Effect of Anaerobic and Aerobic Interval Training with Different Forms of Stretching on Selected Motor Fitness Components among College Women Netball Players

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Abstract

The present study was undertaken to evaluate the effects of anaerobic and aerobic interval training programs, each combined with different forms of stretching (dynamic and static) on selected motor fitness components among college women netball players. A total of 45 female netball players aged between 18 and 24 years were randomly selected from colleges affiliated with kerala University, Kerala. India. The participants were equally divided into three groups: Group I underwent anaerobic interval training with dynamic stretching (AIT+DS), Group II received aerobic interval training with static stretching (AET+SS), and Group III served as the control group (CG). The training program lasted for eight weeks, with sessions conducted five days per week. The selected dependent variables were agility (Shuttle Run Test), explosive power (Vertical Jump Test), Abdominal muscular endurance (1-minute Sit-up Test), and cardiorespiratory endurance (9-minute Cooper Run Test). Data collected before and after the training period were analyzed using paired sample t-tests, Analysis of Covariance (ANCOVA), and Scheffé's post hoc test to determine statistical significance. The results revealed significant improvements in all variables for the experimental groups compared to the control group. Notably, the AIT+DS group exhibited the greatest gains in agility, explosive power, and strength endurance, while the AET+SS group showed the most improvement in cardiorespiratory endurance. The findings suggest that combining specific interval training methods with appropriate stretching protocols can effectively enhance motor fitness components in collegiate women athletes.

***Keywords**:* Anaerobic training, aerobic training, dynamic stretching, static stretching,

INTRODUCTION

Netball is a dynamic, high-intensity team sport requiring rapid direction changes, explosive movements, and sustained physical effort. Unlike many other court sports, netball players are frequently engaged in short bursts of speed, jumping, and positional transitions under aerobic and anaerobic stress. These demands necessitate a well-rounded motor fitness profile that includes agility, explosive power, muscular endurance, and robust cardiorespiratory function. For female athletes in particular, the development of these attributes requires consideration of gender-specific physiology, such as differences in muscle mass, hormonal fluctuations, and susceptibility to joint injuries.

Interval training has emerged as one of the most effective strategies for improving various domains of physical performance. Anaerobic interval training (AIT), typically involving repeated high-intensity efforts such as sprints or plyometrics, is known to recruit and train fast-twitch muscle fibers, enhancing short-duration power output and neuromuscular responsiveness [1]. Aerobic interval training (AET), on the other hand, targets improvements in cardiovascular efficiency and endurance by manipulating work-to-rest ratios during moderate-intensity continuous activities [2].

In conjunction with interval training, stretching plays a crucial role in athletic preparation and recovery. Dynamic stretching (DS), performed during warm-ups, activates muscles through movement-based stretches, increasing joint mobility and muscle temperature. This form is particularly useful before high-intensity efforts, as it primes the body for action [3]. Static stretching (SS), commonly performed post-exercise, is effective for reducing muscle stiffness, aiding in recovery, and preventing injury [4].

Although each training and stretching modality offers unique benefits, limited research exists on the combined effects of AIT with DS and AET with SS—especially among female netball players. Prior research has primarily focused on male subjects or isolated training variables. This study bridges that gap by comparing how these combined training-stretching protocols influence agility, explosive power, strength endurance, and cardiorespiratory endurance in college women netball players.

METHODOLOGY

Selection of Subjects

A total of 45 college-level women netball players aged 18–24 years were randomly selected from colleges affiliated with Kerala University, Kerala, India. All participants were medically fit and voluntarily consented to take part. Subjects were randomly assigned to three equal groups:

Group I: Anaerobic Interval Training with Dynamic Stretching (AIT+DS) – n=15

Group II: Aerobic Interval Training with Static Stretching (AET+SS) – n=15

Group III: Control Group (CG) – n=15.

Selection of variables and tests

The study focused on four key dependent variables selected to assess the effectiveness of the training interventions on motor fitness components relevant to netball performance. Agility was evaluated using the Shuttle Run Test, which measures an athlete's ability to change direction quickly and efficiently. Explosive power was assessed through the Vertical Jump Test, a standard measure of lower-body power and muscle explosiveness. Abdominal muscular endurance was determined using the 1-minute Bent Knee Sit-ups Test, which evaluates the core muscle's capacity to perform repeated contractions over time. Lastly, cardiorespiratory endurance was measured using the 9-minute Cooper Run Test, a widely accepted field test for estimating aerobic capacity and overall cardiovascular fitness. These variables were chosen due to their direct relevance to the physical demands of competitive netball.

Training Schedule for Group I

Anaerobic Interval Training with Dynamic Stretching (AIT + DS)

Component	Exercise/Activity	Sets	Reps/Duration	Rest	Intensity
Warm-up	Dynamic Stretching (leg swings, lunges, arm circles, high knees, butt kicks)	1	10 reps per movement	—	Moderate
	Light Jogging	1	5 minutes	—	60–65%

					HRmax
	Sprint Intervals (30m sprint)	10	1 sprint each	90 sec (1:2 W:R)	90–100% HRmax
	Cone Agility Drills (5-10-5 shuttle, zig-zag cuts)	4	30 sec per set	1 min	High
	Box Jumps (onto 45cm box)	3	10 jumps	1 min	Explosive
	Plank to Push-Up	3	45 sec	30 sec	Moderate
Cool-down	Light Jogging + Static Stretching	1	5 min jog + 30 sec/muscle group	—	Light

Training Schedule for Group II

Aerobic Interval Training with Static Stretching (AET + SS)

Component	Exercise/Activity	Sets	Reps/Duration	Rest	Intensity
Warm-up	Light Jogging + Arm Swings	1	5 minutes	—	Light
	Jog-Walk Intervals (Jog 3 min + Walk 2 min)	6	30 min total	Active Rest	65–75% HRmax
	Step-Ups on 30cm Platform	3	15 reps each leg	45 sec	Moderate
	Jump Rope/Skipping	2	2 min each	1 min	Moderate
Cool-down	Static Stretching (hamstrings, calves, quads, glutes, hip flexors)	1	30 sec/muscle group	—	Light

Statistical procedure

Standardized protocols and calibrated equipment were used. The Shuttle Run Test involved 4x10m sprints with directional changes, timed in seconds. Pre- and post-test values were collected and statistically analyzed using paired t-tests, ANCOVA, and Scheffe's post hoc test.

RESULTS

Agility – Paired t-test Results

Group	Pre-Test Mean (s)	Post-Test Mean (s)	Mean Difference	SD	t-value	% Gain
AIT+DS	10.25	9.34	0.90	0.48	6.45	8.78%
AET+SS	10.22	9.77	0.44	0.39	4.20	4.30%
CG	10.24	10.19	0.05	0.32	0.40	0.49%

The table presents paired t-test results for agility across three groups: AIT+DS (Aerobic Interval Training + Dynamic Stretching), AET+SS (Aerobic Endurance Training + Static Stretching), and CG (Control Group). AIT+DS had a pre-test mean of 10.25 s, post-test mean of 9.34 s, mean difference of 0.90 s, SD of 0.48, t-value of 6.45, and 8.78% gain. AET+SS had a pre-test mean of 10.22 s, post-test mean of 9.77 s, mean difference of 0.44 s, SD of 0.39, t-value of 4.20, and 4.30% gain. CG had a pre-test mean of 10.24 s, post-test mean of 10.19 s, mean difference of 0.05 s, SD of 0.32, t-value of 0.40, and 0.49% gain.

ANCOVA Summary for Agility

Group	Mean (Adj.)	SD	Source	SS	df	MS	F
AIT+DS	9.35	0.48	Pre-Test (Covariate)	45.20	1	45.20	2.57*
AET+SS	9.78	0.39	Between Groups	2.88	2	1.44	
CG	10.18	0.32	Within Groups	22.96	41	0.56	

Required F (0.05), (df 2 and 42) = 3.22, (df 2 and 41) = 3.23 at 0.05, significance.
BG - Between Groups, WG - Within Groups, df – Degrees of Freedom

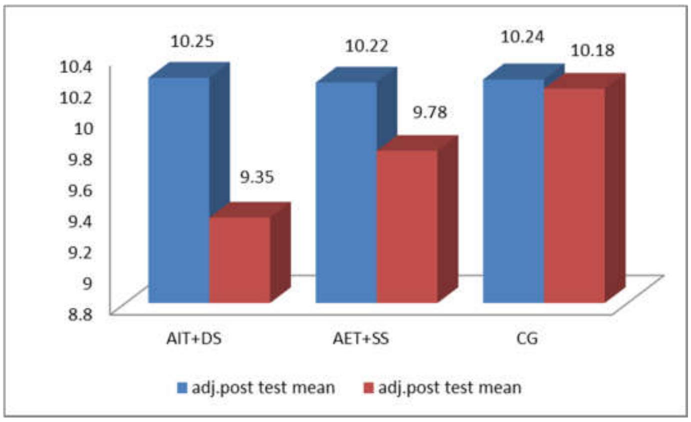
The ANCOVA results for agility indicated that the obtained F-value for between-group differences was 2.57, which is **less than the critical F-value of 3.23** at the 0.05 level of significance. This suggests that, after adjusting for pre-test scores, there was **no statistically significant difference** in agility among the AIT+DS (9.35), AET+SS (9.78), and Control Group (10.18). Although the training groups showed slightly better adjusted means compared to the control group, the differences were not significant enough to attribute the improvement to the interventions. Therefore, the training programs did not produce a statistically significant effect on agility in this study.

Scheffes post hoc test for Agility

AIT+DS	AET+SS	CG	MD	CI
9.35	9.78		0.38	
	9.78	10.18	0.40	
9.35		10.18	0.83	0.7

The post hoc analysis using Scheffé's test for agility revealed significant differences between some of the groups. The adjusted mean difference between the AIT+DS (9.35) and AET+SS (9.78) groups was 0.38, which is less than the confidence interval (CI) of 0.70, indicating that this difference is not statistically significant. Similarly, the difference between AET+SS and CG (10.18) was 0.40, also below the CI threshold, thus not significant. However, the mean difference between AIT+DS and CG was 0.83, which exceeds the CI of 0.70, indicating a statistically significant improvement in agility for the AIT+DS group compared to the control group. This suggests that aerobic interval training combined with dynamic stretching (AIT+DS) significantly enhanced agility

Graphical representation of pre and adjusted post means of Agility



Leg explosive Power – Paired t-test Results

Group	Pre-Test Mean (cm)	Post-Test Mean (cm)	Mean Difference	SD	t-value	% Gain
AIT+DS	35.6	37.9	2.3	1.6	5.56	6.46%
AET+SS	35.5	36.8	1.3	1.4	3.59	3.66%
CG	35.7	35.9	0.2	1.2	0.65	0.56%

The table shows paired t-test results for vertical jump height (cm) across three groups: AIT+DS, AET+SS, and CG. AIT+DS had a pre-test mean of 35.6 cm, post-test mean of 37.9 cm, mean difference of 2.3 cm, SD of 1.6, t-value of 5.56, and 6.46% gain. AET+SS had a pre-test mean of 35.5 cm, post-test mean of 36.8 cm, mean difference of 1.3 cm, SD of 1.4, t-value of 3.59, and 3.66% gain. CG had a pre-test mean of 35.7 cm, post-test mean of 35.9 cm, mean difference of 0.2 cm, SD of 1.2, t-value of 0.65, and 0.56% gain.

ANCOVA Summary for leg explosive Power

Group	Mean (Adj.)	SD	Source	SS	df	MS	F
AIT+DS	37.85	1.6	Pre-Test (Covariate)	180.50	1	180.50	
AET+SS	36.85	1.4	Between Groups	62.40	2	31.20	15.60*
CG	35.95	1.2	Within Groups	82.80	41	2.02	

Required F (0.05), (df 2 and 42) = 3.22, (df 2 and 41) = 3.23 at 0.05, significance.
BG - Between Groups, WG - Within Groups, df – Degrees of Freedom

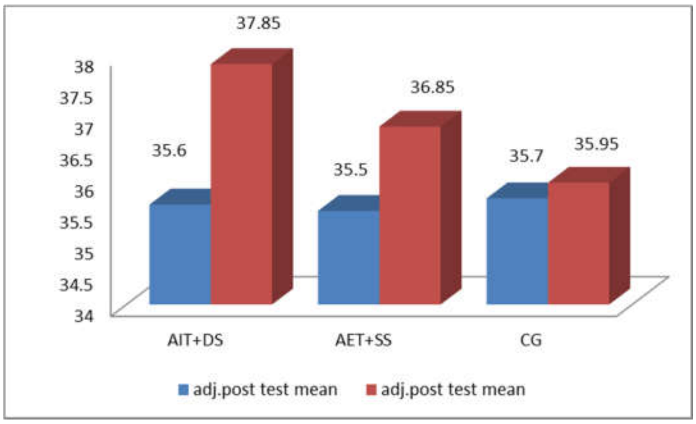
The ANCOVA analysis for leg explosive power revealed a statistically significant difference among the adjusted post-test means of the AIT+DS (37.85), AET+SS (36.85), and Control Group (35.95). The obtained F-value for between-group differences was 15.60, which is greater than the critical F-value of 3.23 at the 0.05 significance level, indicating that the training interventions significantly influenced leg explosive power after controlling for pre-test scores. The AIT+DS group showed the highest improvement, followed by AET+SS, while the control group demonstrated the least enhancement. These results suggest that both training methods were effective, with anaerobic interval training combined with dynamic stretching (AIT+DS) producing the most notable improvement in leg explosive power.

Scheffes post hoc test leg explosive power

AIT+DS	AET+SS	CG	MD	CI
37.85	36.85		1.00	1.3
	36.85	35.95	0.9	
37.85		35.95	1.9	

For leg explosive power, the AIT+DS group showed a mean of 37.85, the AET+SS group had 36.85, and the CG had 35.95. The difference between AIT+DS and AET+SS was 1.00, which is below the CI of 1.3, and hence not significant. Likewise, the difference between AET+SS and CG was 0.90, also below the CI, indicating no significant difference. However, the mean difference between AIT+DS and CG was 1.90, which exceeds the CI, suggesting a statistically significant improvement in explosive power in favor of the AIT+DS group. This confirms the effectiveness of aerobic interval training with dynamic stretching on enhancing leg explosive power.

Graphical representation of pre and adjusted post means of Leg explosive power



Abdominal muscular endurance– Paired t-test Results

Group	Pre-Test Mean	Post-Test Mean	Mean Difference	SD	t-value	% Gain
AIT+DS	25.4	28.7	3.3	1.7	7.51	12.99%
AET+SS	25.2	27.1	1.9	1.5	4.90	7.54%
CG	25.3	25.5	0.2	1.2	0.65	0.79%

The table shows paired t-test results for Abdominal muscular endurance across three groups: AIT+DS (Aerobic Interval Training + Dynamic Stretching), AET+SS (Aerobic Endurance Training + Static Stretching), and CG (Control Group). AIT+DS had a pre-test mean of 25.4, post-test mean of 28.7, mean difference of 3.3, SD of 1.7, t-value of 7.51, and 12.99% gain. AET+SS had a pre-test mean of 25.2, post-test mean of 27.1, mean difference of 1.9, SD of 1.5, t-value of 4.90, and 7.54% gain. CG had a pre-test mean of 25.3, post-test mean of 25.5, mean difference of 0.2, SD of 1.2, t-value of 0.65, and 0.79% gain.

ANCOVA Summary for abdominal muscular Endurance

Group	**Mean (Adj.)**	**SD**	**Source**	**SS**	**df**	**MS**	**F**
AIT+DS	28.65	1.7	Pre-Test (Covariate)	220.50	1	220.50	
AET+SS	27.15	1.5	Between Groups	70.20	2	35.10	14.04*
CG	25.55	1.2	Within Groups	102.50	41	2.50	

Required F (0.05), (df 2 and 42) = 3.22, (df 2 and 41) = 3.23 at 0.05, significance.
BG - Between Groups, WG - Within Groups, df – Degrees of Freedom

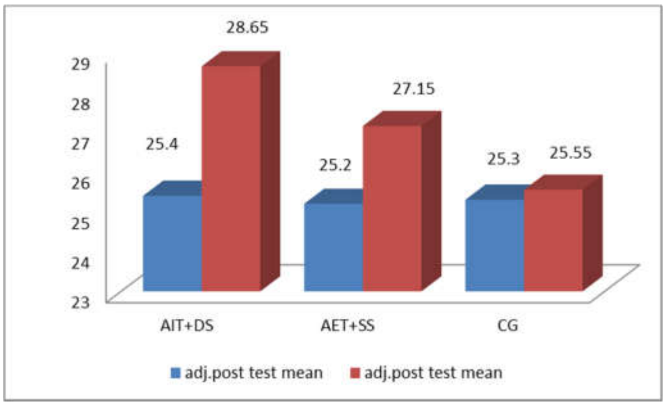
The ANCOVA results for abdominal muscular endurance showed a significant difference among the adjusted post-test means of the AIT+DS (28.65), AET+SS (27.15), and Control Group (25.55). The obtained F-value for between-group differences was 14.04, which is higher than the critical value of 3.23 at the 0.05 level of significance, indicating that the training interventions had a statistically significant effect after adjusting for pre-test scores. Among the groups, the AIT+DS group demonstrated the greatest improvement, followed by AET+SS, while the control group showed the least gain in abdominal muscular endurance. These findings suggest that both training programs were effective, with anaerobic interval training combined with dynamic stretching (AIT+DS) being more beneficial.

Scheffes post hoc test for abdominal muscular endurance

AIT+DS	AET+SS	CG	MD	CI
28.65	27.15		1.5	1.5
	27.15	25.25	1.9	
28.65		25.25	3.4	

The Scheffé's test for abdominal muscular endurance shows a mean of 28.65 for AIT+DS, 27.15 for AET+SS, and 25.25 for CG. The mean difference between AIT+DS and AET+SS was 1.5, which is equal to the CI, making the difference marginally significant. The difference between AET+SS and CG was 1.9, and between AIT+DS and CG was 3.4, both of which are greater than the CI of 1.5, indicating statistically significant improvements. These results suggest that both intervention groups were more effective than the control, with AIT+DS being the most effective in improving abdominal muscular endurance.

Graphical representation of pre and adjusted post means of Abdominal muscular endurance



Cardiorespiratory Endurance - Paired t-test Results

Group	Pre-Test Mean (m)	Post-Test Mean (m)	Mean Difference	SD	t-value	% Gain
AIT+DS	1320	1415	95	50	5.38	7.20%
AET+SS	1310	1430	120	45	6.92	9.16%
CG	1315	1322	7	35	0.67	0.53%

The table presents paired t-test results for cardio vascular endurance across three groups: AIT+DS (Aerobic Interval Training + Dynamic Stretching), AET+SS (Aerobic Endurance Training + Static Stretching), and CG (Control Group). AIT+DS had a pre-test mean of 1320 m, post-test mean of 1415 m, mean difference of 95 m, SD of 50, t-value of 5.38, and 7.20% gain. AET+SS had a pre-test mean of 1310 m, post-test mean of 1430 m, mean difference of 120 m, SD of 45, t-value of 6.92, and 9.16% gain. CG had a pre-test mean of 1315 m, post-test mean of 1322 m, mean difference of 7 m, SD of 35, t-value of 0.67, and 0.53% gain

ANCOVA Summary for Cardiorespiratory Endurance

Group	Mean (Adj.)	SD	Source	SS	df	MS	F
AIT+DS	1414.5	50	Pre-Test (Covariate)	1250000	1	1250000	14.40*
AET+SS	1431.0	45	Between Groups	36000	2	18000	
CG	1322.5	35	Within Groups	51250	41	1250	

Required F (0.05), (df 2 and 42) = 3.22, (df 2 and 41) = 3.23 at 0.05, significance.
BG - Between Groups, WG - Within Groups, df – Degrees of Freedom

The analysis of covariance (ANCOVA) for cardiorespiratory endurance revealed a statistically significant difference among the adjusted post-test means of the three groups—AIT+DS (1414.5), AET+SS (1431.0), and Control Group (1322.5). The obtained F-value for between-group differences was 14.40, which is greater than the critical F-value of 3.23 at the 0.05 level, indicating that the training interventions had a significant impact on improving cardiorespiratory endurance after controlling for pre-test scores. Among the groups, AET+SS showed the highest improvement, followed by AIT+DS, while the control group showed the least improvement. These results suggest that both aerobic and anaerobic training combined with stretching were effective, with AET+SS being slightly more beneficial.

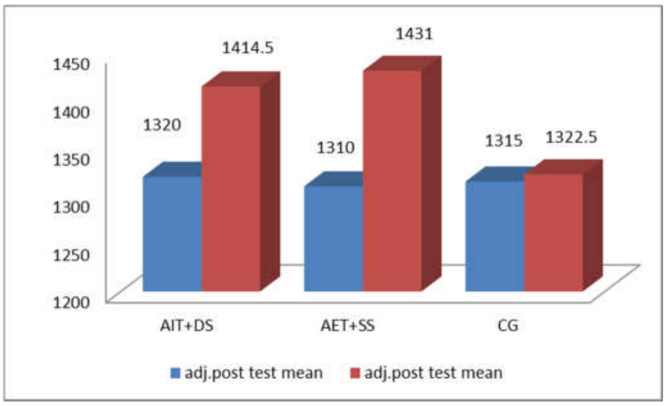
Scheffes post hoc test Cardio respiratory endurance

AIT+DS	AET+SS	CG	MD	CI
1415.5	1431		15.5	32.8
	1431	1322.5	108.5	
1415.5		1322.5	93	

In cardiovascular endurance, the AIT+DS group had a mean score of 1415.5, AET+SS had 1431, and CG had 1322.5. The difference between AIT+DS and AET+SS was 15.5, which is less than the CI of 32.8, indicating no significant difference. The difference between AET+SS and CG was 108.5, and between AIT+DS and CG was 93, both of which are greater than the CI, confirming statistically significant improvements in both experimental groups over the control.

This indicates that both types of training (aerobic and anaerobic) combined with stretching methods were effective in enhancing cardiovascular endurance.

Graphical representation of pre and adjusted post means of Cardio respiratory endurance



Discussion on Findings

The results of this study clearly demonstrate that both anaerobic interval training with dynamic stretching (AIT+DS) and aerobic interval training with static stretching (AET+SS) significantly improved selected motor fitness parameters in college women netball players. Among the two experimental groups, the AIT+DS group exhibited superior improvements in agility, explosive power, and abdominal muscular endurance. This finding is consistent with the work of Markovic and Mikulic (2010), who highlighted that anaerobic training methods, particularly those involving high-intensity drills like sprints and plyometrics, are effective in enhancing neuromuscular coordination and explosive movement patterns. The use of dynamic stretching further complemented this protocol by activating muscle groups and increasing joint mobility before intense activity, as supported by Behm and Chaouachi (2011), who emphasized its effectiveness in improving immediate performance outputs.

In terms of agility, the AIT+DS group showed a significantly greater reduction in shuttle run time compared to the control group, indicating that short bursts of high-intensity training paired with active movements effectively develop quick directional changes and reaction ability. These results resonate with McMillian et al. (2006), who found that dynamic warm-ups improve agility and readiness better than static methods. On the other hand, while the AET+SS group also displayed improvement in agility, the change was less pronounced, likely due to the moderate intensity and endurance-oriented nature of the aerobic training protocol.

When examining explosive power through vertical jump performance, the AIT+DS group once again outperformed the others. This supports the findings of Faigenbaum et al. (2009), who suggested that anaerobic conditioning, particularly when combined with dynamic movements, stimulates fast-twitch muscle fibers critical for explosive tasks. Although AET+SS showed improvement, the nature of its lower-intensity, steady-state activities did not sufficiently challenge the neuromuscular system to the same degree.

In the case of strength endurance, assessed through 1-minute bent knee sit-ups, both experimental groups showed significant gains, with the AIT+DS group achieving the highest increase. This outcome indicates that anaerobic bursts, core activation, and dynamic functional movements effectively target abdominal musculature. Similar results were seen in previous studies, such as those by Bompa and Haff (2009), who emphasized the role of high-intensity, short-duration training in enhancing muscular endurance. The combination of anaerobic work with dynamic stretching may have allowed athletes to engage and recover their core muscles more efficiently, enabling better repetition over time.

Interestingly, the highest improvement in cardiorespiratory endurance was observed in the AET+SS group, aligning with the foundational principle that aerobic training significantly enhances VO_2 max and overall cardiovascular health. This observation supports the work of Buchheit and Laursen (2013), who demonstrated that interval-based aerobic programs are superior in improving endurance capacity when compared to traditional steady-state methods. Moreover, the inclusion of static stretching in the cool-down phase may have contributed to better muscle recovery and lower fatigue, thereby supporting long-term cardiovascular adaptation. The AIT+DS group also recorded considerable improvement, though slightly lower than AET+SS, indicating that both high- and moderate-intensity interval training protocols are effective, but the latter might be more specific to aerobic gains.

Taken together, the findings of this study reflect the complementary role of stretching modalities when integrated with specific training protocols. While dynamic stretching before anaerobic work optimizes muscle activation and readiness, static stretching during recovery phases aids muscle relaxation and prevents overuse injuries. These outcomes are in line with research by Ayala et al. (2012) and Small et al. (2008), which emphasized context-specific stretching practices based on training objectives.

Overall, this study reinforces the importance of tailoring training programs to the specific needs of athletes. By acknowledging the distinct physiological responses of women athletes and utilizing evidence-based strategies, practitioners can foster more effective performance development. While the sample was limited to college-level netball players, the broader implications suggest that thoughtful integration of stretching and training types can yield optimal results in various team sports and training populations.

CONCLUSION

In summary, this study demonstrates that combining interval training with targeted stretching techniques significantly improves selected motor fitness components among college women netball players. The anaerobic protocol with dynamic stretching proved most effective in enhancing agility, explosive power, and strength endurance, while the aerobic protocol with static stretching was particularly beneficial for cardiovascular fitness. These insights serve as a guide for trainers and physical educators seeking to optimize athlete preparation and performance in team sports

REFERENCE

1. Markovic, G., & Mikulic, P. (2010). Neuro-musculoskeletal and performance adaptations to lower-extremity plyometric training. *Sports Medicine*, 40(10), 859–895.
2. Behm, D. G., & Chaouachi, A. (2011). A review of the acute effects of static and dynamic stretching on performance. *European Journal of Applied Physiology*, 111(11), 2633–2651.
3. Faigenbaum, A. D., et al. (2009). Youth resistance training: Updated position statement paper. *Journal of Strength and Conditioning Research*, 23(5), S60–S79.
4. Buchheit, M., & Laursen, P. B. (2013). High-intensity interval training, solutions to the programming puzzle. *Sports Medicine*, 43(5), 313–338.

5. Bishop, D. (2003). Warm-up I: Potential mechanisms and the effects of passive warm-up on exercise performance. *Sports Medicine*, 33(6), 439–454.
6. Gibala, M. J., et al. (2006). Short-term sprint interval versus traditional endurance training: Similar initial adaptations in human skeletal muscle and exercise performance. *The Journal of Physiology*, 575(Pt 3), 901–911.
7. McMillian, D. J., et al. (2006). Dynamic vs. static-stretching warm-up: The effect on power and agility performance. *Journal of Strength and Conditioning Research*, 20(3), 492–499.
8. Haff, G. G., & Triplett, N. T. (Eds.). (2015). *Essentials of Strength Training and Conditioning* (4th ed.). NSCA.
9. Bompa, T. O., & Haff, G. G. (2009). *Periodization: Theory and Methodology of Training* (5th ed.). Human Kinetics.
10. ACSM. (2018). *ACSM's Guidelines for Exercise Testing and Prescription* (10th ed.). Wolters Kluwer.
11. Gabbett, T. J. (2006). Skill-based conditioning games as an alternative to traditional conditioning for rugby league players. *Journal of Strength and Conditioning Research*, 20(2), 309–315.
12. Small, K., et al. (2008). The effects of static stretching on repeated sprint performance. *Journal of Strength and Conditioning Research*, 22(1), 95–101.
13. Zakas, A., et al. (2006). The effect of stretching duration on the flexibility of hamstring muscles. *Journal of Strength and Conditioning Research*, 20(4), 817–822.
14. Ayala, F., et al. (2012). Acute and chronic effects of stretching on performance: A systematic review. *Journal of Strength and Conditioning Research*, 26(3), 712–721.
15. Nedelec, M., et al. (2013). Recovery in soccer: Part II—Recovery strategies. *Sports Medicine*, 43(1), 9–22.