



Differences in Fundamental Movement Skill Performance Between Homeschool Boys and Girls

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Introduction

- There has a growing concern about health and fundamental movement skill development of homeschool students (Kabiri et al, 2018).
- The TGMD-3 assessment contains multiple movement skill tests to determine the level of movement skill performance proficiency.

Purpose

The purpose of this study was to examine gender differences in fundamental movement skill performances of homeschool students.

Results

The results of the study revealed no significant differences in locomotor skill performance ($t=-1.049$, $p=.299$) and in ball skill performance ($t=.076$, $p=.940$) between homeschool male and female students, respectively.

Methods

Participants

- A total of 49 homeschooled children with ages ranging from 4 to 11 participated in the current study.
- All participants (32 male and 17 female students) were enrolled in the Homeschool Physical Education Program run by Springfield College.

Testing Instruments

- A measuring tape, a set of cones, and a stopwatch were used to measure the locomotor movements of the participants.

Procedures

- The experiment was conducted in the Springfield College Field House. The participant performed the movement skill tests individually.
- Each participant performed 2 trials of each locomotor and ball movement skill tests. The average of their 2 performances was used in the data analysis.

Data Analysis

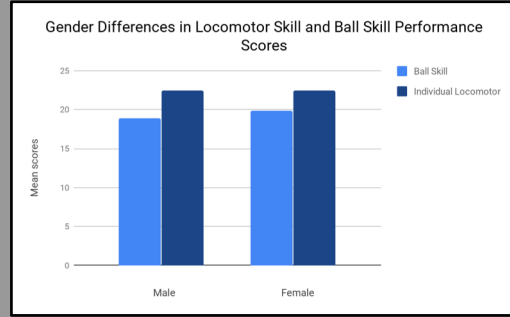
- Separate independent samples t tests were conducted to determine gender differences in both locomotor skill and ball skill performances.
- All analyses were conducted with the use of SPSS 24. Alpha level was set at .05.

Group Statistics				
Gender	N	Mean	Std. Deviation	Std. Error Mean
Locomotor Skill	Male	18.9063	3.44879	.6067
	Female	17.19342	2.84683	.71471
Ball Skill	Male	22.25398	2.65227	.47083
	Female	17.225384	3.10479	.75382

Independent Samples Test										
Levene's Test for Equality of Variances					t-Test for Equality of Means					
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	Lower	Upper
Locomotor Skill	Equal variances assumed	1.06	.303	-1.049	47	.299	-1.71283	.65936	-3.01933	.58718
	Equal variances not assumed			-1.162	37.627	.276	-1.71283	.63942	-2.93765	.56716
Ball Skill	Equal variances assumed	.003	.974	.076	47	.940	.08434	.84656	-1.63972	1.76742
	Equal variances not assumed			.072	38.862	.943	.08434	.80759	-1.75289	1.58136

Discussion and Conclusion

1. The findings of the present study suggest that homeschool male and female students demonstrate the same level of fundamental skill performance regardless age.
2. In the future studies, researchers should investigate gender differences in body control skill performance among homeschool students
 - Although males had better outcome scores, it is safe to conclude the homeschool children are equally skilled



References

Kabiri L. S., Mitchell K., Brewer W., & Ortiz A. (2018). How healthy is homeschool? An analysis of body composition and cardiovascular disease risk. *Journal of School Health*, 88, 132-138.

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