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IMPACT OF AUGMENTED VIDEO-VERBAL ENCOURAGEMENT FEEDBACK ON MOTIVATION AND TECHNICAL PERFORMANCE IN NOVICE CRICKET ATHLETES

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Wpływ wzmocnionej zachęty wideowerbalnej na motywację i wyniki techniczne początkujących sportowców krykieta

Streszczenie

Celem tego badania jest zbadanie wpływu stosowania wzmocnionej informacji zwrotnej wideowerbalnej zachęty (AVF-VEF) na motywację i wyniki techniczne początkujących sportowców

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krykieta. W tym badaniu przyjęto prawdziwą metodę eksperymentalną z losowym badaniem kontrolnym (RCT) trwającym 11 tygodni. W badaniu wzięło udział 60 początkujących zawodników krykieta z Uniwersytetu Stanowego w Dżakarcie (Indonezja). Podzielono ich na dwie grupy: eksperymentalną (AVF-VEF, n = 30, 19,2 ± 1,06 lat) i kontrolną (CG, n = 30, 18,9 ± 1,17 lat). Jako instrumenty wybrano II skalę motywacji sportowej (SMS-II) oraz odbijanie, kręgle i grę na boisku. Dwukierunkowe powtarzane pomiary ANOVA przeprowadzone na testach motywacji i wydajności technicznej wykazały istotny wpływ czasu (wszystkie, $p < 0,05$), istotny wpływ grupy (wszystkie, $p < 0,05$) i istotną interakcję dla grupy*czasu (wszystkie, $p < 0,05$). Test t-Studenta dla par przeprowadzony oddzielnie na dwóch grupach wykazał, że AVF-VEF może znacznie zwiększyć średni wynik motywacji i wyników technicznych, bardziej niż program CG. Badanie to podkreśla znaczenie stosowania AVF-VEF jako narzędzia treningowego poprawiającego motywację i wyniki techniczne u początkujących sportowców uprawiających krykiet.

Słowa kluczowe: trening informacji zwrotnej, krykiet, motywacja, wyniki techniczne.

Abstract

This study aims to investigate the effect of using augmented video feedback (AVF)-verbal encouragement feedback (VEF) on the motivation and technical performance of novice cricket athletes. A true experimental method with a random control trial (RCT) design for 11 weeks was adopted in this study. 60 beginner male cricket athletes from the State University of Jakarta (Indonesia) were involved as participants in this research. They were divided into two groups, experimental (AVF-VEF, n = 30, 19.2 ± 1.06 years) and control (CG, n = 30, 18.9 ± 1.17 years) one. Sport motivation scale-II (SMS-II) and batting, bowling, and fielding were chosen as instruments. Two-way repeated measures ANOVA conducted on motivation and technical performance tests showed a significant effect of Time (all, $p < 0.05$), a significant effect of Group (all, $p < 0.05$) and a significant interaction for Group*Time (all , $p < 0.05$). Student's paired t-test carried out on two groups separately showed that AVF-VEF could significantly increase the mean score of motivation and technical performance more than the CG programme. This research highlights the importance of applying AVF-VEF as a training tool to improve motivation and technical performance in entry-level cricket athletes.

Keywords: feedback training, cricket, motivation, technical performance.

Introduction

Cricket is a competitive sport that enjoys high popularity in the world (Constable et al., 2021). Similar with other competitive sports, to succeed in cricket sport, the athletes require technical performance such as batting, bowling, fielding (Ali et al., 2023; Harrison et al., 2022), and psychological abilities such as motivation (Almagro et al., 2020; Sakalidis et al., 2023). Batting is an important skill in cricket consisting in hitting the ball (Connor et al., 2020; Singh et al., 2023). Bowling is a skill of throwing the ball towards a goal that is defended by a batter (Jamil et al., 2023; Murray et al., 2021). Meanwhile, fielding is a skill of catching or guarding the ball to prevent its exit from the field (Tissera et al., 2022). Apart from having to develop technical performance, motivation is

an aspect that also has a big importance in cricket, because it can create an internal and external drive in athletes to achieve more optimal goals (Kovács et al., 2022). Data from previous studies report that athletes with well-developed technical performance and motivation have potential to win a match (Mercader-Rubio et al., 2023; Tissera et al., 2022). In addition, technical performance and motivation are important factors in determining whether athletes can be successful in competitive sport (Tušak et al., 2022). Therefore, to facilitate optimal development of the aforesaid aspects, a coach needs to implement an appropriate training strategy, for example, the application of augmented video feedback (AVF) combined with verbal encouragement feedback (VEF) during cricket training sessions.

AVF-VEF is informational feedback which is modified by technology (Tissera et al., 2022), and combined with verbal encouragement behaviour from a trainer towards an action or task (Mengi et al., 2023). AVF-VEF can be delivered to athletes before, during or after training (Bigras et al., 2019). Basically, due to the combination of AVF with VEF provided during a complex training process, the athletes obtain important information about a series of technical performances in sport presented through a video (Hicheur et al., 2019), in addition to verbal encouragement from the coach to athletes (e.g., "you can do it", "don't give up", "do your best") to motivate them in training (Rusmana et al., 2023). According to Jaszczur-Nowicki et al. (2021), providing feedback makes it much easier for athletes to learn a given type of sports movement as they can analyze incorrect and correct movements effectively. Providing feedback using visual (Mödinger et al., 2021) or verbal stimuli is an appropriate strategy to be integrated into sports training and physical education (Gong et al., 2022) as it supports the achievement of optimal motor development (Bugnon et al., 2023; Corbett et al., 2023). Data shows that AVF-VEF has experienced an increase in popularity and has been proven to provide many positive benefits for athletes, for example AVF has been documented to improve athletes' jumping performance (Nagata et al., 2018). Meanwhile, the VEF aspect is an important tool in developing physical and technical abilities of young soccer players (Soylu et al., 2023). Apart from that, recent research shows that VEF is the right way to improve athletes' physical, technical and psychological performance (Selmi et al., 2023). However, contrary findings report that providing feedback has not shown a positive effect on improving motor skills in several types of sports such as long jump, shot put and volleyball (Han et al., 2022). The inconsistent results of previous studies underlie the importance of further research on AVF-VEF.

There are several previous studies that have investigated the effects of AVF-VEF feedback on athletes' performance in sports (Otte et al., 2020; Selmi et al., 2023; Mödinger et al., 2021), but previous research only focused on systematic reviews (Zhou et al., 2021) and experiments (Pacholek & Zemková, 2022; Sahli et al., 2022). In addition, according to our knowledge, the facts show that there

is lack of research that investigates the effects of AVF-VEF on increasing motivation and technical performance. Based on this data, this study aims to investigate the effect of using AVF-VEF on the motivation and technical performance of beginner cricket athletes.

Methods

Participants

This study involved 65 male cricket athletes in the Sports Science Department of the State University of Jakarta as participants in this research. They were selected through inclusion criteria such as: (i) athletes in the beginner level category, (ii) athletes who have not participated in championships at a national or international level, (iii) athletes who have 3 months of cricket training experience, (iv) male athletes. Meanwhile, the exclusion criteria are (i) female athletes, (ii) athletes who experienced injuries in the past year, (iii) advanced level elite athletes. G*Power analysis (v.3.1.9.7, University of Kiel, Germany) was used to determine the number of participants that were needed in this study and the analysis results showed that a minimum of 30 athletes in each group was needed. Based on G*Power analysis, 60 athletes were selected as participants in this research (See Fig. 1). Then, the participants were allocated to the experimental group (AVF-VEF, n = 30) and the control group (CG, n = 30). The allocation of participants to the AVF-VEF and CG groups was based on the Random Number Generator (RNG) application. Information about participants is presented in Table 1.

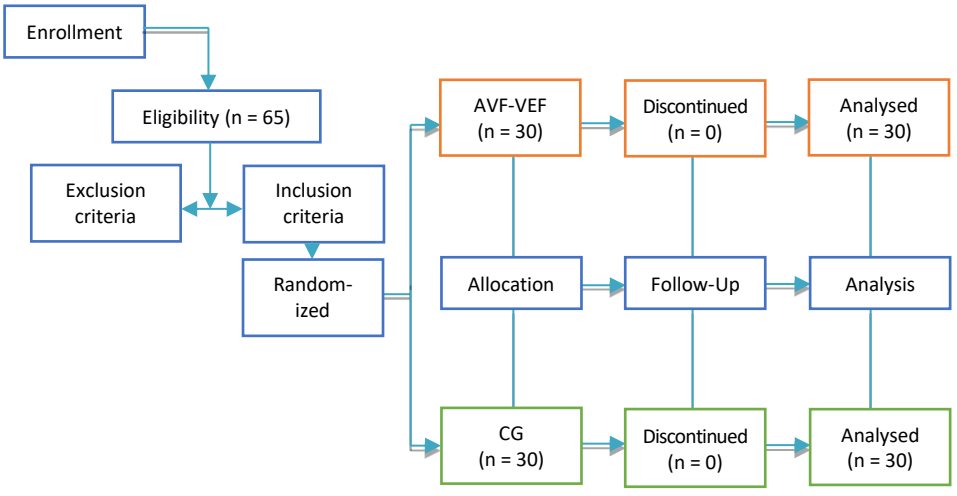

Figure 1
Flow chart

Table 1
Information on the characteristics of the AVF-VEF and CG participants

Variables	Mean ± Standard deviation
AVF-VEF (n = 30)	
Age (Years)	19.2 ± 1.06
Height (Cm)	159 ± 3.19
Weight (Kg)	57.4 ± 2.45
Body mass index (Kg/m^2)	21.2 ± 1.09
CG (n = 30)	
Age (Years)	18.9 ± 1.17
Height (Cm)	158 ± 2.92
Weight (Kg)	57.1 ± 2.24
Body mass index (Kg/m^2)	21.5 ± 1.11

Note: AVF-VEF = augmented video feedback-verbal encouragement feedback, CG = control group

Measures

Motivation

The Sport Motivation Scale-II (SMS-II) was adopted in this research to evaluate the level of athletes' training motivation (do Nascimento Junior et al., 2020). This SMS-II has been converted into an Indonesian version and it consists of 18 question items from 5 dimensions, namely (i) intrinsic, (ii) integrated, (iii) identified, (iv) introject, (v) external. 7-point Likert scale from 1 = "Not at all appropriate" to 7 = "Very appropriate" was used as well. If the athlete obtained a higher score, it means that he has a higher level of training motivation.

Technical Performance

There was a 3-item test to measure the cricket athletes' technical performance, consisting of batting, bowling and fielding. (i) Batting. The participants were given 20 pitches to hit. If the score is 0 point, it means that the stroke did not hit the ball, 1 point means that the ball was "foultipped" off the bat and hit the protective net, 2 points means foul ball (the ball was struck, but settled in foul territory), 3points means fly ball, 4 points means ground ball and 5 points means hit/line drive (Kohmura et al., 2019). (ii) Bowling. The participants were required to throw the ball at a target which was placed 2m from their standing points. The athlete got 3 points if the thrown ball landed in the correct colour zone, 2 points if the ball landed in an adjacent colour zone, 1 point if the ball landed in the furthest colour zone from the targeted colour zone, and 0 points when the ball landed beyond all targets (Harrison et al., 2022; Doma et al.,

2021). (iii) Fielding. The participants stood upright in a predetermined position. The distance between the participants and feeders was 10 metres. Once ready, the feeder threw the ball, the participant caught the ball and immediately threw the ball towards the target. This activity was carried out 10 times, counting the number of balls that could be caught and those that hit the target. The score ranged from 0-10 points.

The intraclass correlation coefficients (ICC) for retest trials in this study were 0.84, 0.80, and 0.78 for batting, bowling, and fielding, respectively.

Design and Procedures

True experimental research with a random control trial (RCT) design was carried out for 11 weeks from December 2023 till February 2024 at the State University of Jakarta. This research complies with the Declaration of Helsinki. All research protocols had been approved by the local research ethics committee of the State University of Jakarta (Indonesia) (number: 0765/UNJ.39.6.Ps/LT/2023). Next, the research team asked permission from the cricket lecturers and coaches to involve their athletes as participants in this research. After obtaining permission, the athletes and their parents signed an approval letter. The pretest was held on Monday (04/12/2023) on the cricket field, all the athletes had to complete the SMS-II and a technical performance test from 11.00 till 1.00 p.m. On Wednesday (06/12/2023), between 07.00 and 08.00, in the morning, the participants in the experimental group carried out the AVF-VEF programme while the CG group received no feedback. The AVF-VEF and CG programme activities were carried out until (21/02/2024). Then the post-test (SMS-II and technical performance test) was held on Saturday (24/02/2024) from 06.00 till 07.00 am. This research activity was carried out and supervised directly by the research team.

Training Procedures

The AVF-VEF participants carried out their training 3 times a week, namely on Monday, Wednesday and Thursday. The training was carried out on the Cricket Field at the State University of Jakarta. Equipment such as cricket balls (24-229 mm, 156-163 grams), cricket bats, wickets, bails, protective gear were provided by the Jakarta State University Cricket coaches. In AVF, we used the Asus Vivobook to watch videos of professional athletes performing batting, bowling and fielding movements, then in the VEF programme, there was verbal encouragement by the coach such as “you can do it”, “don’t give up”, “do your best”. Meanwhile, the CG performed their usual daily exercises without any feedback. The details of the AVF-VEF and CG programmes are presented in Table 2.

Table 2
The AVF-VEF and CG programmes

Activities	Training content of AVF-VEF Coach: A	Training content of the CG Coach: B	Duration
	Day: Monday, Wednesday, Friday		
Before training	**Topic:** – Athletes perform warming up (stretching muscles and jogging). – Athletes observe the technical performance (batting, bowling, fielding) of cricket athletes in a video (AVF). – Giving VEF.	**Topic:** – Athletes perform warming up (stretching muscles and jogging). – Athletes observe the technical performance (batting, bowling, fielding) of cricket athletes demonstrated by the coach.	10 minutes
During training	**Topic:** – The athletes do batting practice and the coach gives VEF to the athletes. – Rest (giving AVF). – The athletes do bowling practice and the coach gives VEF to the athletes. – Rest (giving AVF). – The athletes do fielding practice and the coach gives VEF to the athletes.	**Topic:** – The athletes carry out batting practice. – Rest. – The athletes carry out bowling. – Rest. – Athletes carry out fielding-drills.	40 minutes
After training	**Topic:** – Giving AVF. – Evaluation (VEF). – Cooling-down.	**Topic:** – Evaluation. – Cooling-down.	10 minutes

Statistical Analysis

Jamovi Statistics (v.2.3.28) was used to analyze all data. The mean and standard deviation are the results of descriptive statistical testing. Shapiro-Wilk analysis was chosen to determine the normality of the data in this study and the results show that all variables are normally distributed. A two-way repeated measures ANOVA (2 Groups: AVF-VEF vs CG × 2 Times: pre-test vs post-test), and Time*Groups interaction were also calculated to compare the impact on motivation and technical performance. If a significant difference was reported, the Student's paired t-test would be used to detect the mean difference between the pre-test vs post-test for each group separately. Additionally, partial eta-squared (η2p) was used to determine the effect size. The partial eta-squared value was between 0.01 to 0.06 (small effect), 0.06 > to 0.13 (medium effect) and the value 0.14 > (large effect). The significance level was set at $p < 0.05$.

Results

Based on Table 3, Two-way repeated measures ANOVA carried out on the motivation test shows a significant effect of Time on intrinsic indicators ($F^{[1.58]}$] = 252.2; p < .001; η2p = 0.813), integrated indicators ($F^{[1.58]}$ = 80.1; p < .001; η2p = 0.580), identified indicators ($F^{[1.58]}$= 93.9; p < .001; η2p = 0.618), introject indicators ($F^{[1.58]}$= 106.43; p < .001; η2p = 0.647) and external indicators ($F^{[1.58]}$= 363; p < .001; η2p = 0.862). Group influence also showed significant results for intrinsic indicators ($F^{[1.58]}$= 97.6; p < .001; η2p = 0.627), integrated indicators ($F^{[1.58]}$= 6.63; p = 0.013; η2p = 0.103), identified indicators ($F^{[1.58]}$27.2; p < .001; η2p = 0.319), introject indicators ($F^{[1.58]}$= 78.7; p < .001; η2p = 0.576) and external indicators ($F^{[1.58]}$= 4.77; p = 0.033; η2p = 0.076). In addition, significant interactions for Group*Time were found for intrinsic indicators ($F^{[1.58]}$= 99.7; p < .001; η2p = 0.632), integrated indicators ($F^{[1.58]}$= 50.0; p < .001; η2p = 0.463), identified indicators ($F^{[1.58]}$= 45.0; p < .001; η2p = 0.437), introject indicators ($F^{[1.58]}$= 4.26; p = 0.044; η2p = 0.068) and external indicators ($F^{[1.58]}$= 174 ; p < .001; η2p = 0.750).

Student's paired t-test carried out on two groups showed that AVF-VEF could significantly increase the motivation score more than the CG programme (Figure 2).

Based on Table 4, Two-way repeated measures ANOVA carried out on the motivation test shows a significant effect of Time on the batting indicator ($F^{[1.58]}$ = 216.1; p < .001; η2p = 0.788), the bowling indicator ($F^{[1.58]}$= 219.2; p < .001; η2p = 0.791), and the fielding indicator ($F^{[1.58]}$= 120.0; p < .001; η2p = 0.674). The group effect also showed significant results for the batting indicator ($F^{[1.58]}$= 12.2; p < .001; η2p = 0.174), the bowling indicator ($F^{[1.58]}$= 7.47; p = 0.008; η2p = 0.114), and the fielding indicator ($F^{[1.58]}$= 56.2; p < .001; η2p = 0.492). In addition, significant interactions for Group*Time were found for the batting indicator ($F^{[1.58]}$= 26.1; p < .001; η2p = 0.311), the bowling indicator ($F^{[1.58]}$= 4.47; p = 0.039; η2p = 0.072), and the fielding indicator ($F^{[1.58]}$= 59.1; p < .001; η2p = 0.505).

Student's paired t-test performed on two groups separately showed that AVF-VEF could significantly improve the mean technical performance score more than the CG programme (Figure 3).

Table 3

Two-way repeated measures ANOVA test results on motivation between the AVF-VEF and CG programmes

Motivation	AVF–VEF (n = 30)				CG (n = 30)				Significance		
	Pre	Post	Δ	CI 95%	Pre	Post	Δ	CI 95%	Time	Group	Group*Time
Intrinsic (score)	8.73 ± 1.11	15.90 ± 2.26*	+7.17	8.22 to −6.11	9.13 ± 0.97	10.77 ± 0.85*	+1.67	−2.04 to −1.22	$F^{[1.58]}$= 252.2 p < .001 η^2_p = 0.813	$F^{[1.58]}$= 97.6 p < .001 η^2_p = 0.627	$F^{[1.58]}$= 99.7 p < .001 η^2_p = 0.632
Integrated (score)	6.30 ± 1.18	10.00 ± 2.03*	+3.70	−4.59 to −2.81	7.20 ± 1.19	7.63 ±1.07*	+0.43	−0.738 to −0.128	$F^{[1.58]}$= 80.1 p < .001 η^2_p = 0.580	$F^{[1.58]}$= 6.63 p = 0.013 η^2_p = 0.103	$F^{[1.58]}$= 50.0 p < .001 η^2_p = 0.463
Identified (score)	7.63 ± 1.13	10.57 ± 1.45*	+2.94	−3.61 to −2.25	7.57 ± 1.13	8.10 ± 0.88*	+0.53	−0.806 to −0.261	$F^{[1.58]}$= 93.9 p < .001 η^2_p = 0.618	$F^{[1.58]}$= 27.2 p < .001 η^2_p = 0.319	$F^{[1.58]}$= 45.0 p < .001 η^2_p = 0.437
Introject (score)	9.50 ± 0.90	13.00 ± 1.96*	+3.50	−4.36 to −2.64	7.87 ± 1.04	10.20 ± 1.67*	+2.33	3.10 to −1.57	$F^{[1.58]}$= 106.43 p < .001 η^2_p = 0.647	$F^{[1.58]}$= 78.7 p < .001 η^2_p = 0.576	$F^{[1.58]}$= 4.26 p = 0.044 η^2_p = 0.068
External (score)	7.20 ± 0.80	13.07 ± 0.48*	+5.87	−6.52 to −5.22	9.17 ± 0.87	10.23 ± 0.85*	+1.06	−1.43 to −0.701	$F^{[1.58]}$= 363 p < .001 η^2_p = 0.862	$F^{[1.58]}$= 4.77 p = 0.033 η^2_p = 0.076	$F^{[1.58]}$= 174 p < .001 η^2_p= 0.750

Note: AVF-VEF: augmented video feedback-verbal encouragement feedback; CG:control group; CI: confidence interval;*Significantly different from pre- to post-test values (at $p < 0.05$)

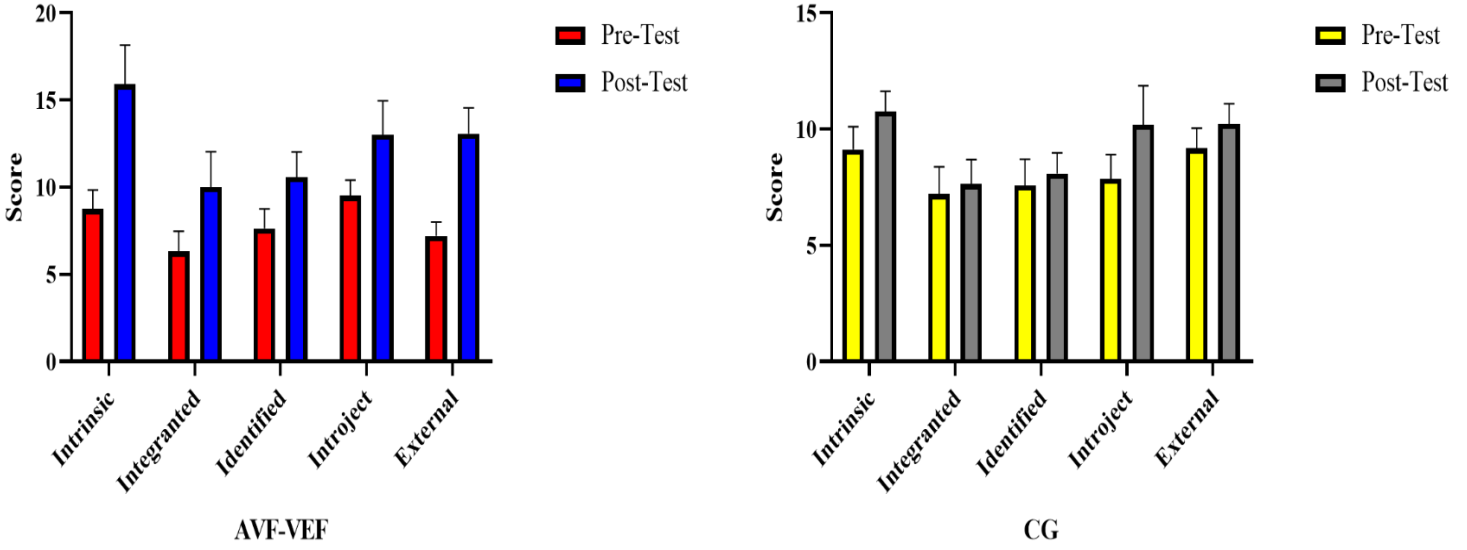

Figure 2
The difference in mean motivation scores from pre-post-test between the AVF-VEF and CG programmes

Table 4

Two-way repeated measures ANOVA test results on technical performance between the AVF-VEF and CG progammes

Technical Performance	AVF–VEF (n = 30)				CG (n = 30)				Significance		
	Pre	Post	Δ	CI 95%	Pre	Post	Δ	CI 95%	Time	Group	Group*Time
Batting (score)	1.90 ± 0.60	3.97 ± 0.71*	+1.77	−2.42 to −1.71	2.00 ± 0.52	3.00 ± 0.64*	+1.00	−1.24 to −0.760	$F^{[1.58]}$= 216.1 p < .001 η^2_p = 0.788	$F^{[1.58]}$= 12.2 p < .001 η^2_p = 0.174	$F^{[1.58]}$= 26.1 p < .001 η^2_p =0.311
Bowling (score)	1.90 ± 0.40	2.80 ± 0.40*	+0.90	−1.05 to −0.750	1.50 ± 0.50	2.70 ± 0.46*	+1.20	−1.45 to −0.952	$F^{[1.58]}$=219.2 p < .001 η^2_p= 0.791	$F^{[1.58]}$= 7.47 p = 0.008 η^2_p = 0.114	$F^{[1.58]}$= 4.47 p = 0.039 η^2_p = 0.072
Fielding (score)	2.17 ± 0.59	5.40 ± 1.67*	+3.23	−3.89 to −2.58	2.17 ± 0.59	2.73 ± 0.45*	+0.56	−0.838 to −0.295	$F^{[1.58]}$= 120.0 p < .001 η^2_p = 0.674	$F^{[1.58]}$= 56.2 p < .001 η^2_p = 0.492	$F^{[1.58]}$= 59.1 p < .001 η^2_p = 0.505

Note: *Significantly different from pre- to post-test values (at $p < 0.05$)

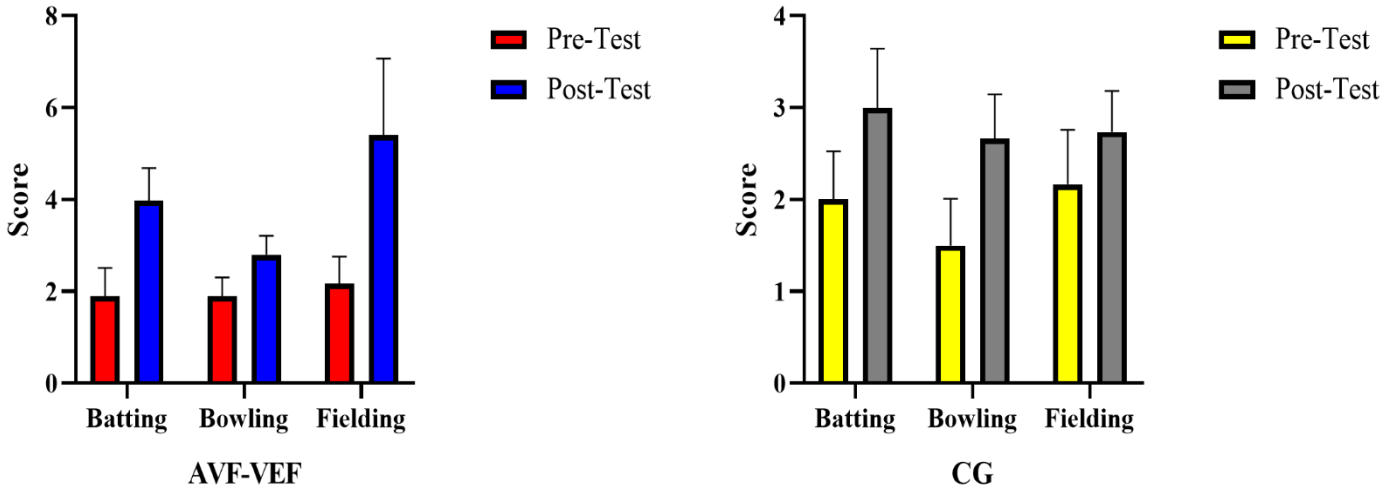

Figure 3
Differences in mean technical performance scores from pre-post-test between the AVF-VEF and CG programmes

Discussion

The aim of this study was to examine the impact of using AVF-VEF on the motivation and technical performance of novice cricket athletes.

Our findings show that AVF-VEF provided for 11 weeks proved effective in improving two aspects simultaneously, namely motivation and technical performance. Additionally, we observed that AVF-VEF proved to have greater positive effects than the CG programme. These results prove that the AVF-VEF programme constitutes an important component of a meaningful training process for athletes, for example before, during and after training. The athletes were given feedback in the form of information regarding their batting movements, bowling and fielding which they can observe via a video on a laptop. They were given feedback in the form of verbal support from the coach. Getting a lot of feedback in a training session shall provide more opportunities for athletes to analyze every movement in their sports discipline (Soylu et al., 2023). This confirms previous findings that feedback that was provided either through video technology (Mason et al., 2021; Pettit & Karageorghis, 2020) or verbal support (Pacholek & Zemková, 2022) can trigger several positive results, for example, by applying feedback as a tool to encourage the development of athletes' skills and successful performance in competitive sports (Otte et al., 2020). In addition, these results are consistent with previous research, which shows that augmented feedback in the form of video technology (AVF) can improve poor technical performance of cricket athletes (Tissera et al., 2022). Weakley et al. (2023) explain that providing feedback in training can provide benefits in the form of increased muscle endurance, barbell kinetics and kinematics as well as changes in the athlete's motivation level. Other studies also report similar results, showing that AVF in training sessions works well in developing javelin throwing performance (Mengchao & Chenqi, 2022), anticipation, decision making (Zhao et al., 2022). There was not only AVF that proved to be effective as recent research conducted by (Mengi et al., 2023) reported similar results pertaining to verbal feedback (VEF) that improved the performance of twelve young basketball players. On the other hand, through their experimental research (Rusmana et al., 2023) reported that VEF applied for 12 weeks was effective in improving decision making and execution skills in basketball athletes. Basically, VEF which is integrated into a training process provides encouragement to athletes and contributes to optimal achievements in technical, physical and psychological performance (Selmi et al., 2023). Similarly, Tannoubi et al. (2023) also confirmed that it was important to provide VEF in training sessions, since it could significantly improve technical performance in beginner level basketball athletes. Thus, we confirm that the combined effect of AVF-VEF in this study supports the results of previous studies (Mason et al., 2021).

Strength and Limitation of the Study

Finally, a major strength in this study is the application of AVF-VEF before, during and after training, so it provided the athletes with a lot of information about how to perform technically, e.g., batting, bowling fielding. In addition, this AVF-VEF training was designed in an ecologically valid environment with real field-based training experience that can be easily learned by novice cricket athletes. However, we acknowledge that there are several limitations to this study. First, this study only involved novice athletes, which may limit the generalizability of the results. Second, the participants in the study were male, and this requires further comparisons involving female participants to confirm the effect of AVF-VEF on both genders. Apart from that, another suggestion is to involve both male and female athletes from several universities in Indonesia or other countries.

Conclusions

Based on the results and discussion, we conclude that this true experimental research with an 11-week RCT design provides a new scientific insight regarding the combined effects of AVF-VEF which has proven to be effective in increasing the level of motivation and technical performance among entry-level cricket athletes. Several practical implications may arise from this research. The results of our research can be used as a reference in guiding cricket trainers in creating a training programme with integrated AVF-VE. Apart from that, we recommend that cricket coaches and athletes implement the AVF-VE training programme continuously and for a long period of time so that novice athletes are more motivated to learn and improve their technical performance.

STATEMENT OF ETHICS

True experimental research with a random control trial (RCT) design for 11 weeks was carried out from December 2023-February 2024 at the State University of Jakarta and this research complies with the Declaration of Helsinki. All research protocols had been approved by the local research ethics committee of the State University of Jakarta (Indonesia) (number: 0765/UNJ.39.6.Ps/LT/2023).

DECLARATION OF CONFLICTING INTERESTS

The authors declared no potential conflicts of interests with respect to the research, authorship, and/or publication of the article *Impact of Augmented Video-Verbal Encouragement Feedback on Motivation and Technical Performance in Novice Cricket Athletes.*

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