



# Impact Of Choiced Stretching Exercise On College Men's Agility And Flexibility

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**Abstract:** Finding out how stretching affected speed and jumping performance was purpose of the research. Twenty (n=20) students from the Department of Physical Education and Sports at Ayya Nadar Janaki Ammal College in Sivakasi were chosen at random for the study during the 2024–2025 academic year. Two groups of ten (n=10) each, such as an experimental group and a control group, were randomly assigned to the chosen subjects. In addition to following the curriculum's regular schedule, group A (n=10) received stretching exercise training for four weeks, with the number of sessions per week limited to three alternate days. Group B (n=10) served as the control group and was instructed to avoid any special.

**Index Terms – Stretching, Flexibility, Agility**

## 1. INTRODUCTION

Stretching is a type of physical exercise where a particular skeletal muscle (or muscle group) is purposefully extended, frequently by abduction from the torso, to restore comfortable muscle tone and the muscle's perceived elasticity. A sense of improved range of motion, flexibility, and muscle control is the end result. Another therapeutic use for stretching is to relieve cramps.

The length of the muscles that cross the joints and the absolute ranges of motion in a joint or group of joints are referred to as flexibility. Individual differences exist in flexibility, especially when it comes to the length of multi-joint muscles. Stretching is a common exercise component to maintain or improve flexibility. Exercise can increase the degree of flexibility in some joints. One of the most important aspects of physical fitness is thought to be flexibility.

The ability to shift the body's position efficiently is known as agility, and it necessitates the integration of discrete movement skills utilizing a mix of strength, endurance, stamina, reflexes, balance, coordination, and speed.

## 2. METHODOLOGY

Twenty (n=20) students from the Department of Physical Education and Sports at Ayya Nadar Janaki Ammal College in Sivakasi were chosen at random for the study during the 2024–2025 academic year. Two groups of ten (n=10) each, such as an experimental group and a control group, were randomly assigned to the chosen subjects. In addition to the regular curriculum schedule, group A (n=10) received stretching exercise training for four weeks, with the number of sessions per week limited to three alternate days. Group B (n=10) served as the control group and was instructed to forgo any additional training beyond their university-related leisure activities. Healthy males without any prior experience or formal training in stretching exercises will make up this group; participants were made aware of all potential risks associated with the study.

**Table I**  
**Participant's Characteristics by Group**

Group	Number	Age (Yr)	Height (Cms)	Weight (Cms)
Experimental group	10	20.8+ 1.6	174.5+ 5.4	66.5+ 4.1
Control group	10	20.6+ 1.5	176.5+ 4.4	64.7+ 4.4

The collected data statistically analyzed for significant difference using dependent 't' test and analysis of covariance (ANOCOVA). In this cases .05 level of significance was used to test the hypothesis. There was a significant improvement in flexibility on experimental group through stretching exercises. There was a significant improvement in agility on experimental group through stretching exercises.

**Table II**  
**Test Selection**

S.No	Criterion Variables	Test Items	Unit of Measurement
1	Agility	Shuttle run	In Seconds
2	Flexibility	Sit and reach	In Centimeters

**Table III**  
**Intra Class Co-Efficient of Correlation on Selected Dependent Variables**

Test (Variables)	'R' Values
Agility	0.88*
Flexibility	0.90*

## 2.1 AGILITY

**Table IV**  
**The Summary of Mean and Dependent 'T' – Test for the Pre and Post Tests on Agility of Experimental and Control Groups**

Mean	Experimental Group	Control Group
Pretest Mean	14.52	13.9
Posttest Mean	10.13	13.66
't' test	13.72	0.50
Table Value	2.26	2.26

\*Significant at .05 level. The table value required for 0.05 level of significance with df 9 is 2.26

**Table V**  
**Analysis of Covariance on Agility of Experimental and Control Groups**

Adjusted Post-test Mean		Sources of Variance	Sum of Square	df	Mean Squares	F-ratio
Experimental Group	Control Group					
10.83	13.24	Between	13.4	1	13.4	21.7*
		Within	10.5	17	0.62	

Significant at 0.05 level of confidence. The table value required for significance at 0.05 level with df 1 and 17 is 4.45

## 2.2 FLEXIBILITY

**Table VI**  
**The Summary of Mean and Dependent 'T' Test For the Pre and Post Tests on Flexibility of Experimental and Control Groups**

Mean	Experimental Group	Control Group
Pretest Mean	18.51	18.43
Posttest Mean	24.47	19.01
't' test	2.84	1.12
Table Value	2.26	2.26

Significant at .05 level. The table value required for 0.05 level of significance with df 9 is 2.26

**Table VII**  
**Analysis of Covariance on Flexibility of Experimental and Control Groups**

Adjusted Post-test Mean		Sources of Variance	Sum of Square	df	Mean Squares	F-ratio
Experimental Group	Control Group					
22.51	18.47	Between	18.59	1	18.59	45.45*
		Within	6.95	17	0.41	

Significant at 0.05 level of confidence. The table value required for significance at 0.05 levels with df 1 and 17 is 4.45

### 3. CONCLUSION

1. There was a significant improvement in flexibility on experimental group through stretching exercises.
2. There was a significant improvement in agility on experimental group through stretching exercises.

### 4. RECOMMENDATIONS

1. Stretching exercise training helps the competitor to prepare physically and psychologically, it may be given to other disciplinarians also.
2. The same study may conduct on women students.
3. A similar study may conduct and its influences on other physical and psychological variables.

### REFERENCES

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