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Addressing Laterality to Prevent Injury in Dance Education: Teaching Methods to Compensate for the Right Bias and Asymmetry

Olivia M. Alsamadi

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Olivia Alsamadi, Virginia Commonwealth University
Mentor: Professor Mary Boyes, VCU Honors College

Introduction

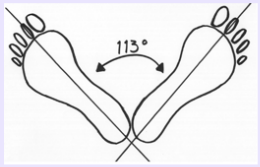
Despite the vast knowledge available about proper alignment and safe dance training, the growing demands for university dancers have plagued them with increasing rates of overuse injuries stemming from an imbalance in their practice often influenced by their professors. The purpose of this review is to study teaching methods in dance education and the right bias in university dance classes to learn how unbalanced teaching methods and dancers' asymmetric physicalities cause injuries. This research will help professors understand how to effectively communicate with their students to promote safe, injury preventing practice.

Table 3 The most common diagnoses. Numbers of injuries and percentages of all injuries recorded in female and male dancers between August 1988 and June 1995 are shown

	Number of injuries (%)	
	Girls	Boys
Traumatic injuries		
Ankle sprain	31 (7.1)	19 (4.4)
Distorsion dig pedis	15 (3.4)	4 (0.9)
Overuse injuries		
Foot		
Tendinosis pedis	37 (8.5)	19 (4.4)
Calcaneodynia	16 (3.7)	11 (2.5)
Plantar fasciitis	10 (2.3)	9 (2.1)
Knee		
Jumper's knee	13 (3.0)	18 (4.1)
Tendonitis genu	19 (4.4)	6 (1.4)
Chondromalacia patellae	19 (4.4)	6 (1.4)
Hip/thigh		
Tendinosis groin	28 (6.4)	13 (3.0)
Back		
Low back pain	23 (5.3)	22 (5.1)

Leanderson et al. (2011)

Kennedy et al. (2007)



Merkensteijn & Quin (2015)

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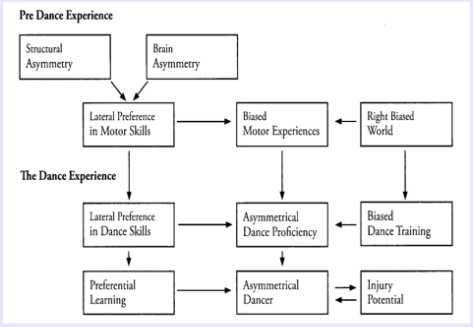
Inquiries

alsamadiom@vcu.edu



Akinleye & Payne (2016)

Methods

The research explores the various roles present in the problem, including the involvement of the student, professor, and even the physical therapist. This review investigates the influence the professor's language and actions have on the student's behaviors. For instance, how the student may interpret the language differently from the professor's true intentions. Also considered in the research is the implementation of screening students for any physical asymmetries or weaknesses at the beginning of each semester to develop a basis for individual conditioning programs to work toward evolving a more balanced body. In addition to these programs, the research examines the dancers' attitudes toward the implementation of these programs as well as fully complying with their physicians' requests during injury.

Table 2 Distribution of injuries by site, age, sex and type of injury (trauma/overuse). Test of difference (*P* value) between type of injury for each age group and by sex

	Age						
	≤10 years		11–14 years		15–21 years		All ages
	Number of injuries (trauma/overuse)						
	Girls	Boys	Girls	Boys	Girls	Boys	Total
Site of injury							
Foot/lower leg	0/4	1/3	14/30	7/24	28/65	17/33	67/159
Knee	1/2	0/1	2/31	3/12	2/20	1/17	9/83
Thigh/hip	0/0	0/0	1/16	1/2	0/14	1/11	3/43
Back	0/0	0/1	3/8	0/8	4/14	3/16	10/47
Upper extremity/misc.	0/0	0/0	4/2	3/0	3/1	2/2	12/5
Total	1/6	1/5	24/87	14/46	37/114	24/79	101/337
P value (trauma vs. overuse)	ns	ns	0.00001	0.00001	0.00001	0.00001	0.00001

Leanderson et al. (2011)

Results

The current research shows that students are more likely to learn about proper alignment and human anatomy than they are to actually embody the information and change their technique habits that are causing these injuries. There is a low percentage of physical therapists who treat dancers and understand how unique dance injuries are and how dance culture influences the prescribed treatment and recovery periods. The research done on university dance programs demonstrates that many schools do not offer an injury prevention course in their core requirements.

Koff (2016)

Discussion

Universities should consider strengthening their relationships between their dancers, professors, and physicians, which includes a required injury prevention course that is integrated into their other courses. Teachers and professors are encouraged to promote the equal training of both sides of their students' bodies, and to conduct their class through a dialogue. Outside of class, dancers should be conditioning to balance their strength/flexibility with a personal program specialized for their needs.

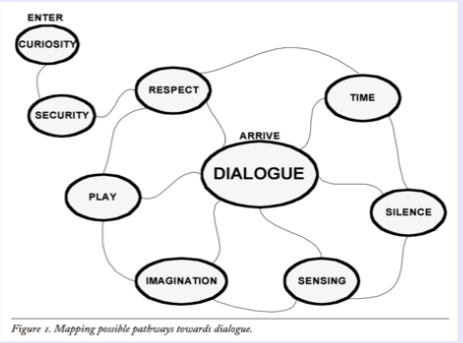


Figure 1. Mapping possible pathways towards dialogue.

Anttila (2007)

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