

Effect of Basic Water Confidence, Flexibility, and Technique on Freestyle Swimming Skill among Elementary School Pupils

Efecto de la confianza, la flexibilidad y la técnica básicas en el agua sobre la habilidad de natación de estilo libre entre alumnos de escuela primaria

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Abstract. The purpose of this study to examines the effect of differences between intervention programs using basic water confidence, flexibility, and freestyle swimming techniques on freestyle swimming skills. A quasi-experimental research design was adopted. There were three groups in this study, namely two experimental groups and one control group. The number of participants in the three groups was 90 people where they were carried out pre-test and post-test on freestyle swimming skills. The data analysis used is inferential testing, Covariance Analysis (ANCOVA), Assumption of Homogeneity of Variance, Data Normality Test and Statistical Assumption Test (T-test paired samples). Results. From the pre-test and post-test scores, ANCOVA results show that the effect of basic water confidence, flexibility, and freestyle swimming technique is significant on freestyle swimming skills at a good level. Next, a paired sample t-test was conducted, the results of the flexibility exercise with the highest score, while the group with the basic water confidence exercise got a pretty good score, although not as high as the score achieved by the group that did the flexibility exercise. While the scores with practice with freestyle swimming techniques did not show a significant effect on freestyle swimming skills. Conclusions. Thus, the findings prove that training with water-based confidence and flexibility has been shown to improve freestyle swimming skills in elementary school students. However, when this form of exercise must be applied in the appropriate order, starting with flexibility exercises, basic water confidence, and freestyle swimming technique to achieve freestyle swimming skills in elementary school students.

Keywords: Basic Water Confidence, Flexibility, Freestyle Swimming Technique, Freestyle Swimming Skill, Elementary School

Resumen. El propósito de este estudio es examinar el efecto de las diferencias entre los programas de intervención que utilizan técnicas básicas de confianza en el agua, flexibilidad y natación de estilo libre sobre las habilidades de natación de estilo libre. Se adoptó un diseño de investigación cuasiexperimental. Hubo tres grupos en este estudio, a saber, dos grupos experimentales y un grupo de control. El número de participantes en los tres grupos fue de 90 personas donde se realizaron pre-test y post-test de habilidades de natación estilo libre. El análisis de datos utilizado es prueba inferencial, Análisis de Covarianza (ANCOVA), Supuesto de Homogeneidad de Varianza, Prueba de Normalidad de Datos y Prueba de Supuesto Estadístico (prueba T para muestras pareadas). Resultados. A partir de las puntuaciones de la prueba previa y posterior, los resultados de ANCOVA muestran que el efecto de la confianza básica en el agua, la flexibilidad y la técnica de natación de estilo libre es significativo en las habilidades de natación de estilo libre en un buen nivel. A continuación, se realizó una prueba t de muestras pareadas, obteniendo los resultados del ejercicio de flexibilidad con la puntuación más alta, mientras que el grupo con el ejercicio básico de confianza en el agua obtuvo una puntuación bastante buena, aunque no tan alta como la obtenida por el grupo. que hizo el ejercicio de flexibilidad. Mientras que los puntajes con la práctica de técnicas de natación estilo libre no mostraron un efecto significativo en las habilidades de natación estilo libre. Conclusiones. Por lo tanto, los hallazgos demuestran que se ha demostrado que entrenar con confianza y flexibilidad en el agua mejora las habilidades de natación de estilo libre en estudiantes de escuela primaria. Sin embargo, cuando esta forma de ejercicio debe aplicarse en el orden apropiado, comenzando con ejercicios de flexibilidad, confianza básica en el agua y técnica de natación estilo libre para lograr habilidades de natación estilo libre en estudiantes de primaria.

Palabras clave: Confianza básica en el agua, flexibilidad, técnica de natación estilo libre, habilidad de natación estilo libre, escuela primaria

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Introduction

In the curriculum 2013 of Education in Indonesia, aquatic learning began to be taught to elementary school students at grade 1. The curriculum includes practicing various forms of water recognition games, breathing techniques, hovering, and gliding. Learning to swim incorporates teaching the basics of self-confidence in water, as a provision for mastering good swimming techniques (Sutapa et al., 2021; Amran et al., 2023). However, in reality, there are still many students who have not mastered the

basic techniques in (introduction to) water skills. This may be due to the way of delivering and the implementation of the lessons, which may make them less interesting. Another impact of the lack of mastery of water recognitions that they are afraid to swim in deep pools and lack self-confidence (Adji et al., 2022). This is the result of not having mastered water recognition techniques. They are used to making the wrong moves and it becomes a (bad) habit. This study aims to see the effects of the intervention; applying basic water confidence skills, flexibility training, and freestyle swimming techniques to elementary school students. In general,

this research is needed because the existence of additional research resources can be combined to be more effective and useful for mastering freestyle swimming skills in elementary school.

Education experts provide differing definitions of learning. According to Yudhistira et al., (2021). They stated that the word "learning" represents a concept or idea to describe the change in behaviour shown by a person. Cooper, Heron, & Heward (2020). Learning theories for teachers, added that learning refers to some systematic change in behaviour or arrangement of behaviour that results from experience in a particular situation. This is also clarified Kristiyanto et al., (2020), learning encompasses relatively permanent behavioural changes due to specific experiences or repetition of experiences. Learning is done to gain information and knowledge, attaining mastery of skills and habits, and shaping or forming attitudes and beliefs. Learning not only encompasses the mastery of knowledge and skills, but also the development of emotions, attitudes, aesthetic and artistic values, as well as internal characteristics, which are also influenced by learning. Learning brings about change in a person, with change for the better or for worse (saifu et al., 2021; Trisnadi et al., 2023).

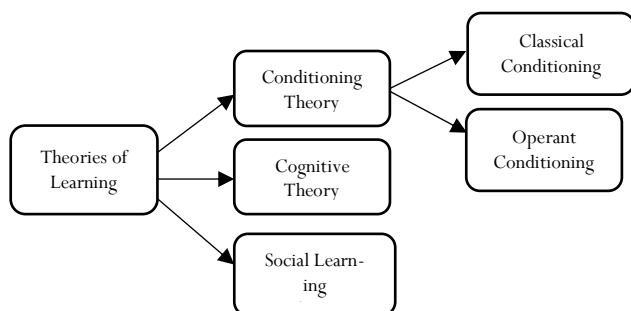


Figure 1. Theories of Learning Base on Thorndike Theory

Educational psychologists and pedagogues have identified several principles of learning, also referred to as the laws of learning, which appear to be generally applicable to the learning process (Thompson et al., 2020). These principles have been discovered, tested, and used in practical situations. They provide additional insight into what makes people learn most effectively. Edward Thorndike developed the first three "Laws of learning": readiness, practice, and effects. According to Thorndike, learning is an event that forms an association between events called stimulus and response. Stimulus is a change from the external environment which becomes a sign of activating the organism to react or act. Response is any behaviour that arises because of a stimulant. The diagram above illustrates the learning theory process. Learning is the acquisition of new behaviours so it can be agreed that learning involves changes in behaviour, and we practice it in our daily lives and the process becomes a permanent part of an existing set of behaviours (Sutapa et al., 2020)

To be able to master the swimming style, we must have basic water confidence as a form of introduction to water

to help our bodies adapt and grow courage. Introduction to water is not teaching certain techniques or styles, but steps that must be known in advance (Listyarini et al., 2021). In this study, the forms of water introduction that were applied were bubbles breathing exercise, Float exercise (Streamline, Back-float), push and glide and, reach and pull. The skills of a sport are needed by students or athletes to be skilled in doing sports that are of interest. Perfection of the basic technique of each movement is important because it will determine the overall skill of the movement. The basic movements of every technique required in every sport must be made and mastered to perfection (Driska, 2018).

According to Nopembri et al., (2022), flexibility is an important aspect in every human activity, for example in sports, especially sports achievements. Flexibility determines the progress of an achievement, among others, determined by arm length, height, leg length (anatomy), ability to breathe oxygen, agility, balance, coordination, strength, power, speed of motion, and frequency of motion. Therefore, to obtain high achievement, it is necessary to train physical and psychological abilities, one of which is flexibility (Hardianto et al., 2022). Researchers chose this exercise because it is easy to do and very beneficial. The movement is in between: (1) *Elbow Pull for Your Arm Pit*, (2) *Wall Press for Your Front Shoulder*, (3) *Wall Lean for Your Calves*, (4) *Pretzel Stretch for Your Buttocks*, (5) *Butterfly Stretch for Your Inner Thighs & Groin*, (6) *Model Pose for Your Laterals*, (7) *Model Pose for Your Lateral*. Several types of flexibility training are movements that are always used by swimming athletes before starting activities in water (Sukendro et al., 2021).

Freestyle is swimming with the chest facing the water surface. The arms are alternately moved far forward in a pedalling motion, while the legs are alternately lashed up and down up and down. Freestyle is a swimming style that is fastest compared to other styles (Trung & Lee, 2016). The program interventions provided for the technique (freestyle swimming) are freestyle foot movement technique, hand movement technique, breathing technique, and combination hand, foot, and breath movement techniques. The purpose of this study to examines the effect of differences between intervention programs using basic water confidence, flexibility, and freestyle swimming techniques on freestyle swimming skills.

Materials and Methods

The research design used in this study was true-experimental research. Experimental research was conducted to see the causal relationship between variables. Experimental research will test certain effects on a variable compared to other variables with different treatments (Koch et al., 2018). By using two experimental groups and one control group with a female sample. The experimental group I used the basic water confidence intervention programme, the experimental group, group II used the flexibility intervention, and the control group used the freestyle swimming technique intervention program. The intervention program

exercises were carried out three times a week. The duration of exercise in the experimental group was 60 minutes and for the control group, 45 minutes. This intervention program was carried out for 4 weeks with 12 meetings. The pre-test was carried out at the first meeting, the second meeting until the 11th meeting carried out the treatment, and the last meeting carried out the final exam, which was the post test.

Assessment in education is the process of assessing whether a quantity or area of something that is measured is acceptable or not. Thus, assessment involves three steps, namely obtaining information through measurement, establishing measurement criteria, making assessments (considerations) for measuring students' weaknesses (Salafi et al., 2022). According Kogoya et al., (2023), assessments carried out through certain tests will help teachers or researchers evaluate the effectiveness of the teaching methods used in a learning process. This is important to allow teachers to get feedback on the appropriateness of the methods used, based on the student's current level of knowledge. This sheet was used to provide scores/assessments when doing the pre-test and post-test. This sheet contained the complete information of the samples, such as identity - the name of the student, date of implementation and the time clocked by the student when doing the 25 meter freestyle swimming test. This sheet also contained pictures of the implementation/movement of freestyle swimming, indicators and an explanation of how the correct movements should be when doing freestyle swimming movements. The movements are in the form of leg movements, hand movements, and taking of breath; as well as combined movements of a series of freestyle swimming movements.

The test sheet for the 25-meter freestyle swimming skills test. This sheet was used to conduct the pre-test and post-test documentation of the research sample. There are several illustrations, as well as instructions for movements that must be done, along with an explanation of how to position the subject (the student being used as sample) properly and correctly when the researcher makes an assessment. In the table above, there are three indicators for the initial implementation. The position of the body must be straight, parallel to the water surface and the head in the normal position. Then, on the second indicator, for leg movements, the legs move up and down alternately in a scissor-like (cutting the water motion) with the source of the movement from the groin-hip area. This is followed by rotating the arm forward with a pulling and pushing motion in the water. For taking a breath, the motion is with the head turned to the side, partially out to the surface of the water, inhale the air from the mouth and exhaling from breath from the mouth takes place whilst the face is turned down in the water (Utami et al., 2018).

Quasi Experimental Design (Pre-test and Post-test Design)

The form of the research design used in this study was a

quasi-experiment research with a test and post-test with an unbalanced group (Pre-test-Post-test Group Design). The pre-test and post-test research designs are the research designs most often used in research to see results in education and achievement. The form of this research consisted of two experimental groups with different treatments combined with freestyle swimming technique exercises and a control group that only practiced the freestyle swimming technique. The research design used in this study was a pre-test, post-test, group design, namely a group that was given a preliminary test to measure the initial conditions. Furthermore, the experimental group was given treatment. After finishing the treatment, the group was given another test as a final test (post-test) to see if there was any improvement from the treatment (intervention program) given.

In this study, the number of samples of experimental research was 90 female students consisting of 30 students each group. A population is a group that will be generalized if an investigation has been conducted on part of the entire population. According to Yuniana et al., (2023), the population is, "All research subjects". The population in this study is 6th-grade, female students in a state from two elementary school in Jambi City, totalling 90 people. The study population was taken from 2 elementary school. The population consisted of 6 classes from 2 grade 6 elementary schools with female students. Which totalled 90 students. N: 30 for the experimental group I, N: 30 for the experimental group II, and N: 30 for the control group therefore, the number of samples were N: 90 female students. At the initial meeting, a pre-test was carried out to note the extent of the abilities of elementary school students to swim the 25 meter freestyle. Henceforth, from the second meeting to the 11th meeting, each group would be given treatment in the form of an intervention program with different exercises. In the experimental group I, the subjects did basic water confidence exercises, the experimental group II did flexibility exercises, and the control group did the freestyle swimming technique exercises. At the final meeting in the 12th session, the students returned to the final test (post-test), the 25 meter freestyle swimming. All the data obtained were then processed using the SPSS Version 20.

Table 1.
Pre-test and Post-test Design (Creswell,2005)

Control Group	Pre-test	No treatment (4 weeks)	Post-test
Experimental Group I	Pre-test	Basic water confidence (4 weeks)	Post- test
Experimental Group II	Pre-test	Flexibility (4 weeks)	Post-test

Validity and Reliability

According to Weise et al., (2020), the definition of validity is the suitability, meaning and according to Cheng et al., (2018), reliability is concerned with delivering consistent and accurate test results through the use of reliable instruments. Likewise, Zyphur & Pierides (2017), in his research mentioned that validity is showing the actual situation and this refers to the suitability between constructs, or the way a researcher conceptualizes ideas in conceptual definitions and measures. To fulfil the process of measuring the

validity for basic exercises for water confidence skills, flexibility, and freestyle swimming techniques in swimming. The data obtained from these expert evaluations were analysed using the following formula: Based on the validation schedule for the exercise evaluation with basic water confidence and flexibility, the freestyle swimming technique along with the assessment instrument is $r = .93$ ($n = 4$), according to Tweedy et al., (2017). The value that is considered mastering or reaching the highest stage is the value of 0.70. Furthermore, Šiljeg, Sindik, & Leko, (2017) stated that the best step for item validation was at $r = .71$ to $.99$. The results of the assessment of the training experts for basic water confidence and flexibility and assessment instruments were made with additions following the experts' recommendations before the research was conducted. According to Bärnighausen et al., (2017), understanding reliability is a series of measurements or a series of measuring devices that have consistency if measurements made with the measuring instrument are carried out repeatedly, is the level of consistency of a test, is the extent to which the test can be trusted to produce a consistent score, relatively unchanged even though tested in different situations. To ensure that the training produced has high reliability, the researcher carries out the process of trying and assessing in a pioneering study conducted at the researcher's choice of place in accordance with the research criteria of the researcher. Pioneering studies aim to help researchers to see the reliability according to the exams conducted (Nicolaidis, 2016; Nugroho et al., 2022).

Data Analysis

The analysis of covariance (ANCOVA) is an advanced statistical test of ANOVA. This test is used when a researcher wants to test the impact of a continuous independent variable on the dependent variable, while controlling for the effect of one or more other continuous independent variables that may affect the dependent variable. The independent variable in ANCOVA is often called a factor. ANCOVA can be applied to one-factor, two-factor or multi-factor experiments. For an experiment consisting of one factor it is called one-way ANCOVA. One way ancova test inference statistics were used to see the difference in effectiveness between the experimental group I, the experimental group II, and the control group on 25 meter freestyle swimming skills in this study.

In the inference analysis procedure, a data is tested for significance value at the specified stage, namely ($p < 0.05$). In order to reduce the risk of committing type I and type II errors. Pratama et al., (2022), suggested the value of α to be used was 0.05. To answer research problems in this study, researchers used one type of exam, namely the t-test. While the 1 way ANCOVA test is used to facilitate comparative analysis between groups that have more than two experimental groups. The "Paired t-test" t test was used to see if there were any significant differences in the experimental group and the control group after carrying out the pre-test and post-test. In addition, the independent t-test t

was also used to compare t-scores to ensure that the group of respondents was equal in the pre-test and compared the differences between the experimental group and the control group of the three types of exercises for the post-test.

The homogeneity test or test aims to ensure that the data set to be measured does indeed come from a homogeneous population (the same). The calculation of homogeneity is carried out by researchers when they want to compare an attitude, intention, or behaviour (variance) in two population groups (Jufrianis et al., 2021). This population group has its own characteristics and characteristics such as age, gender, education, etc. From the results of the homogeneity test, the significance value of all groups was $P > 0.05$, which means the data was homogeneous.

The statistical assumption test is a stage of processing data through statistical formulas, with the aim of finally answering the research problem formulation. In its stages, test the statistical assumptions through the following stages:

Data description is the processing stage to obtain information about the data, including the average, standard deviation, lowest score, and highest score.

Data normality test is carried out to find out whether the data is at a normal distribution level or not. Test the normality of data from each data. The normality test data used in this study is the Kolmogorov-Smirnov test with the assumption that the sample group is included in a small sample or 30 down. Format the test by comparing the value of probability (p) or significance (Sig.) with degrees of freedom (dk) $\alpha = 0.05$.

The significance test is as follows:

If the Sig. Or P-value > 0.05 , then the data is declared normal.

If the Sig. Or P-value < 0.05 , the data is declared abnormal.

Result

Assumption of Normality

According to Ilham et al., (2021), the normality test is carried out to test whether the regression model, an independent variable and the dependent variable, or both, have a normal or abnormal distribution. If a variable is not normally distributed, the results of statistical tests will decrease.

Table 2.
Normality Test

	Group	Shapiro-Wilk		
		Statistic	df	Sig
Time	Experimental Group I	.938	30	.080
	Experimental Group II	.947	30	.145
	Control Group	.971	30	.572

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

From table 2, the normality test results obtained significant values from all groups, namely, the experimental group I, the experimental group II, and the control group

with $p > 0.05$, which means that the data were normally distributed.

Time

The homogeneity test aims to ensure that the data set to be measured does indeed come from a homogeneous population (the same). The calculation of homogeneity is carried out by researchers when they want to compare an attitude, intention, or behaviour (variance) in two population groups (Nasrulloh et al., 2020). From table 3, the results of the homogeneity test obtained a significant value from all groups $p > 0.05$, which means the data is homogeneous.

Table 3.
Homogeneity test

Dependent Variable	Levene's Statistic	Df1	Df2	Sig.
Freestyle Swimming Skill	1.87	2	87	.160

Table 4.
Dependent Variable: Post-test

Group	Mean	Standart Deviation	N
Experimental Group I	66.83	4.73	30
Experimental Group II	76.53	8.66	30
Control Group	109.73	11.11	30
Total	84.37	20.33	90

Table 4 reflects that the three groups given the intervention programme had different mean results. By using basic exercises of water confidence, flexibility, before and after controlling the effect of the pre-test. In general, the ANCOVA analysis proves that students in the first experimental group (Basic water confidence) and the second experimental group (Flexibility) students ($M = 66.83$, $SD = 4.728$) & ($M = 76.53$, $SD = 8.657$) each scored significantly higher than the control group ($M = 109.73$, $SD = 11.111$).

Table 5.
The Interaction between the independent variable (Group) and the covariate (Freestyle Swimming Skill pre-test)

Groups	Df	Mean	f	Sig.
Basic water confidence	21	5.41	1.06	0.50
Flexibility	24	4.30	0.43	0.91

The results from Table 5 show that the linearity test results obtained a significance value for the basic water

confidence group of 0.50 ($p > 0.05$). This shows that there is a linear relationship between the independent variable (basic water confidence) and the dependent variable (freestyle swimming skills). The results of the linearity test in the flexibility group were 0.91 ($p > 0.05$). This shows that there is a linear relationship between the independent variable (flexibility) and the dependent variable (freestyle swimming skills).

Table 6.
Test of Between – Subject Effect

Source	Type III of Squares	df	Mean Squares	F	Sig.	Partial eta Squared
Correction Model	31827.456	3	106009.152	184.640	.000	.866
Intercept	24684.804	1	24684.804	429.610	.000	.833
Pre-test	1460.056	1	1460.056	25.411	.000	.228
Treatment	26293.497	2	13144.748	228.804	.000	.842
Error	4941.444	86	57.459			
Total	677365.000	90				
Correction Total	36768.900	89				

In reference to Table 6, the significance value for the experimental group was .000, which was less than .05, thus, there was a significant difference between the experimental and control groups in the skills learning of 25 meter freestyle swimming. The partial eta square value of 0.842 means that it was 84.2% of the 25 meter freestyle swimming using the basic intervention programme of water confidence, flexibility, and freestyle swimming techniques. According to Delextra et al., (2015), eta values range from 0.1 to 0.3 as small response, 0.3 to 0.5 as medium, and 0.5 and greater. Therefore, the eta score for the forehand skills test ($\eta = .842$) was considered a large effect size.

Table 7.
Paired Samples Statistic

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Pre-test	1.06	30	27.99	5.11
Post-test	66.84	30	4.73	.863

In table 7, it is reflected that the paired sample statistical pre-test results obtained were $M = 1.06$, $SD = 27.99$, $SEM = 5.11$, while in the post-test, the results obtained were $M = 66.83$, $SD = 4.73$, $SDM = .863$.

Table 8.
Paired Samples Test

Paired Differences								
96 % Confidence Interval of the Difference								
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1								
Pre- test								
Post-test	3.99	26.62	4.86	29.96	49.85	8.20	29	.000

Table 9.
Paired Samples Statistic

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1				
Pre-test	1.19	30	34.56	6.30
Post-test	76.53	30	8.66	1.59

Table 8 indicates the results of the paired sample t-test in the pre-test and post-test obtained values at $M = 3.99$, $SD = 26.62$, $SEM = 4.867$, with a significant value of .000

value was $M = 1.19$, $SD = 34.56$, $SEM = 6.30$, while in the post-test, the value obtained was $M = 76.53$, $SD = 8.66$, $SEM = 1.58$.

Paired Differences								
95 % Confidence Interval of the Differences								
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1								
Pre-test-Post-test	4.29	30.07	5.49	31.74	54.19	7.83	29	.000

confidence training, flexibility training and freestyle swimming skills. This proves that basic water confidence training alone is not enough to improve freestyle swimming skills. However, moving further, the results indicate that basic water confidence exercises should be accompanied by flexibility exercises and freestyle swimming techniques in order to reach optimum levels of freestyle swimming skills. flexibility is the ability to move joints freely throughout the space to move (Nugroho et al., 2021). Therefore, flexibility exercises must be incorporated in every training session. Flexibility exercises can be done during warm-up, during core exercises, and while cooling-down in both the training process and in competition preparations (Racinais, Cocking, & Périard (2017). In order to achieve the best results, training should start with flexibility (stretching) exercises prior to starting water activities, to warm-up muscles and avoid injury. This exercise can maximize the students' muscles' potential while in the water to enable their bodies to move and function properly. Flexibility exercises can also increase or accelerate the movement of the limbs in the water so that the resulting movement can be maximised (Nasrulloh et al., 2021). According to Turdaliyevich & Pulatovna (2020), before starting swimming activities at school, students would usually be given an introductory session to learning how to swim and this basic exercise must be done before entering the pool. It is also recommended that the introduction to swimming is carried out gradually.

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Pre-test	1.32	30	19.70	3.42
Post-test	1.26	30	24.17	4.21

Furthermore, water activities with the application of basic water confidence can be carried out to foster children's confidence in water and eliminate fear (Hastuti et al., 2021). Finally, the learning of freestyle swimming technique exercises need to be structured and broken-down to ensure components of learning becomes easier to understand. The exercises provided are in the form of leg (kicking) techniques, hand movements, breathing exercises and coordination exercises. Freestyle swimming technique exercises should be done with precise (but simplified) to eventually achieve the mastery of freestyle swimming, which is essential in any swimming lesson (Nasrulloh et al., 2022). This is intended so that students get used to doing these exercises and eventually master the freestyle swimming with good and correct techniques. It is sincerely hoped that the

		Paired Differences						
		95 % Confidence Interval of the Differences						
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1								
Pre-test	4.64	13.33	2.32	-0.89	9.36	1.99	32	.054
Post-test								

Discussion

The aim of this study to examines the effect of differences between intervention programs using basic water confidence, flexibility, and freestyle swimming techniques on freestyle swimming skills. The findings of this research also showed a positive correlation between basic water

results of this study can become a catalyst to other research; provide a point of reference, give some direction and make useful contributions to the field, especially in the improvement of swimming learning in elementary schools. According to Denton & Aranda (2020). 2Like any sport, swimming has a number of benefits. Among them is to nourish the body, increase confidence, to stimulate motor movements as well as serve as a relaxing recreational activity. As such, the training provided in schools must be structured and suitable to be delivered successfully by teachers and/or instructors in order to achieve the best results in learning swimming at school.

The researcher also hopes that with this intervention programme, the teacher/coach are able to see the potential of their students and groom them to one day become athletes and participate in competitions from the elementary school level all the way to international ones. It is also recommended that researchers explore this field by considering what is lacking from this research and recommending solutions to any limitations or problems found. However, further research should aim to broaden the study; either by using samples of different age groups or by using different training methods, techniques and research instruments to obtain better and more significant results which may further contribute to the body of knowledge in this field.

Conclusion

The results obtained from the study showed that training using flexibility attained very good results, whilst training with basic water confidence exercises also attained fairly good results, lying second in the scoring. The analytical data used are inferential testing, Analysis of Covariance (ANCOVA), Assumption of Homogeneity of Variances, Normality Test data and Test Statistical Assumptions (Paired samples t-test). From the pre-test and post-test scores ANCOVA results reveal that the effect of basic water confidence, flexibility, and freestyle swimming technique has a significant effect on freestyle swimming skill at $p < .05$ level for between the groups [$F = 228.804$, $p = 0.000$, partial eta squared = .842]. Furthermore, paired sample t-test, the results of the flexibility exercise with the highest score are [$M = 4.29566$, $SD = 30.07288$, $SEM = 5.49053$]. While the group with basic water confidence training obtained a pretty good score, although not as high as the score achieved by the group that did flexibility training that is as much as [$M = 3.99000$, $SD = 26.62297$, $SEM = 4.86067$]. While the score with freestyle swimming technique is with the Sig. (2-tailed) valued at .054 did not show a significant effect on freestyle swimming skills. Thus, the findings prove that exercises with basic water confidence and flexibility have been shown to improve freestyle swimming skills in elementary school students.

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