The impact of the achievement motive on athletic performance in adolescent football players

SGS-Conference Basel
14 February 2013

Claudia Zuber
ISPW, University of Bern
Psychological characteristics considered as very important for successful talent development

Particularly achievement motivation
(e.g. Brüggemann & Albrecht, 2003; Coetzee, Grobbelaar & Gird, 2006)

Evidence for the relationship between achievement motive and athletic performance from cross-sectional and longitudinal studies
(Elbe, Beckmann & Szymanski, 2003; Halvari & Thomassen, 1997)

Nature of the relation still unclear
Relationship between achievement motive and athletic performance I

Evidence anticipated in:

- Talent models and empirical findings from sport sciences
- Theories and empirical findings from general and pedagogical psychology
### Relationship between achievement motive and athletic performance II

<table>
<thead>
<tr>
<th>Model</th>
<th>Name</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM → P</td>
<td>Main effect model</td>
<td>Hohmann (2009)</td>
</tr>
<tr>
<td>AM → AT → P</td>
<td>Mediator model amount of training</td>
<td>Abbott &amp; Collins (2004)</td>
</tr>
</tbody>
</table>

AM = achievement motive; P = performance; AT = amount of training; MA = motor abilities; SS = sport-specific skills
Method I

Measures

- **Achievement motive (t₁)**
  Achievement Motive Scale-Sport (Elbe, Wenhold & Müller, 2005)
  Hope for Success (HS; $\alpha = .72$), Fear of Failure (FF; $\alpha = .77$)

- **Physical abilities & skills (t₁)**
  7 tests measuring the factors Football Technique (skills) and Physical Fitness (abilities)

- **Amount of training (Δt₁ t₂)**
  Summation of training hours in the club, with the regional squad and in spare time

- **Performance (t₂)**
  Expert rating by two squad coaches on a graphical rating scale (0-100)
  $r_{Interrater} = .80$
Population

- $N = 140$ male Swiss football players ($M_{age} = 12.26$)

Data analysis

- Structural equation modeling
  - Maximum likelihood
  - Parceling (Little, Cunningham & Shahar, 2002)
  - Bootstrapping for mediator models (Shrout & Bolger, 2002)
  - Multi-group comparison for moderator model (Weiber & Mühlhaus, 2010)
Results
Main effect model

\( \chi^2 = 13.61, p (df) = .73 (18), CFI >.99, RMSEA <.001 \)

HS = Hope for Success; FF = Fear of Failure; P = Performance; **bold** = \( p < .05 \)
Summary & Discussion

- Hope for Success as significant talent predictor in the middle-term
- No evidence for mediator and moderator effects
- No impact of Fear of Failure on athletic performance
- Need for longer research periods of examination and
- More detailed registration of training quality and effort

Results confirm the importance of psychological characteristics for talent selection and development
Thank you for your attention!

Questions!


