

**University of Coimbra** 

Sport Sciences and Physical Education Faculty

**Portugal** 

# Anxiety and motivation in basketball athletes with and without disability

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2ND INTERNATIONAL CONFERENCE
THEORY AND PRACTICE IN ADAPTED PHYSICAL ACTIVITY
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# Psychological benefits of sport participation





- Better prepared to support tension and frustration,
- Easier to control anxiety levels,
- Less susceptibility to depression and low mood states,
- Higher contribution for the construction of individuals personality.

# Psychological determinants





Determinants are factors that might influence the individual participation in sport and exercise

(Biddle & Mutrie, 2001)

#### Which determinants?





- Motivation
- Trait anxiety
- State anxiety
- Self-esteem & Physical Self
- Self-confidence & Self-efficacy
- Athletic Identity
- (...)

### What is motivation?

"Motivation is simply the direction and the intensity of the individual effort"

(Sage, 1977)

"We may define motivation as the totality of the factors that determine different forms of behaviour directed to a certain goal"

(Samulski, 1990)





#### Motivation orientation



Task orientation – perceptions are self-referenced, with the motivation driven by the desire to master demands of a particular task and to improve one's ability or competence;



Ego orientation – perceptions are norm-referenced, with motivation driven by desire to perform as well or better than others.

#### Motivation orientation

#### Instrument:

Task and Ego Orientation in Sport Questionnaire (TEOSQ) (Duda, 1989) – 13 items

Portuguese version (Fonseca, 1999)

#### 2 dimensions:

- Task (7 items)
- Ego (6 items)



### Competitive sport anxiety





Top level disability sport has become increasingly organized and competitive, and achieved the potential to create anxiety in many disability sport participants (Campbell & Jones, 1997, 2002a, 2002b; Ferreira et al., 2007)

### Competitive sport anxiety

**Trait** 

State

**Trait Anxiety** - It's an individual predisposition where a person perceives a huge diversity of situations as threatening and responds to those situations with an unadjusted level of Anxiety.

**Arousal** – It's a general physiological and psychological excitement of the body, varies in a continuum from sleep to extreme excitement

<u>State anxiety</u> – Changes in the feelings related to worry and concern associatd to body excitment

#### **Cognitive**

Concern and negative thoughts

#### **Somatic**

Perceived physiological activation



# AROUSAL, STRESS & ANXIETY IN SPORT



### Sport trait anxiety assessment

#### Instrument:

Modified version of the Sport Anxiety Scale – SAS – (Smith, Smoll, & Schutz, 1990) - 21 original items
Portuguese version (Cruz, 1996) – 15 items

#### 3 dimensions:

- Somatic anxiety (9 items)
- Worry anxiety (7 items)
- Concentration disruption (5 items)



### State anxiety





Cognition and arousal are considered to be different components of the anxiety response and a distinction has been made between cognitive and somatic anxiety (Burton, 1998; Davidson & Schwartz, 1976; Deffenbacher, 1977; Smith, Smoll, & Wiechman, 1998) and they can be differently related to performance

### Sport state anxiety assessment

#### Instrument:

Competitive State Anxiety Inventory – 2 (revised) – (Cox, Martens, & Russell, 2003) - 27 items

Portuguese version (Cruz et al., 2006)

#### 3 dimensions:

- Cognitive anxiety (9 items)
- Somatic anxiety (9 items)
- Self-confidence (9 items)



# Sample

• N=95

Male basketball athletes from 1st division teams participating in the National Competition

• n=50

Athletes without disability 24.62 ± 3.53 yrs.

• n=45

Athletes with disability 30.40 ± 11.93 yrs.



#### **Procedures**

- One-to-one administration
- Being available to answer any questions
- In particular cases interview method was used
- Administration at the end of exercise and training sessions or during team meetings, with coaches agreement and cooperation
- Data was collected in private and social security institutions for elderly people in the district of Coimbra -Centre Portugal



### **Basketball athletes trait anxiety**

		Without disability		With disability			
SAS	n	M	SD	n	M	SD	
Som_anx_i	50	7.30	2.19	45	7.91	2.21	
Worry_i	50	10.74	2.55	45	11.07	3.73	
Conc_disrup_i	50	7.52	1.94	45	8.89	5.09	
Som_anx_d	50	1.08	5.28	45	<u>444</u>	6.59	
Worry_d	50	<u>26</u>	5.59	45	2.36	7.71	
Conc_disrup_d	50	1.34	6.41	45	.931	7.89	
Tot_anx_i	50	25.56	4.49	45	27.87	7.98	
Tot_anx_d	50	2.16	14.71	45	3.21	18.57	

### Basketball athletes state anxiety & motivation

	Without disability			With disability			
CSAI-2	n	M	SD	n	М	SD	
Cog_anx_i	50	25.56	4.49	45	27.87	7.98	
Som_anx_i	50	2.16	14.71	45	3.21	18.57	
Selfconf_i Cog_anx_d	50	18.36	3.97	45	22.53	10.09	
Som_anx_d	50	19.10	6.92	45	24.86	32.12	
Selfconf_d	50	32.20	9.44	45	35.91	30.87	
TEOSQ	n	М	SD	n	M	SD	
Task	50	4.34	.481	45	4.23	.525	
Ego	50	2.57	.782	45	2.18	.881	

### Trait anxiety in basketball athletes

Basketball athletes with and without disability showed a similar psychological pattern for both intensity and direction of trait anxiety.

### Trait anxiety

Basketball athletes with more years of sport experience present lower levels of intensity of somatic anxiety and intensity of total anxiety.

### State anxiety in basketball athletes

Basketball athletes with disability presented higher levels of cognitive anxiety [intensity] than athletes without disability. Significant statistical differences were found between both groups;

Wheelchair basketball athletes seem to think more about their performance and feel more concerned and worried with their performance just before the competition starts.

### State anxiety in basketball athletes

Significant statistical differences for intensity of cognitive anxiety between athletes with and without disability;

Athletes with disability present higher levels of cognitive anxiety, suggesting that they think more about the competition and are more concerned with their performance before the competition.

\*\* Significant at 0.01 level and \* at 0.05 level



#### Motivation orientation in BA

Athletes with disability show a similar motivation orientation pattern than basketball athletes without disability;

Basketball athletes with and without disability showed that they are strongly task oriented rather then ego oriented.

\*\* Significant at 0.01 level and \* at 0.05 level



#### Motivation orientation in WBA

Athletes with disability with more years of competitive experience showed higher level s of Ego motivation orientation when compared with their team mates with less competitive experience.

<sup>\*\*</sup> Significant at 0.01 level and \* at 0.05 level

ADAPTED PHYSICAL ACTIVITY QUARTERLY, 20th, 18, 364-315. @ 2001 Human Kinetics Publishers, Inc.

#### Sport Orientations and Goal Perspectives of Wheelchair Athletes

Emmanouil K. Skordilis University of Thessalia

Dimitra Koutsouki and Katerina Asonitou University of Athens

Elizabeth Evans, Barbara Jensen, and Kenneth Wall Springfield College



#### Motivation orientation in WBA

The motivational pattern found in the present study is similar to the one found in previous studies using the same instrument in WBA

This strong task orientation may be explained by the fact that team sport athletes tend to be more task oriented as consequence of the cooperation activities.

Task Ego

Perceptual and Motor Skills, 2007, 105, 339-346. © Perceptual and Motor Skills 2007

#### PRECOMPETITIVE ANXIETY AND SELF-CONFIDENCE IN ATHLETES WITH DISABILITY<sup>1</sup>

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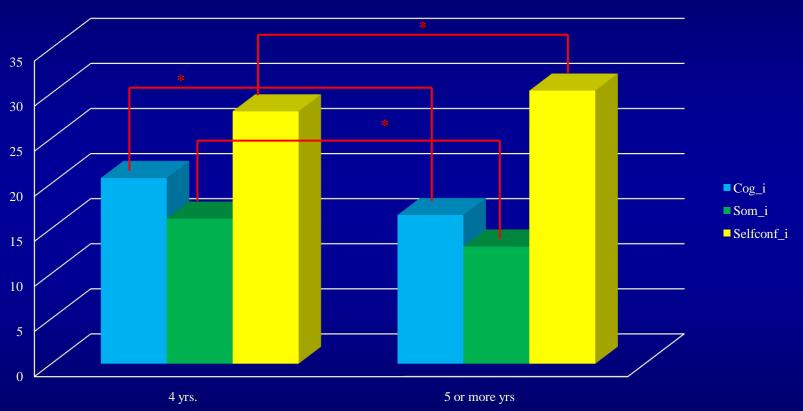
University of Plymouth

PEDRO MIGUEL GASPAR AND MARIA JOÃO CAMPOS

University of Coimbra

### State anxiety in wheelchair basketball athletes



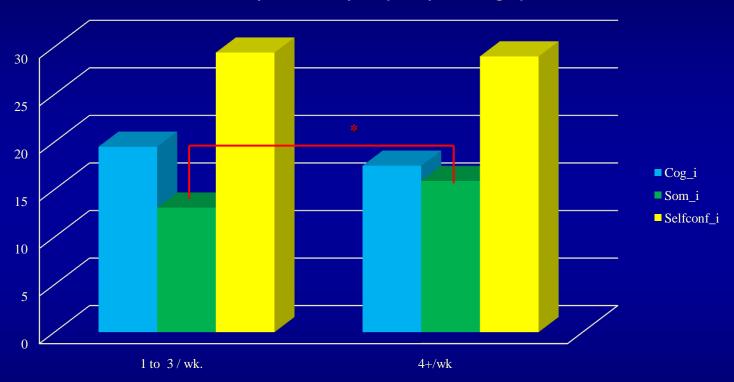


<sup>\*\*</sup> Significant at 0.01 level and \* at 0.05 level



### State anxiety in WBA

#### State anxiety and weekly frequency of doing Sport

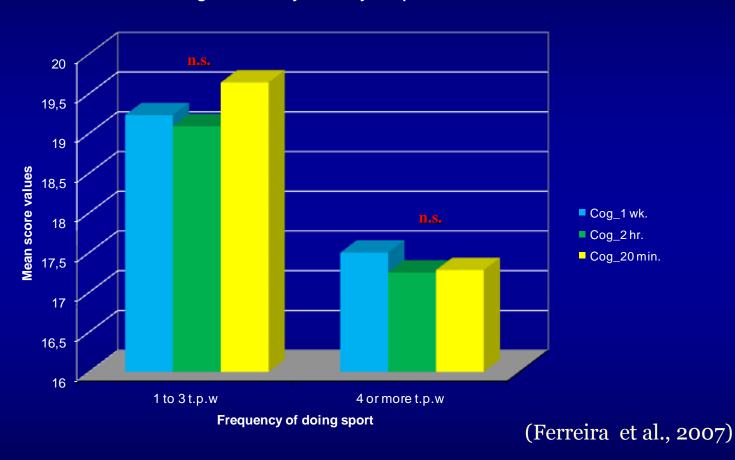


<sup>\*\*</sup> Significant at 0.01 level and \* at 0.05 level



## Cognitive anxiety in WBA

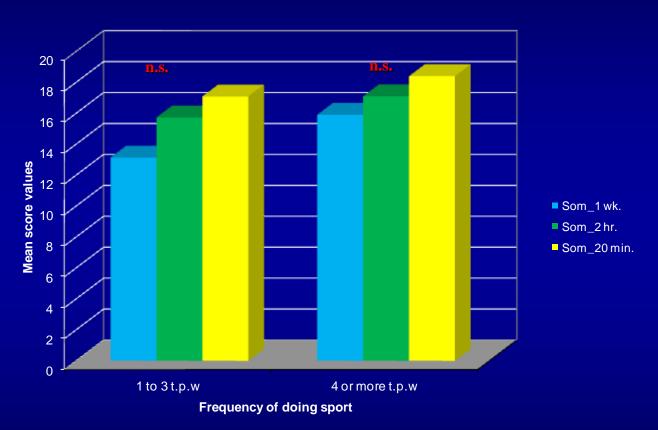
#### Cognitive anxiety intensity temporal variation





# Somatic anxiety in WBA

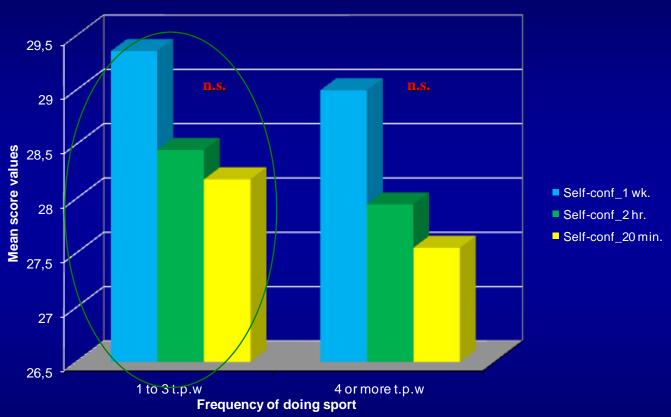
#### Somatic anxiety intensity temporal variation





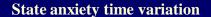
### Self-confidence in WBA

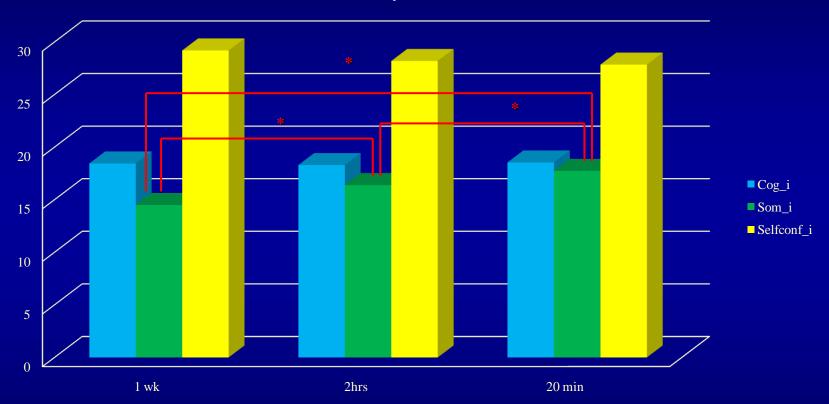
#### Self-confidence intensity temporal variation





# State anxiety in WBA





<sup>\*\*</sup> Significant at 0.01 level and \* at 0.05 level



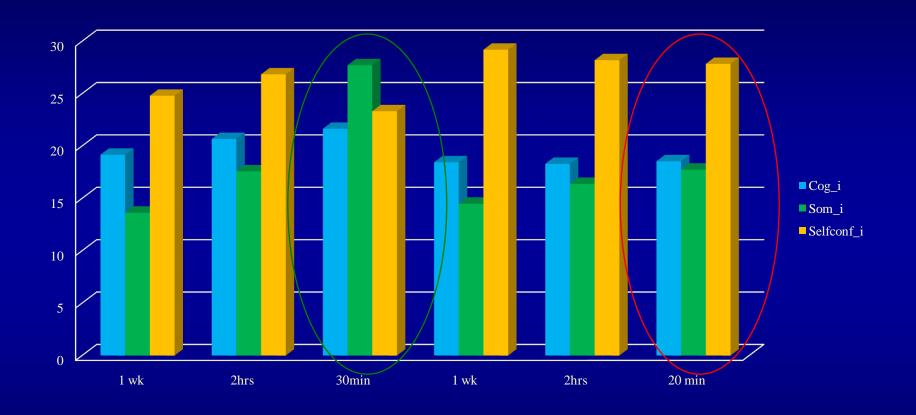
ADAPTED PHYSICAL ACTIVITY DUARTERLY, 1907, 14, 93 107. 41 1897 Holmon Kimetics Publishers, Inc.

#### Precompetition Anxiety and Self-Confidence in Wheelchair Sport Participants

Elizabeth Campbell and Graham Jones Loughborough University



# State anxiety in WBA



Campbell & Jones, 1997

Ferreira et al., 2007



### In summary



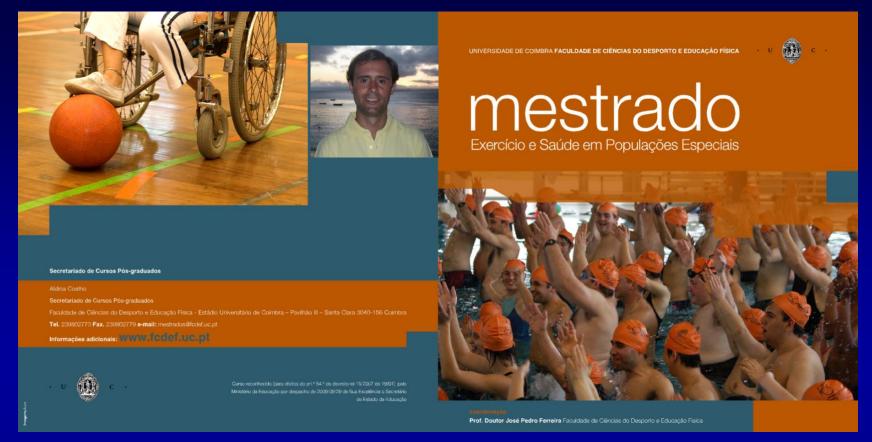


#### Key elements

- Disability sport athletes presented a precompetitive anxiety pattern similar to the one found in athletes without disability,
- Disability athletes may have fewer competitive experiences and may perceive less secure and less confident when experiencing new or less usual competitive sport situations,
- Disability sport and disability athletes may not be so competitive oriented as it is the case of male athletes without disability.



Thank you for your attention!



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