	22
		Making correction	23	24
		Develop goals	25	26
	<b>Total</b>			<b>26</b>

Furthermore, in supporting training management during of COVID-19 the need for the Health Protocol to be structured based on the requirements set out, it is then structured into an instrument in the form of a questionnaire which is:

**Table No. 2: Grid Implementation of Health Protocol RequirementsIn Exercise Implementation**

No	Indicator	No Item
1.	Coordinate with the task force	1
2.	Limitations on the number of participants	2

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3.	Carried out outdoors	3
4.	Divide exercise into several exercise sessions	4
5.	Body temperature check	5
6.	Sterilization of the training ground	6
7.	Facilitate hand washing	7
8.	Sport equipment sterility	8
9.	Hand hygiene	9

Adaptability Instrument grids are structured based on operational definitions, especially the ability of trainers to adapt to the demands of the times plus the presence of the Covid-19 pandemic.

**Table No. 3: Trainer Adaptability Instrument Grid**

Variable	Indicator	Sub Indicator	No Item
Adaptability	Learning and innovation skills	Learning ability	1, 2
		Ability to innovate	3, 4
	Digital literacy skills	Ability to use information literacy	5, 6
		Ability to use media literacy	7, 8
		Ability to use technology	9
	Career and life skills	Ability to behave flexibly	10, 11
		Initiative ability	12, 13
		Responsible ability	14, 15
	<b>Total</b>		

Once the data is collected, then it is analyzed using SPSS 2020; before hypothesis testing is performed, it is necessary to perform a prerequisite test. The validity test of this study used a construct validity test using expert opinions (judgment experts). Instruments that have been reconstructed by grounded theories are subsequently validated by experts. The results of such validation are instruments ready for use in collecting research data. The results of the validation test conducted using the opinions of experts, in this case, were three people of the Faculty of Sports Science lecturer in sports management, sports evaluation, and senior trainers in karate. In addition, content validity testing was conducted on 30 respondents and further processed using the SPSS 23 program. The instrument reliability test uses the formula "Alpha Cronbach's," which states that Cronbach's Alpha 0 0.70, then it can be said that the instruments of all research variables have high reliability. Data analysis techniques are a way used to process data in order to produce an appropriate conclusion. There are 2 (two) analytical techniques to be used in this study, namely descriptive analysis, and Chi-square Test analysis.

### RESULT AND DISCUSSION

Based on the exercise management variable there are 26 statement items that are then tested for their validity. There is one invalid item, i.e. item number 4 (count  $r > r$  table). Furthermore, the invalid item is not used in data collection, with the reason already represented in the other item, so the number of items is reduced by one to 25 items. Furthermore, in the health protocol items supporting exercise management in the Covid-19 pandemic period, there were 12 statement items that were tested for their validity, from the overall question of implementation variables of health protocol requirements in exercise implementation all validly proven with (count  $< r$  table). Based on the adaptability variable there were 15 statement items that were then tested for their validity. Of all the questions, the adaptability variable was all valid (calculate  $r > r$  table).

**Table No. 4: Reliability Test**

No	Variable	Cronbach's Alpha	Description
1.	Training Management	0,947	Reliabel
2.	Adaptability	0,928	Reliabel

Based on the reliability test results in Table 4, training management and adaptability show that Cronbach's Alpha 0 value is 0.70. It can be said that the instruments of all research variables have high reliability.

Results of a study of karate trainer exercise management in the Covid-19 pandemic period in table 5:

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Table No. 5: Practice Management Assessment Norms

No	Interval	Category	Frequency	Percentage
1	81 <	High	26	24,07%
2	44 - 81	Adequate	82	75,93%
3	≤ 44	Low	0	0,00%
<b>Total</b>			<b>108</b>	<b>100%</b>

Based on table 21 above shows that the training management of karate trainers during the Covid-19 pandemic was in the "low" category of 0.00% (0 traineres), "adequate" of 75.93% (82 traineres), and "high" of 24.07% (6 traineres). Thus the categorization of the scores of research results based on the above data and the mean gain of 76.76 exercise management were categorized sufficiently. Next karate trainer exercise management in the Covid-19 pandemic was analyzed according to the items presented in Table 6:

Table No 6: Average Score of Training Management Items

No	Statement	Mean	Category
1	Monitor and plan daily programs	3,65	High
2	Prepare and plan weekly program	3,65	High
3	Prepare and plan monthly program	3,63	High
4	Incorporate material on history, philosophy and karate tradition	3,27	High
5	Setting goals is carried out in discussions with the trainees	2,83	Adequate
6	Planning an exercise program in the form of technical, physical, tactical, and mental exercises	3,12	High
7	Provide practice materials with instructions only	2,34	Adequate
8	Demonstrating the movement and making sure the child is trained to pay attention to the movement	2,88	Adequate
9	Prepare and plan monthly programs	2,51	Adequate
10	Have a team / accompanied by other trainers in the implementation of training	3,06	High
11	Ensure the availability of training facilities such as mattresses, bags, and others	3,21	High
12	Explain the type and material of the exercise first to the trainee	2,28	Adequate
13	Give the task of what movements the child must repeat at home	3,00	Adequate
14	Give a warning if the child trains to make a mistake in the exercise	3,18	High
15	Give a warning if my training child cheats in practice.	2,72	Adequate
16	Motivate the trainees to keep the spirit in practicing	3,08	High
17	Give praise when there are children who train to achieve success.	2,65	Adequate
18	Provide training materials that are adapted to the conditions during the level increase exam/ karate competition.	3,36	High
19	Open communication openly to reduce awkwardness with the trainee	3,34	High
20	Record the results of the exercise, including the strengths and weaknesses of the trainees	3,45	High
21	Delivering written evaluations to trainees	3,48	High
22	Have a discussion with the trainees after finishing the exercise.	3,06	High
23	Give feedback to the trainees to improve better results.	3,05	High
24	Helping the trainees practice to analyze their shortcomings.	3,14	High
25	Use the evaluation results to develop further programs.	2,81	Adequate

Based on item analysis it can be found that the management ability of the respondents on each item shows as many as 9 items (36%) showed sufficient categories and 16 items (64%) of those items in high categories. The highest consecutive items on compiling and planning daily programs (3.65), compiling and planning weekly programs (3.65), and compiling and planning monthly programs (3.65). All three items are in the Planning indicator. Whereas low-level items exist in explaining the type and material of exercise first to the exercising child (2.12) Provide exercise material only with instructions, (2.51) Explain the type and

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material of exercise first to the exercising child (2.28). The thing with the most item scores is the actuating indicator. This shows that even though the trainer has designed the training program well, there are many difficulties in implementing the implementation aspect because karate actually leads to more motion training, but the instructions and reproofs carried out through online program training are still difficult to implement. Furthermore based on the clustering of the management functions, then the data are presented in Table 7.

**Table No. 7: Management Function Implementation Score in Karate Exercise**

No	Management Function	Score	Average	Category	Rank
1	Planning	2176	3,36	High	I
2	Actuating	2083	2,76	Adequate	IV
3	Leading	1980	3,06	High	III
4	Controlling	2051	3,17	High	II
<b>Average</b>			<b>3,09</b>		

Based on the grouping in table 7, it appears that the implementation of management in karate exercise was highest on the aspect of planning with rata 3.36. The controlling aspect has the second-highest with an average of 3.17 Aspect leading in the third order with 3.06 rata. Whereas in the actuating aspect it is in the fourth order with an average of 2.76. Planning gained high categories because trainers were able to plan daily, weekly and monthly programs. Then on the leading aspect obtain high categories because the trainer seeks to manage the conflicts that occur by adjusting the training materials according to the conditions, as well as opening communication to reduce awkwardness with the training child. The aspect of control is because the trainer always conducts evaluations both directly and in writing to his training child. Whereas in the implementation or actuating aspects, due to the large number of programs that are disrupted due to some limitations that must be carried out.

The results of the research on health protocol requirements in the implementation of exercise training during the Covid-19 pandemic are in table 8 as follows:

**Table No. 8. Norms for Assessment of Implementation of Health Protocol Requirements in the Implementation of Exercise**

No	Interval	Category	Frequency	Percentage
1	9 <	High	62	57,41%
2	3 - 9	Adequate	43	39,81%
3	≤ 3	Low	3	2,78%
<b>Total</b>			<b>108</b>	<b>100%</b>

Based on table 8 above shows that the implementation of health protocol requirements in the implementation of karate exercises during the Covid-19 pandemic was in the "low" category of 2.78% (3 trainers), "adequate" 39.81% (43 trainers), and "high" 57.41% (62 trainers). Based on the mean calculation result of 9.41, it can be inferred that the implementation of health protocols in exercise implementation is in the high category. Usual sustains how the implementation of health protocol requirements in exercise trainers implementation in times of Covid-19 pandemic. The results of an analysis of the implementation of health protocol requirements are presented in Table 9:

**Table No 9: Average of Each Item Implementation of Health Protocol Requirements in the Implementation of Exercise**

No	Statement	Mean	Kategori
1	Coordinate with the Covid-19 task force in the local area in order to practice karate	0,84	High
2	Plan to limit the number of trainees in one session.	0,75	High
3	Carried out outdoor exercise	0,88	High
4	Divide the exercise into several practice sessions if the trainees exceed 50% of the room capacity	0,73	High
5	Check your body temperature before starting the exercise	1,00	High
6	The sterilization of the place and exercise equipment is my concern	1,00	High
7	Ensure the availability of adequate hand washing facilities	0,76	High
8	Clean hands with soap before entering the practice area	0,71	High
9	Bring and use hand sanitizer when in contact with other people	0,70	High
10	Set the training distance between athletes at least 1 meter	0,74	High
11	Provide training by making direct contact with athletes/fellow athletes	0,69	Adequate

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12	Ensure athletes do not take off/lower masks during training	0,60	Adequate
<b>Average</b>		<b>0,78</b>	

The data in table 9 show that the item indicating the highest category at the implementation of the health protocol by looking at the average is checking body temperature before exercise (1.00) and sterilization of exercise places and tools (1.00), while the least is to ensure athletes do not remove or lower masks during exercise, (0.60).

The Results of a karate trainer adaptability study in times of Covid-19 pandemic in table 10:

**Table No. 10: Adaptability Assessment Norms**

No	Interval	Category	Frequency	Percentage
1	$49 < X$	High	28	25,93%
2	$26 < X \leq 49$	Adequate	80	74,07%
3	$X \leq 36$	Rendah	0	0,00%
<b>Total</b>			<b>108</b>	<b>100%</b>

Based on table 10 above shows that the adaptability of karate trainers in the Covid-19 pandemic was in the "low" category of 0.00% (0 traineres), "adequate" of 74.07% (80 traineres), and "very high" 25.93% (28 traineres). Judging from the average value, which is 47.33, the adaptability of the respondents is in the category sufficiently.

**Table No. 11: Average Adaptability of Each Item**

No	Statement	Mean	Kategori
1	Learn how to use new applications that will be used for training activities	3,57	High
2	Learn to understand various government policies regarding the adaptation of new habits	3,44	High
3	Develop training programs during this pandemic	3,48	High
4	Try new ways of training by leveraging video learning resources	3,48	High
5	Using information from the internet to gain knowledge about karate.	3,54	High
6	Informing the exercise schedule through digital media (WA, Instagram, Fb)	3,33	High
7	Using youtube and others media as practice material	2,93	Adequate
8	Looking for sources of material to be used as training media	3,18	High
9	Using various digital features to train children's learning resources	2,65	Adequate
10	Adjusting the training regulations with the new rules set by the government.	2,94	Adequate
11	Make my ideas accepted by others	2,81	Adequate
12	Offers a new training method in the great outdoors	3,13	High
13	Make a video to give an example of the right technique	3,16	High
14	My trainee is my responsibility in developing his ability in the field of karate	2,68	Adequate
15	Paying special attention to slow learners	3,01	High

Based on item analysis it can be found that the adaptability of respondents to each item showed as many as 5 items (33.33%) in the sufficient category and 10 items (66.66%) in the high category. Learned how to use new applications to be used for exercise activities (3.57) and developed exercise programs during pandemic times, (3.48), and tried new ways of training by exploiting video learning resources (3.48). While the items with the lowest adaptation are the use of various digital features for training children's learning resources (2.65) and the sense of responsibility for training in developing their skills in karate (2.68)

**Table No. 12: Adaptability Score**

No	Adaptability	Score	Average	Category	Rank
1	Learning and innovation skills	1510	3,5	High	I
2	Digital literacy skills	1687	3,12	High	II
3	Career and life skills	1915	2,96	Adequate	III
<b>Average</b>			<b>3,16</b>		

The data in table 12 shows out of the 3 (three) adaptability indicators that the highest-scoring trainer has the Learning and innovation skills, (3.5) and continued Digital literacy skills (3.12). This is very reasonable considering that adaptability during this pandemic, should be used as momentum to learn new skills, in addition to opportunities to deal with the digital leaps necessary for future education.

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Analysis techniques were used to test the relationship between adaptability and karate training management using Chi-Square analysis techniques with the help of the SPSS 23.0 computer program. The provisions used are a 0.05 error rate, where the test criterion is, if the probability (Sig) of 0.05, then it is significant. If the probability (Sig) of 0.05, then it is not significant. The complete Chi-Square analysis results are in Table 13.

**Table No. 13: The results of Chi Square Analysis of the relationship between Adaptability and Karate Training Management**

		Exercise Management		Total	value	sig
		Adequate	High			
Adaptability	Adequate	77	3	80	65,269 <sup>a</sup>	0,000
	High	6	22	28		
Total		83	25	108		

After conducting a chi-square test with a significant extent of 5% (0.05), it was obtained that a significance value was 0.000, which means significance was 0 0.05, so it can be concluded that there is a relationship between adaptability ability and karate training management during the Covid-19 pandemic.

**Table No. 14: Difficulties in Online Training**

No	Difficulties Encountered	F	Percentage (%)
1	Unstable internet connection so the practice is not smooth	63	58 %
2	Cannot directly correct the wrong technique and movement	21	19,44%
3	Dissatisfaction with training, lack of emotional involvement, difficulty motivating, feeling ineffective	24	22,22%
<b>Total</b>		<b>108</b>	<b>100 %</b>

An online exercise system (in a network) is an exercise system without face-to-face directly between a trainer and a trainee but is carried out online using the internet network. The implementation of karate exercises, in particular, online exercises in times of the Covid-19 pandemic hit several obstacles. The problem that occurs with quota availability that requires a high cost is reasonably priced to facilitate the need for online practice. Quotas purchased for internet needs are becoming soaring and many parents are not prepared to supplement budgets by providing internet networks. This is also a very important issue for trainers and training children when karate exercise is done. The second difficulty is the lack of satisfaction of trainers in carrying out training online because karate involves a sense, emotion, and even commitment, so obstacles arise from oneself because it feels unable to motivate and bring the child to practice optimally. The third difficulty of training karate is very identical to motion training, so training that is not held offline is clearly the biggest difficulty for trainers to shape the athletes' achievements.

### EXERCISE MANAGEMENT

Based on the results of the study showed that the management of the karate trainer exercise during the Covid-19 pandemic was in the sufficient category. The training management here is based on planning, organizing, leading, and controlling. Linking exercise management during the COVID-19 period requires training planning, training organization, training direction, and controlling exercise results. The main task in the exercise is to explore, compile, and develop the concept of "practicing to train" by combining practical experience and a scientific approach, so that the training process can take place precisely, quickly, effectively, and efficiently (Wati & Sugihartono, 2018).

The implementation of offline exercise is carried out by making many restrictions and adjustments. One is by using the Health protocol. Based on the research results shows that implementation of health protocol requirements in the implementation of karate trainer exercises in times of the Covid-19 pandemic was in the category sufficiently. Covid-19 transmission can occur in contact, droplet, air, fomit, Fecal-Oral, blood, mother-to-child, and human animals ((Bao & Bihn, 2022); (Yadav et al., 2020)).

Regardless of the postponement of major events in the world of sports, the WHO prepares steps or protocols that must be complied with when it is to hold meetings a mass meeting (Ebrahim et al., 2020) identifying step steps to be implemented, especially cancellation or suspension of the event when deemed to make the spread of the disease possible, carry out physical distancing to reduce direct contact. Travel restrictions, including reduction of flights and public transportation as well as route restrictions without reducing essential services, carry out quarantine at home. Of course, this has an impact on the usual sports activities involving many people whether it's a matching activity or training activities in sports clubs.

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The implementation of the health protocol should involve the role of relevant parties, including officials, in conducting order and supervision, as well as paying attention to the crisis point of COVID-19 transmission in terms of "The type and characteristics of activities/activity, the size of activities, the location of activities, the length of activities, the number of people involved, vulnerable groups (mother) pregnant, toddlers, children, the elderly, comorbid people, people with disabilities, etc.) (Hanafi et al., 2021).

Entering the New Normal period, a number of activities can already be carried out with health rules or protocols that must be obeyed by people who carry out activities. The importance of following health protocol rules that must be implemented during the new normal is to reduce the spread of the COVID-19 virus. Always wearing a mask when outside the home, diligently washing your hands, and keeping your distance, is a health protocol that everyone who does outdoor activities must comply with. In new normal times, the government is preserving scenarios for the recovery of economic activities, schools, and other activities.

### **ADAPTABILITY**

Research results show that karate trainers' adaptability during the Covid-19 pandemic was in the sufficient category. Adaptability aims to minimize the risks caused by changes so that established performance can be achieved (Novikov, 2020). Adaptability is a very complex behavior because it involves a number of functions and intellectuals. For example, reasoning, work memory, and learning skills are getting higher (Rifani, 2019).

Adjustments related to increasing competency demands for trainers are currently urgently needed. There are various reasons, including one of the strategic plans outlined by the Ministry of Youth and Sports in 2020-2024 is the increase in the availability of qualified and competency-certified sports personnel to ensure sports achievement at the Olympics and Paralympic sports. Similarly, one of its performance targets is the establishment of a sports training system on a regular basis tiered, and continuous based Olympic and Paralympic sports branches supported the implementation of IPTEK sports, national standards of sports as well as award systems. In addition, the demands of future competencies that cannot be delayed cause trainers to like or dislike having to learn and be willing to improve themselves in the face of various existing changes.

Based on the result of the study, a form of karate exercise conducted during the Covid-19 pandemic, trainers used online media and offline (face-to-face). The online media used are Whatsapp, Telegram, Line, Media Chatting, Zoom Meeting, Google Meet, Meeting app, Google Classroom, Instagram, and Youtube. Offline exercises are also performed if possible with health rules or protocols. Exercise is done by checking body temperature, always wearing a mask or face shield, washing hands before and after exercise or using hand sanitizer, keeping distance or minimizing direct contact, maintaining cleanliness, and reducing exercise duration. These various platforms can be utilized to support knowledge transfer supported by various discussion techniques and others. Online learning is effective in carrying out learning even though educators and training children are in different places (Churiyah et al., 2020). Variations of available platforms and resources help sustain the exercise process during the COVID-19 pandemic. Online training is a new way in the training process that utilizes electronic devices, especially the internet, in delivering training. Online training is completely dependent on internet network access.

### **The Relationship between Adaptability and Karate Training Management**

Based on the results of the study shows that there is a relationship between adaptability and karate training management during the COVID-19 pandemic. The better the adaptability of the trainer, the better the management of karate exercise during the COVID-19 pandemic will be. Adaptability refers to the characteristics of building the environment (Pinder et al., 2017). Adaptive individuals will anticipate problems and develop alternative solutions for various possibilities in assessing and responding to a changing environment (Boylan & Turner, 2017).

Increasing adaptability can lead individuals to sell innovative ideas effectively through self-confidence (Smith & Webster, 2018). In other words, self-perception of adaptability will lead individuals to act in innovative ways, thereby motivating themselves to succeed in justifying the resulting innovations for others. Adaptability will increase exposure to various tasks and experiences with other people around, which will increase the ability of individuals in situations where individuals have to develop new strategies and skills. In other words, adaptability relies on HR practices to achieve a competitive advantage.

### **The Difficulties of Karate Trainers in Exercise during the Covid-19 Pandemic**

The online exercise system (on the network) is a training system without face-to-face directly between trainer and trainees but is carried out online using the internet network. Online training is completely dependent on internet network access. Although online learning is able to provide attractive and effective services, its implementation still has its own challenges ((Hebebcı et al., 2020) (Coman et al., 2020)). The various benefits obtained, of course, have obstacles that are felt by trainers and children who train in online exercise. The obstacles faced are the various regional conditions in Indonesia, causing not all areas to be reached by internet services, and the distribution of internet networks is slow from time to time.



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The implementation of karate exercises, especially online exercises during the COVID-19 pandemic, encountered several obstacles. The problem that occurs is the availability of quotas which require a fairly high price to facilitate the need for online exercise. The quota purchased for internet needs is increasing, and many parents are not ready to increase the budget to provide internet networks. This is also a very important issue for trainers and children when practicing karate.

The research conducted (Sya'diah & Jatmiko, 2021) stated that the purpose of their study was to find out the obstacles experienced by athletes and the solutions provided during the COVID-19 pandemic and to determine the efficiency of the exercise monitoring system during the COVID-19 pandemic. The results of the study found that the obstacles in exercise lie in the facilities and infrastructure, sparring partners, as well as TFH-applied training. Solutions for exercise facilities by finding a large place outside the home and buying some matching equipment, solutions to replace sparring partners, athletes are continuing to train with friends who live in the same area, and supervising athletes' exercise through e-teleconference through the zoom meeting application.

### **CONCLUSION**

Training management conducted by karate trainers during the COVID-19 pandemic was in the sufficient category of 75.93% (82 trainers), and "high" was 24.07% (6 trainers), and the average showed a sufficient category with a score of 76.76. Furthermore, the implementation of the management function was highest on the planning aspect, on a scale of 1 to 4 there was a score of 3.36 and lowest on the actuating aspect with an average score of 2.76. The highest aspect of planning was obtained because trainers were able to plan daily, weekly, and monthly programs. Whereas the implementation or actuating aspect is the lowest, due to the large number of programs being disrupted due to some limitations that must be carried out.

The implementation of health protocol requirements in the implementation of karate trainer exercise during the Covid-19 pandemic was in a high category, with the most frequency of 57.41% (62 trainers), and the average score showed a high category of 9.41. Offline exercise is also carried out by checking body temperature, always wearing a mask or face shield, washing hands before and after training or using hand sanitizers, keeping distance or minimizing direct contact, maintaining cleanliness, and exercise duration reduced.

The karate trainer's adaptability in times of the Covid-19 pandemic was in the "adequate" category with an average of 47.33. with a frequency of 74.07% (80 trainers), and "very high" 25.93% (28 trainers). The adaptability of the karate trainer during the Covid-19 pandemic was in the "adequate" category with an average of 47.33. with a frequency of 74.07% (80 trainers), and "very high" 25.93% (28 trainers). This adaptability has the largest average score on Learning and innovation skills which is 3.5, and the lowest on Career and life skills, with an average of 2.96. This adaptability capability trainers perform by learning how to use the new applications to be used for training activities, learning to understand various existing policies, as well as developing training programs.

A form of karate exercise conducted during the COVID-19 pandemic trainers uses online (networking) and offline (face-to-face) media. The online media used are Whatsapp, Telegram, Line, Media Chatting, Zoom Meeting, Google Meet, Meeting App, Google Classroom, Instagram, and Youtube, with the most applications using online meet such as zoom, and google meet. There was a relationship between adaptability and karate training management during the Covid-19 pandemic, with a significance of 0.05. The better the coach's adaptability is, the karate training management in times of the Covid-19 pandemic will be the better.

The implementation of karate exercises in particular online exercises in times of the COVID-19 pandemic hit several obstacles. The biggest constraints are signal problems and quota availability issues that require sufficiently high costs to facilitate the need for online exercises. Quotas purchased for internet needs are becoming soaring, and many parents are not prepared to supplement budgets by providing internet networks. This is also a very important issue for trainers and training children when karate exercise is done.

### **REFERENCES**

- 1) Bao, C. C., & Bihn, D. (2022). Spread of Local Transmission Virus That Causes Health Problems From Public Transportation. *Journal of Asian Multicultural Research for Medical and Health Science Study*, 3(1), 18–22.
- 2) Boylan, S. A., & Turner, K. A. (2017). Developing organizational adaptability for complex environment. *Journal of Leadership Education*, 16(2), 183–198.
- 3) Churiyah, M., Sholikhan, S., Filianti, F., & Sakdiyyah, D. A. (2020). Indonesia education readiness conducting distance learning in Covid-19 pandemic situation. *International Journal of Multicultural and Multireligious Understanding*, 7(6), 491–507.

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- 4) Coman, C., Țîru, L. G., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective. *Sustainability*, 12(24), 10367.
- 5) Ebrahim, S. H., Ahmed, Q. A., Gozzer, E., Schlagenhauf, P., & Memish, Z. A. (2020). Covid-19 and community mitigation strategies in a pandemic. In *Bmj* (Vol. 368). British Medical Journal Publishing Group.
- 6) Garcia-Garcia, B., James, M., Koller, D., Lindholm, J., Mavromati, D., Parrish, R., & Rodenberg, R. (2020). The impact of Covid-19 on sports: a mid-way assessment. In *The International Sports Law Journal* (Vol. 20, Issue 3, pp. 115–119). Springer.
- 7) Grix, J., Brannagan, P. M., Grimes, H., & Neville, R. (2021). The impact of Covid-19 on sport. *International Journal of Sport Policy and Politics*, 13(1), 1–12.
- 8) Hanafi, Y., Taufiq, A., Saefi, M., Ikhsan, M. A., Diyana, T. N., Thoriquttyas, T., & Anam, F. K. (2021). The new identity of Indonesian Islamic boarding schools in the “new normal”: the education leadership response to COVID-19. *Heliyon*, 7(3), e06549.
- 9) Hebebcı, M. T., Bertiz, Y., & Alan, S. (2020). Investigation of views of students and teachers on distance education practices during the Coronavirus (COVID-19) Pandemic. *International Journal of Technology in Education and Science*, 4(4), 267–282.
- 10) Mujahidin, E., Nurhayati, I., Hafidhuiddin, D., Bahruddin, E., & Endri, E. (2021). Importance Performance Analysis Model for Implementation in National Education Standards (SNPs). *Academic Journal of Interdisciplinary Studies*, 10(5), 114.
- 11) Novikov, P. (2020). Impact of COVID-19 emergency transition to on-line learning onto the international students' perceptions of educational process at Russian university. *Journal of Social Studies Education Research*, 11(3), 270–302.
- 12) Oblinger-Peters, V., & Krenn, B. (2020). “Time for recovery” or “utter uncertainty”? The postponement of the Tokyo 2020 Olympic Games through the eyes of Olympic athletes and trainers. A qualitative study. *Frontiers in Psychology*, 11, 610856.
- 13) Pinder, J. A., Schmidt, R., Austin, S. A., Gibb, A., & Saker, J. (2017). What is meant by adaptability in buildings? *Facilities*.
- 14) Rifani, J. (2019). Efektivitas Peranan Dinas Pemuda, Olahraga, Kebudayaan Dan Pariwisata Dalam Pengembangan Pariwisata Di Kabupaten Hulu Sungai Utara. *INOVATIF*, 1(2).
- 15) Şenışık, S., Denerel, N., Köyağasıođlu, O., & Tunç, S. (2021). The effect of isolation on athletes' mental health during the COVID-19 pandemic. *The Physician and Sportsmedicine*, 49(2), 187–193.
- 16) Smith, M. B., & Webster, B. D. (2018). Narcissus the innovator? The relationship between grandiose narcissism, innovation, and adaptability. *Personality and Individual Differences*, 121, 67–73.
- 17) Stambulova, N. B., Schinke, R. J., Lavallee, D., & Wylleman, P. (2022). The COVID-19 pandemic and Olympic/Paralympic athletes' developmental challenges and possibilities in times of a global crisis-transition. *International Journal of Sport and Exercise Psychology*, 20(1), 92–101.
- 18) Susilawati, S. (2020). Implementasi Manajemen Pelatih Renang di Club Ciamis Aquatic. *Indonesian Journal of Education Management & Administration Review*, 4(1), 209–214.
- 19) Sya'diah, H., & Jatmiko, T. (2021). Dampak Covid-19 Dalam Latihan Atlet Karate Kata Dan Kumite Pusat Latihan Daerah Jawa Timur Beserta Solusinya. *Jurnal Prestasi Olahraga*, 4(2), 44–50.
- 20) Terry, P. C., Parsons-Smith, R. L., & Terry, V. R. (2020). Mood responses associated with COVID-19 restrictions. *Frontiers in Psychology*, 11, 589598.
- 21) Wati, S., & Sugihartono, T. (2018). Pengaruh Latihan Terpusat Dan Latihan Acak Terhadap Hasil Penguasaan Teknik Dasar Bola Basket. *Kinestetik: Jurnal Ilmiah Pendidikan Jasmani*, 2(1), 36–43.
- 22) Yadav, V., Rajput, M., Diwakar, R. P., & Kumar, R. (2020). An Overview on transmission of diseases in special reference to COVID-19 and potential Tar-gets to control this pandemic. *J Adv Microbiol Res*, 4, 15.



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