When our leader is convinced, so am I!
An experiment on team confidence contagion in basketball.

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Team confidence

Literature review:

- Team confidence
- Persistence
- Effort
- Motivation
- Team cohesion

Team performance
Sources of team confidence


Top 3 – Most important sources of team confidence

**Volleyball**

1. Coming together enthusiastically after a point.
2. Athlete leaders within the team believe our team will win the game and express this on the field.
3. Enthusiastic cheering of both field players and bench players.

**Soccer**

1. Athlete leaders within the team believe our team will win the game and express this on the field.
2. The coach believes our team will win the game and expresses this on the field.
3. The players play as one team, rather than for individual success.
The hypothesized model

Athlete leaders → Team confidence → Team performance
The hypothesized model


Athlete leaders → Collective efficacy → Team confidence → Team performance

Process-oriented

Outcome-oriented
The hypothesized model

Fransen, K., et al. (Submitted). The role of athlete leaders in affecting the team confidence of their teammates and coach: The mediating role of team identification and collective efficacy.
Basketball experiment

- Teams of 5 players: Shooting-contest
- Data collection: 102 players ($M_{age} = 14.6$)

- Manipulation:
  - Leader (=Confederate)
    - T-shirt Nr. 1, Older, More skilled
  - Leader’s expression of team confidence

  High confident VS Low confident
Experimental design

Start
- Leader is presented as the captain of the team

Quiz
- Leader knows the answers in advance

Warming-up
- Each player takes 10 shots / Neutral behaviour of leader

Test
- High confidence test (N=51)
  - Each player takes 10 shots
  - Leader expresses **HIGH** team confidence
  - Leader scores 5 out of 10

- Low confidence test (N=51)
  - Each player takes 10 shots
  - Leader expresses **LOW** team confidence
  - Leader scores 5 out of 10
**Manipulation check**

"To what extent do you perceive this person as leader of your team?"

-3 → 3

### Leadership Test:

- **Wilcoxon signed rank test**
  - **p < .001**

*In 22/26 teams the captain was perceived as best leader after the test*
Manipulation check

Team confidence expression

“To what extent does this person believe that your team will win this game?”

-3 → 3

Agree

After warming-up

Leader: 1.18

Other Players: .92

After high confidence test

Leader: 1.78

Other Players: .99

After warming-up

Leader: 1.52

Other Players: 1.01

Disagree

After low confidence test

Leader: .92

Other Players: .99

Test: Wilcoxon signed rank test  *p<.05  **p<.01  ***p<.001
Team confidence contagion

**Results**

“To what extent did the behaviour of this person strengthen your belief in winning/losing this contest?” -3 → 3

<table>
<thead>
<tr>
<th>Impact of team leader</th>
<th>Impact of other players</th>
</tr>
</thead>
<tbody>
<tr>
<td>High team confidence expression by team leader</td>
<td>1.55 ± 1.05</td>
</tr>
<tr>
<td>Low team confidence expression by team leader</td>
<td>-0.75 ± 1.74</td>
</tr>
<tr>
<td>High team confidence expression by team leader</td>
<td>0.95 ± 1.18</td>
</tr>
<tr>
<td>Low team confidence expression by team leader</td>
<td>0.18 ± 1.36</td>
</tr>
</tbody>
</table>

Test: ANOVA with repeated measures:

**Significant main effect for high/low confidence by team leader** (p < .001)
Results

“To what extent did the behaviour of this person strengthen your belief in winning/losing this contest?” -3 → 3

Test: ANOVA with repeated measures:
Significant interaction effect (p < .001)
The mediating role of team identification

Structural Equation Modeling by AMOS:

Model fit: $\chi^2=1.81; \text{df}=1; p=.18; \text{GFI}=.99; \text{AGFI}=.91; \text{CFI}=1.00; \text{RMSEA}=.09$

** $p<.001$
Impact on performance

Objective performance in contest (# scored shots out of 10)

Results

Test: ANOVA with repeated measures: Significant main effect for time ($p = .02$)
Impact on performance DURING test

Objective performance during test (# scored shots out of 4)

Results

Test: ANOVA with repeated measures: Significant interaction effect ($p < .05$)
Conclusions

1. **Manipulation** succeeded!

2. **Leader**: strongest impact upon teammates’ team confidence (Pos + Neg).

3. **Team identification** and **collective efficacy** partly mediate the relationship between team confidence expressed by the leader and the players’ team confidence.

4. **The effect on performance:**
   - An interaction effect within the test session emerged
     - Leader highly confident $\rightarrow$ Performance increases
     - Leader lowly confident $\rightarrow$ Performance decreases
Athlete leadership

Team identification

Team confidence & Collective efficacy

Performance
Thank you for your attention!

“Competitive sports are played mainly on a five-and-a-half-inch court; the space between your ears.”

Bobby Jones

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