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**Comparative Study between High and Low Impact Aerobics  
on Dynamic Balance**

**Hitham Alnader  
Mu'tasem Khatatbeh**

**Abstract**

This study aimed to compare the effect of high and low impact of aerobic movement on the dynamic balance for the age group of 18-22 years.

The study was conducted using the experimental method on a sample consisting of 32 students were divided randomly into two Homogeneous experimental groups (group 1 consist of 16 subject) (group2 consist of 16 subject) in pre test variables (weight, height, length of the Lower limbs, and the values of the dynamic balance witch defined by a star excursion balance test.

Group 1(HIA) applied the high impact aerobic program for 12 weeks, three times a week for 50 minutes (10 minutes of warm-up, 30 minutes for the main part - aerobics movements - and 10 minutes of cooling). And the 2<sup>nd</sup> group (LIA) applied the same aerobic program in low impact.

To find differences between the two groups were used independent t-test. The study concluded that high impact aerobics classes may develop the ability of the human body moving in the dynamic balance on one foot. The study recommended the possibility of using the aerobics classes program Within preparation, prevention and physical rehabilitation associated with balance.

**Keywords:** Dynamic balance, aerobics, high, low. impact. star excursion balance test.

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(Cash-smith, 2002; Lukkanen et al., 2001)

(Hagberg et al., 1989).

(Ashutosh,

et al, 1997; Schmidt et al., 2001; Kramer et al., 2001; Chambliss, 2005

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		5.93155	173.1250		
.828	.220	.83417	19.8125		( )
		.77460	19.7500		
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.055	1.998	3.51188	88.7500		
		4.55887	85.8750		
.129	1.562	4.09878	70.0000		
		6.30839	67.0625		
.568	.577	4.04763	64.6250		
		3.91950	63.8125		
.185	1.357	3.69177	72.1875		
		6.59166	69.6250		
.277	1.106	3.46410	70.5000		
		4.74517	68.8750		
.240	1.198	2.62996	62.3750		
		2.96578	63.5625		
.413	.831	3.19831	74.3125		
		4.36988	73.1875		
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		2.13600	79.1875		

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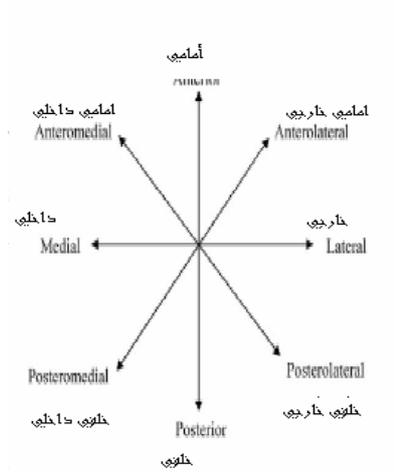
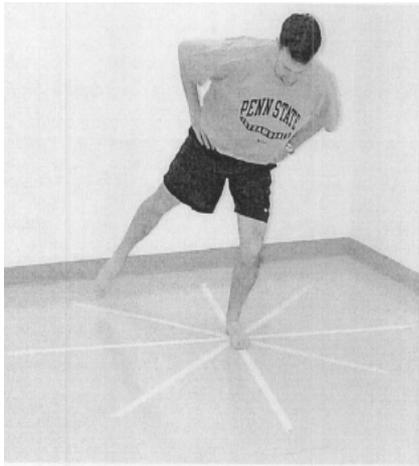
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### Star Excursion Balance Test (SEBT)



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	.000 *	15.000	3.51188	88.7500		
			3.63261	93.4375		
	.000 *	13.178	4.09878	70.0000		
			3.88962	77.0625		
	.000 *	11.502	4.04763	64.6250		
			3.30656	71.5000		

						( )
	.000 *	9.764	3.69177	72.1875		
			4.86998	77.8750		
	.000 *	11.962	3.46410	70.5000		
			4.51248	78.6875		
	.000 *	11.656	2.62996	62.3750		
			3.93065	68.6250		
	.000 *	12.29	3.19831	74.3125		
			2.45544	79.8125		
	.000 *	11.389	2.29401	77.9375		
			1.83371	83.1875		

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	.000 *	10.247	4.55887	85.8750		
			4.77493	88.5000		
	.000 *	10.401	6.30839	67.0625		
			5.34439	71.1875		
	.000 *	8.017	3.91950	63.8125		
			4.33397	68.1250		
	.000 *	9.043	6.59166	69.6250		
			6.00971	72.8750		
	.000 *	8.728	4.74517	68.8750		
			4.90875	74.6875		
	.000 *	7.154	2.96578	63.5625		
			3.21455	65.7500		
	.000 *	8.820	4.36988	73.1875		
			3.97492	76.2500		
	.000 *	11.783	2.13600	79.1875		
			1.82460	81.5625		

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.003	3.292	3.63261	93.4375		
		4.77493	88.5000		
.001	3.555	3.88962	77.0625		
		5.34439	71.1875		
.019	2.476	3.30656	71.5000		
		4.33397	68.1250		
.015	2.586	4.86998	77.8750		
		6.00971	72.8750		

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.023	2.400	4.51248	78.6875		
		4.90875	74.6875		
.031	2.265	3.93065	68.6250		
		3.21455	65.7500		
.005	3.050	2.45544	79.8125		
		3.97492	76.2500		
.018	2.513	1.83371	83.1875		
		1.82460	81.5625		

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(Plisky et al.2006; Emory et al.2005)

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and Horak,1986; Plisky et al. 2006; Riemann et al., 2002)

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al.,2002; Guskiewicz and Perrin,1998)

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