



# EFFECT OF SIMPLIFIED MOVEMENT GAMES ON SELECTED MOTOR PROFICIENCY VARIABLES AMONG SCHOOL GIRLS

S. Preethi Prisilla<sup>1</sup>, Dr. S. Thirumalai Kumar<sup>2</sup>

<sup>1</sup>Ph.D. Scholar, Department of Physical Education, Tamil Nadu Physical Education and Sports University  
Chennai 600127

<sup>2</sup>Professor, Department of Physical Education, Tamil Nadu Physical Education and Sports University,  
Chennai 600127

## ABSTRACT

The study aimed to determine the effect of Simplified movement games on selected motor proficiency variables among school girls. To achieve this purpose 60 school girls were selected from Chennai District and they were divided into control groups and experimental groups each consists thirty subjects. Group one underwent simplified movement games and group two underwent a combination of simplified movement games and motor proficiency variables. Pre and Post-tests were conducted prior to and after the experimental training. The collected data were analyzed statistically with the Analysis of Covariance and Scheffe's Post hoc test. The analysis revealed the effect of simplified movement games on selected motor proficiency variables among school girls. The results proved that the simplified movement has significantly improved a positive effect on motor proficiency variables among school girls.

**KEYWORDS:** simplified motor movement games, Motor proficiency variables, school girls

## INTRODUCTION GIRL CHILD

A child is a boy or girl yet to become an adult. Children are tomorrow's citizens; thus, ensuring good health for children is extremely important. Girl child health plays a vital role in the development of a country. Girls' Education strengthens economics and reduces inequality. It contributes to more stable, resilient societies that give all individuals-including boys and men -the opportunity to fulfill their potential. But education for girls is about more than access to school. It's also about girls feeling safe in classrooms and supported in their subjects and careers. Girl child refers to the sequence of physical, language, thought, and emotional changes that occur in a child from birth to the beginning of adulthood.

## MOTOR PROFICIENCY

Motor proficiency is determined by qualitatively different aspects of both gross and fine motor development and serves as an index of children's motor development. (Bruininks, 1978).

## ROLE OF MOTOR PROFICIENCY DEVELOPMENT

Motor development is a progressive change in movement behavior throughout the life cycle brought about by interaction among the requirements of the movement task, the biology of the individual, and the condition of the learning environment (David L. Gallahue, 2003). Children will develop 2 types of motor (movement) skills: 'fine' motor skills and 'gross' motor skills. Fine motor skills involve using hands and fingers to control smaller objects. Gross motor skills involve the coordination of larger muscles in the body to make larger movements. Fine motor skills

engage the smaller muscles in the hands and fingers so a child can grasp, hold, grip, and pinch. picking up food, holding a pencil, or buttoning up a shirt all involve fine motor skills. Gross motor skills that involve the movement of the larger muscles in the arms, legs, and torso, such as crawling, running, jumping, and throwing are called gross motor skills (David L. Gallahue, 2003).

## MOVEMENT GAMES

The act or process of moving, change of place or position or posture. Movement activities also called gross motor activities, are games, actions, or activities of any kind that engage the large muscles of the body, thereby building gross motor coordination. Movement and play keep the body healthy and build coordination and strength. Some types of movement result in a change of place, they are termed locomotion. walking, cycling, running and swimming are some of the locomotory movements.

## PURPOSE OF THE STUDY

The purpose of the study was to find out the effect of simplified movement games on selected motor proficiency variables among school girls.

## HYPOTHESES

It was hypothesized that there would be a significant improvement in gross motor skills due to simplified movement games among school girls.



It was hypothesized that there would be a significant improvement in fine motor skills due to simplified movement games among school girls.

**DELIMITATIONS**

1. Only sixty school girls were selected Chennai district.
2. The age range between 6 to 10 years only.
3. Only simplified movement games are selected as independent variables.
4. Gross motor skills and fine motor skills were selected as a dependent variable.

**LIMITATIONS**

1. The differences that exist among the subjects due to varied factors such as heredity, food habits, family type, weight, and health factors will not be considered.

**SELECTION OF VARIABLES**

**Independent Variables**

- Simplified movement games
  1. Beam Balance walk with Ball
  2. Balancing Ball with Cone Zig Zag Walk
  3. Rope with a jump run
  4. Catch the tail
  5. Imitations of body parts
  6. Oops with the leg jump
  7. Catching the ball using the upper part
  8. Ball rolling
  9. Bambole race
  10. Cone fixing race

**Dependent Variables**

Motor development skills: Fine motor and Gross motor

**METHODOLOGY**

**SELECTION OF SUBJECTS**

The purpose of the study was to find out the effect of simplified movement games on selected motor proficiency variables among school girls. To achieve this purpose sixty children were selected from Chennai District and they were divided into two experimental groups each consists thirty subjects. Group one underwent simplified movement games, group two underwent a combination of simplified movement games and motor proficiency variables among school girls. Pre and Post-tests were conducted prior to and after the experimental training. Pre and Post-test were conducted prior to and after the experimental training through standardized tests. The training program will be scheduled for an hour 5 days/ week for both groups.

**STATISTICAL TECHNIQUE**

The collected data were analyzed statistically with the Analysis of Covariance and Scheffe’s Post hoc test.

**RESULTS AND DISCUSSION**

**Table - I Analysis of Covariance**

Variables	Test	Simplified Movement games	Combined group	SV	SS	Df	MS	F
Fine motor	Pre-test	1255	1265	B	1083.33	2	541.67	0.32
				W	96375	57	1690.79	
	Post test	1240	1197.5	B	27250	2	13625	5.98
				W	129875	57	2278.51	
	Adjusted	1242.46	1194.02	B	33409.29	2	16704.65	9.79
				W	95568.90	56	1706.59	
Gross motor	Pre-test	18.1	18.25	B	0.43	2	0.22	0.18
				W	68.5	57	1.20	
	Post test	17.6	18.9	B	17.73	2	8.87	6.96
				W	72.6	57	1.27	
	Adjusted	17.62	18.05	B	14.97	2	7.49	8.79
				W	47.70	56	0.85	

**\*Significant: Table Value requires 3.15**

The above table- I above shows that there was no significant difference between groups at the pre-test level which indicates that there were no differences among the the groups at the initial stage and proved that the groups were equally distributed. However, due to the training effect, there was a significant difference in the post and adjusted post-test which indicates the

effectiveness of all the experimental training programs. The combined group of simplified movement games and the isolated training groups proved to be effective in improving the motor proficiency variables with the movement games among school girls. Further Scheffe’s Post test was used for pairwise comparison.



**TABLE – II Scheffe’s post hoc test**

Variables	Combined group	Simplified Movement games	MD	CI
Fine motor	1194.02	-	48.47	33.20
	-	1242.92	3.51	33.20
	1194.02	1242.49	51.97	33.20
Gross motor	18.83	-	1.21	0.74
	-	18.05	0.43	0.74
	18.83	18.05	0.78	0.74

The above table indicates the pairwise comparison and indicates the supremacy of the combined group over the isolated training groups. The combined group showed better significant improvement in simplified movement games due to motor proficiency than the other isolated training groups among school girls.

**CONCLUSIONS**

1. The results showed that simplified movement games significantly improved gross motor skills among school girls.
2. The results showed that simplified movement games significantly improved fine motor skills among school girls.
3. Thus, the results showed that simplified games have significantly improved a positive effect on motor proficiency variables among school girls.

**REFERENCES**

1. Adolph KE, Robinson SR: *Motor development; in Liben L, Muller U (eds): Handbook of Child*
2. *Psychology and Developmental Science, ed 7. Hoboken, Wiley, 2015, pp 113–157.*
3. David L. Gallahue, Frances Cleland Donnelly (2013). *Developmental Physical Education For All Children, fourth edition,36-37*
4. Yobu (2010) *Test measurement and evaluation in physical education and sports, friends’ Publication (India)*
5. Zaitchik, D., Iqbal, Y., & Carey, S. (2014). *The effect of executive function on biological reasoning in young children: An individual differences study. Child Development, 85(1), 160–175. doi:10.1111/dev.12145 DOI - 10.1080/03004430.2016.1261337*