

A comparison of Paralympic and able-bodied athletes' physical self concept, and the impact of a centralized training environment

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Self Concept

- The way a person perceives him or herself, based on their experience and interpretation of their **environment**. (Shavelson, Hubner & Stanton, 1976)
- Self concept affects the way one behaves and their behaviours in turn subsequently affects one's self concept.
- Self concept is learned, dynamic and organized.

Research Supports

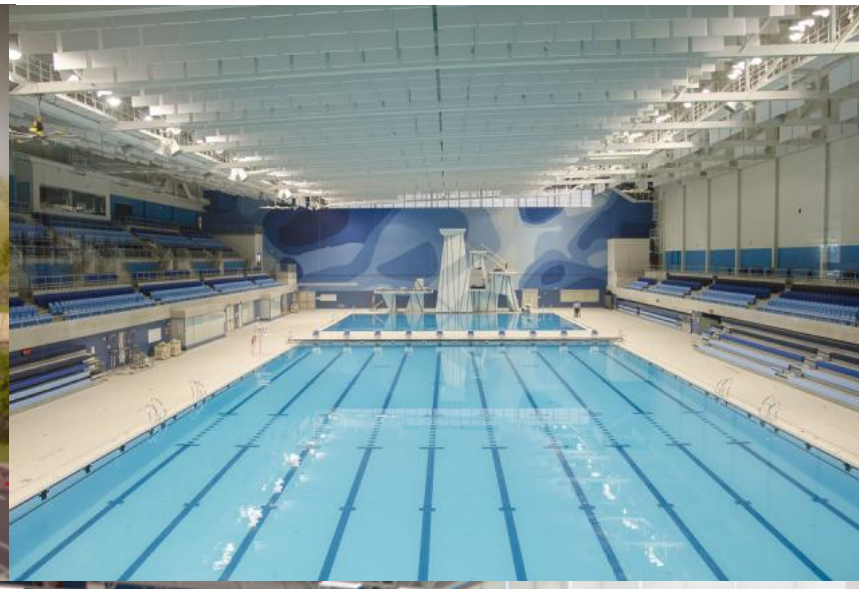
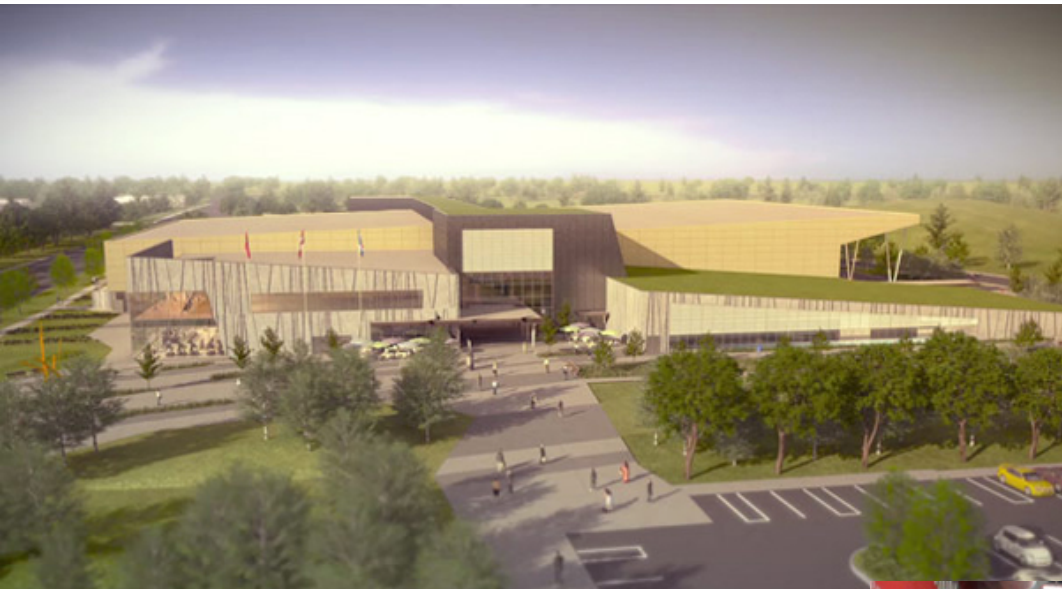
- The value of examining a multidimensional Physical Self Concept (PSC) (Martin & Whalen, 2012)
- PSC is an important mediator in physical activity (Shapiro & Martin, 2010)
- Gender differences in PSC are small in athletes (Marsh, Hey, Lawrence & Clark, 1997)
- PSC contributes to improving levels of physical activity and skill development
- Non-athletes have lower PSC than elite athletes (Marsh, 2007)
- SC declines from a young age into at least early adolescence and levels out and increase at least into early adulthood (Marsh, 1989)



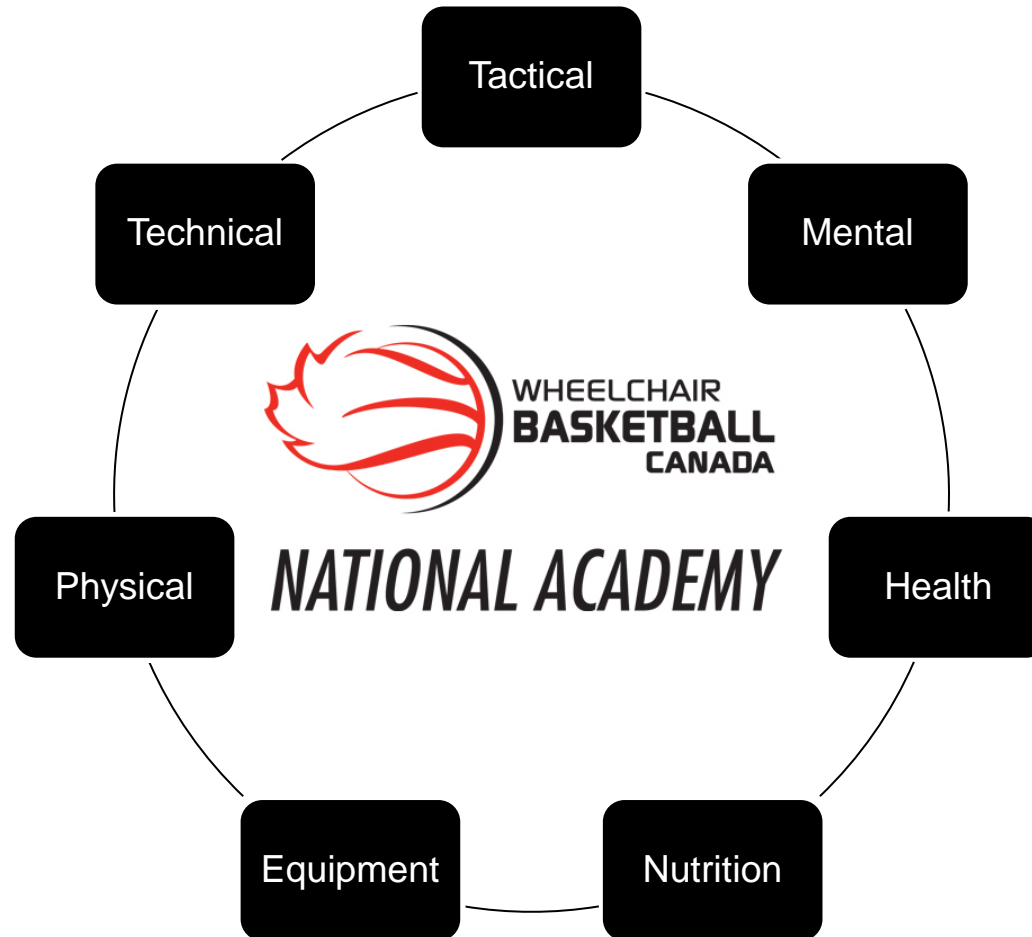
National Academy



Centralized Training Environment



Operational Components



Core Curriculum

Nutrition

- Blood work
- Supplement review
- Cooking Demos and lessons
- Diet logs
- Travel Planning
- General Nutrition Education
- Eating for Performance
- Iron Chef Contest
- Smoothie Bar

Health

- Pre-Participation Exam
- EKG and PFT
- Flu shot and Immunization
- Concussion baseline
- Physiatry
- Upper Extremity
- Shoulder Hygiene
- Sleep Analysis
- Daily Monitoring (HM)
- Physician accessible

Daily Schedule

Time	
7 to 9am	On Court Practice
9 to 930am	Refuel
930 to 1030am	Weights
1030 to 11am	Recovery
11am to 12pm	Small Group on court
12 to 1230pm	Lunch
1230 to 1pm	Pre Hab
1 to 2pm	Educational Session, Massage or Meeting



Procedure

- October 2014 – All National Team and Academy athletes completed the PSDS-S
- October through May fulltime centralized training environment with programming at the Academy
- May 2015 - All athletes completed the PSDS-S

Physical Self Description Scale (S)

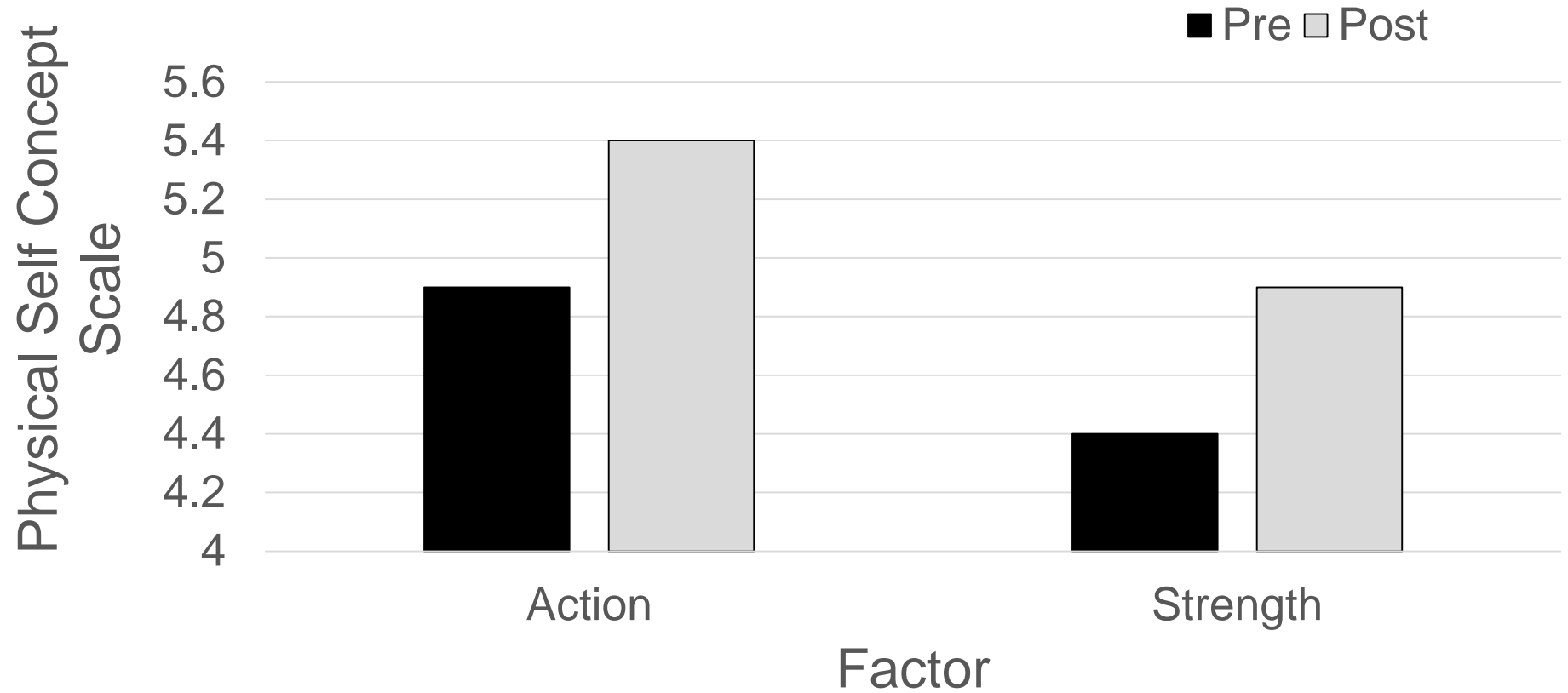
- Coordination
- Strength
- Flexibility
- Endurance
- Global Esteem
- Appearance
- Health
- Action
- Body Fat
- Sport Competence
- Global Physical Self Concept

Marsh, Martin & Jackson, 2010

Results

- ✓ Comparison to a sample of able bodied basketball players found our wheelchair basketball players to score lower on Sport Competence
- ✓ Male WCBB were found to higher than Female WCBB on the subscales of Body Fat and Appearance

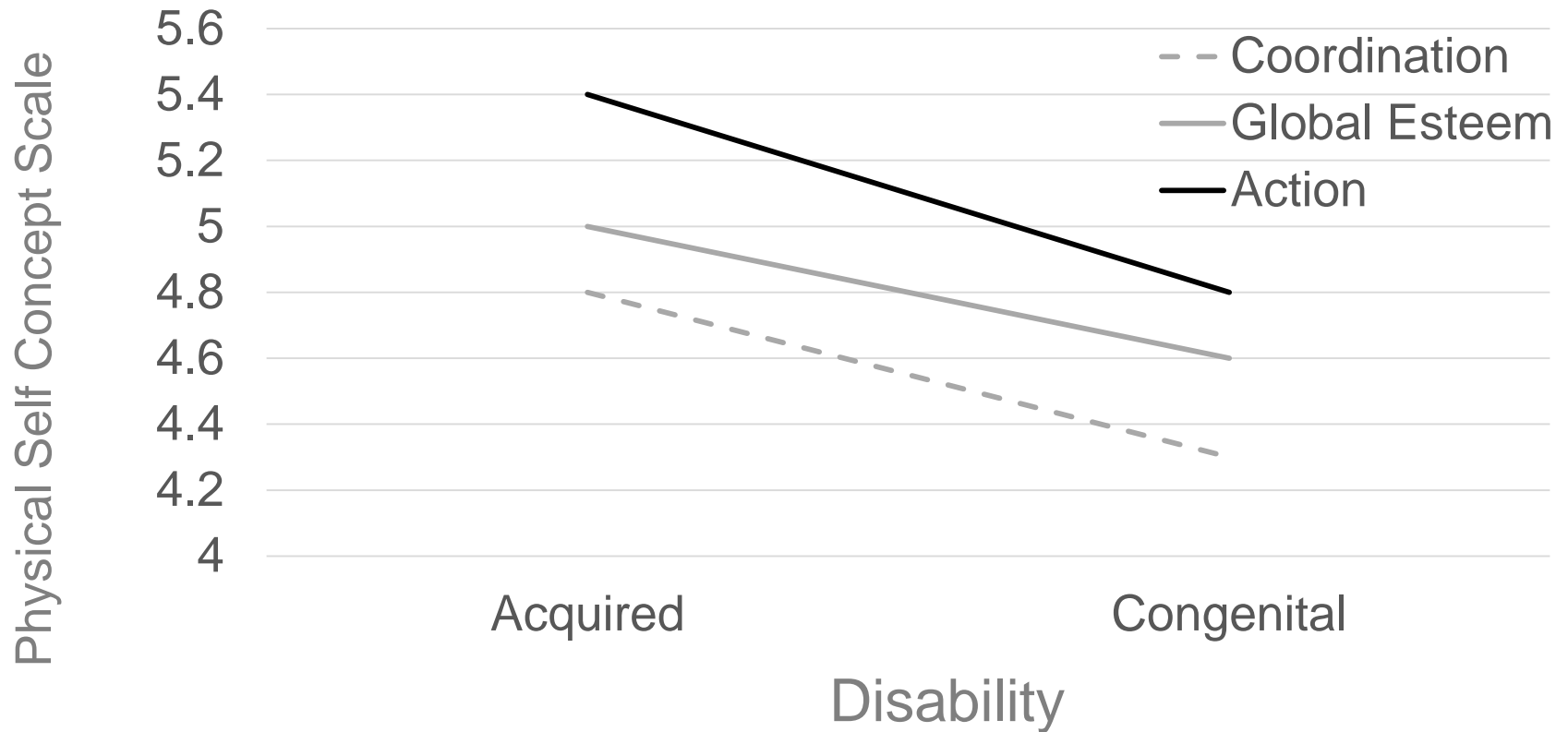
Results – Pre & Post Test



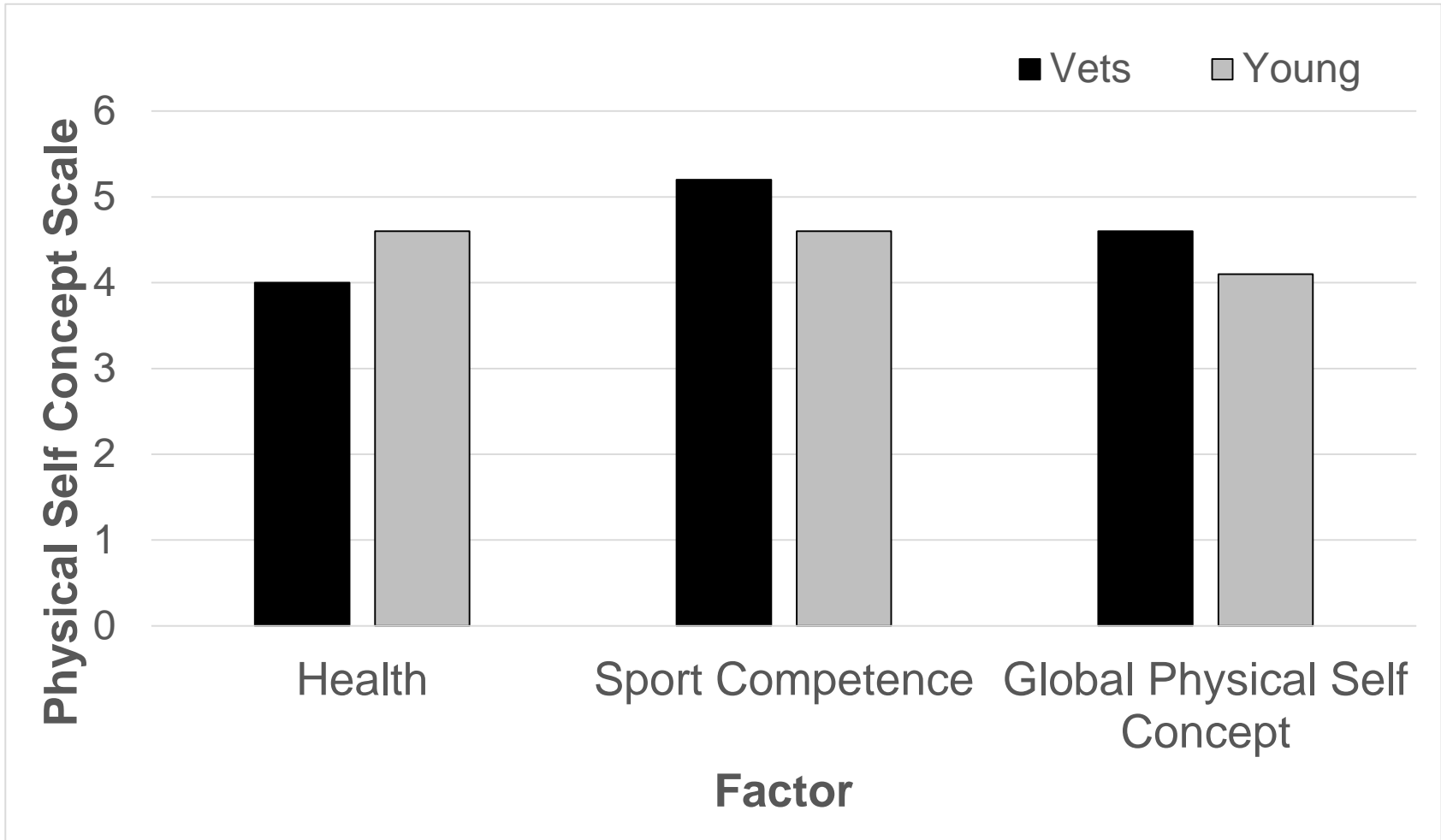
Results

- ✓ The analysis from Pre Test to Post Test did reveal several interesting findings:
 1. Over time scores significantly increased on the subscales of Strength and Action
 2. The subscales of Health, Global Esteem and Global Physical Self Concept were also trending in the positive direction, just did not reach significance

Results - Disability



Results - Age



Big-Fish-Little-Pond Effect

“Pat Anderson Effect”



Conclusions & Recommendations

- Physical Self Concept was positively impacted by the programming of our centralized training environment
- We need to constantly evaluate the training environment to ensure that it is positively impacting the general well being of the athletes.