

GETTING A GRIP ON CLASSIFICATION IN JUDO

DEVELOPING EVIDENCE BASED CLASSIFICATION FOR JUDO ATHLETES WITH VISION IMPAIRMENT

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OMEGA
WORLDWIDE TIMING
UKR 0
MEX 0
AVILA EDUARDO
-73kg 4:55
London 2012

STARTING POSITION

Able-sighted judo

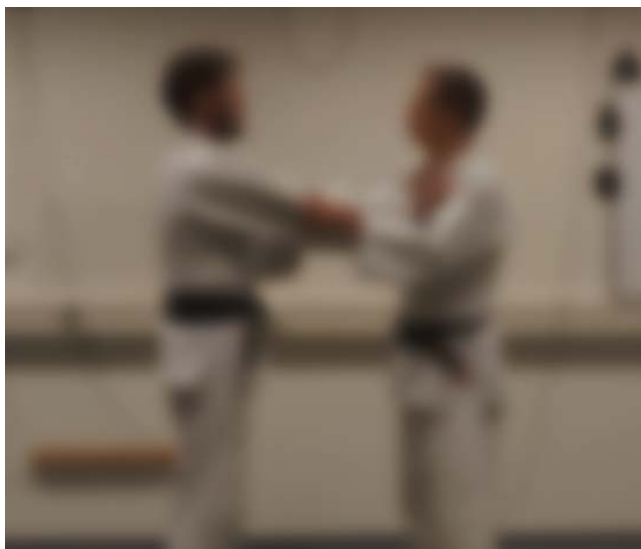
VI judo

CURRENT CLASSIFICATION IN VI SPORTS

B3



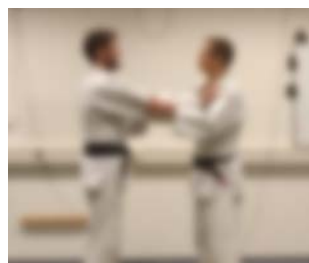
B2



B1



CURRENT CLASSIFICATION IN VI JUDO



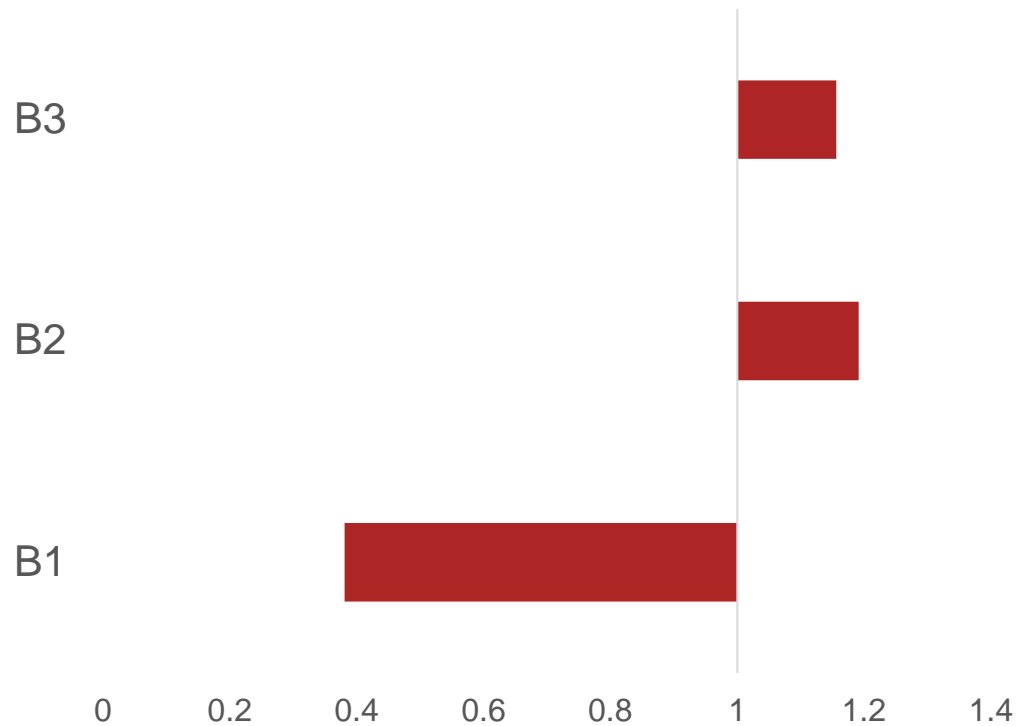
B3 + B2 + B1 combined



Effectively, VI judo has only one sports class

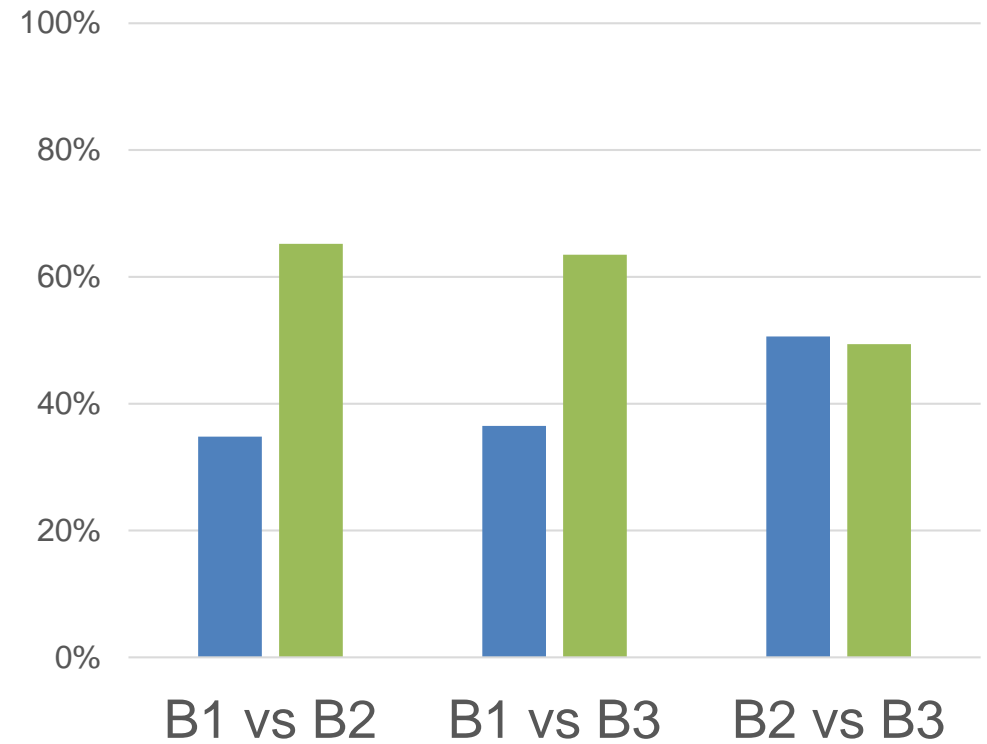
IS THE CURRENT SYSTEM LEGITIMATE?

Odds ratio (likelihood of winning a medal)



Krabben, Van der Kamp & Mann (2019)

Winning percentage



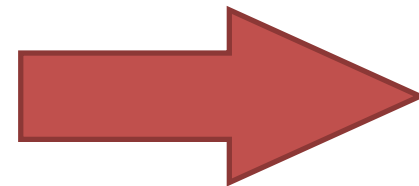
Mashkovskiy, Magomedova & Achkasov (2018)

BACKGROUND SUMMARY

- In the current system functionally blind athletes are less successful than their partially sighted opponents
- Need to develop new, evidence-based classification criteria for VI judo
- Evidence-based classification needs to be based on research examining the relationship between direct measures of impairment and sport performance

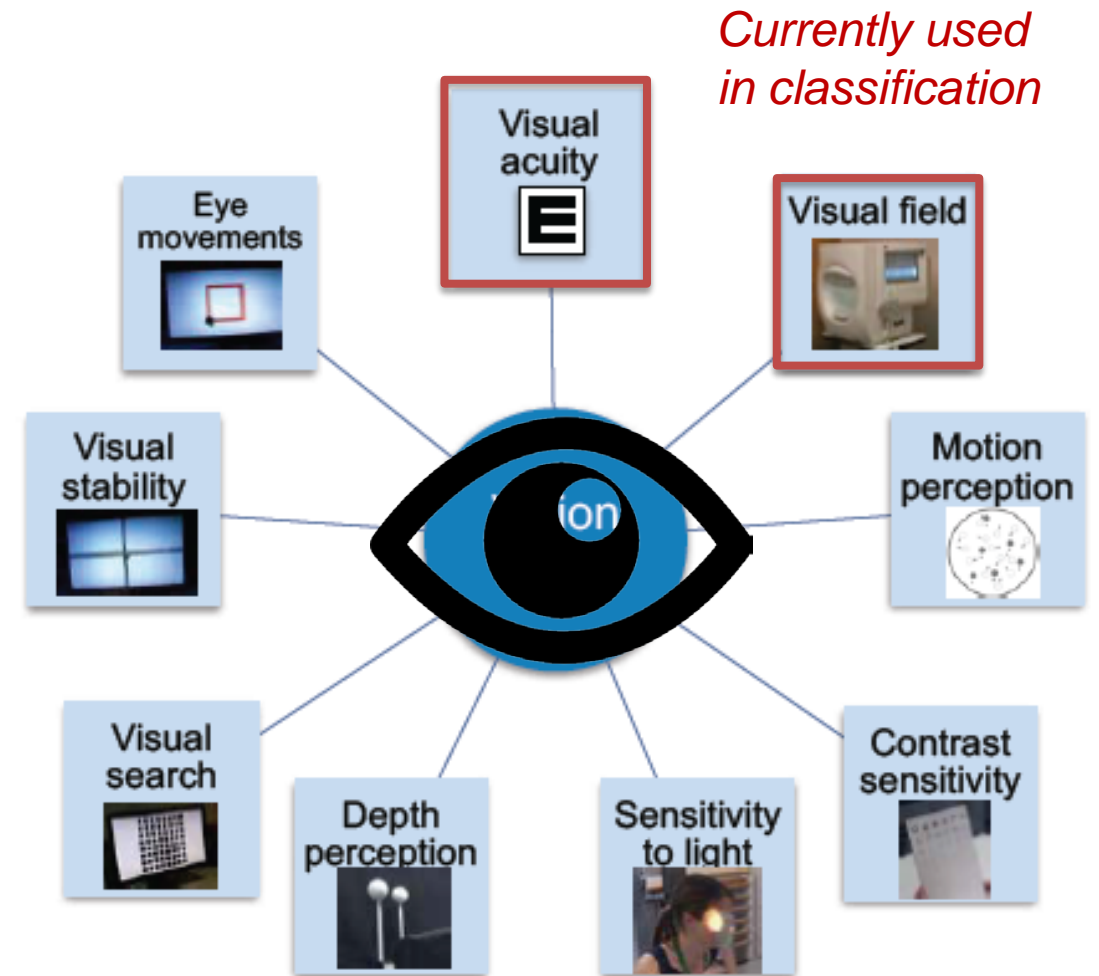
STUDY DESIGN

Aim: establish relationship between impairment and performance in VI judo



VISUAL FUNCTION

- Which visual functions best predict judo performance?
- Vision test battery developed to test all visual functions of interest



PERFORMANCE

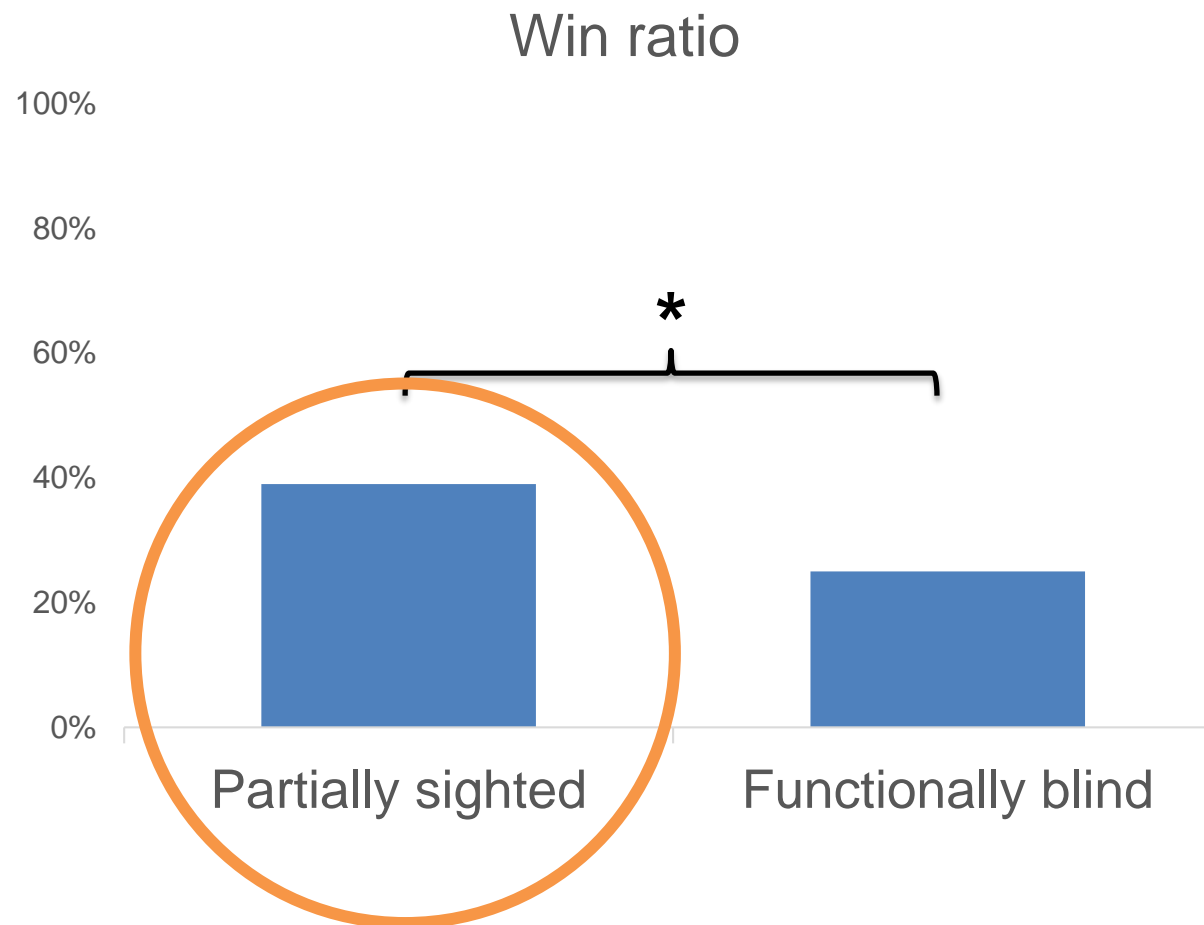
- Performance data gathered from all major competitions two years prior – two years after time of vision testing
- Outcome measures:
 - > **Win ratio: nr of wins / total nr of fights**
 - > Score ratio: nr of scores / nr of matches
 - > Match time: average match time in winning / losing matches
 - > Technical variation: number of different scoring techniques



Rafael Kons - Poster session 16:00 – 18:00

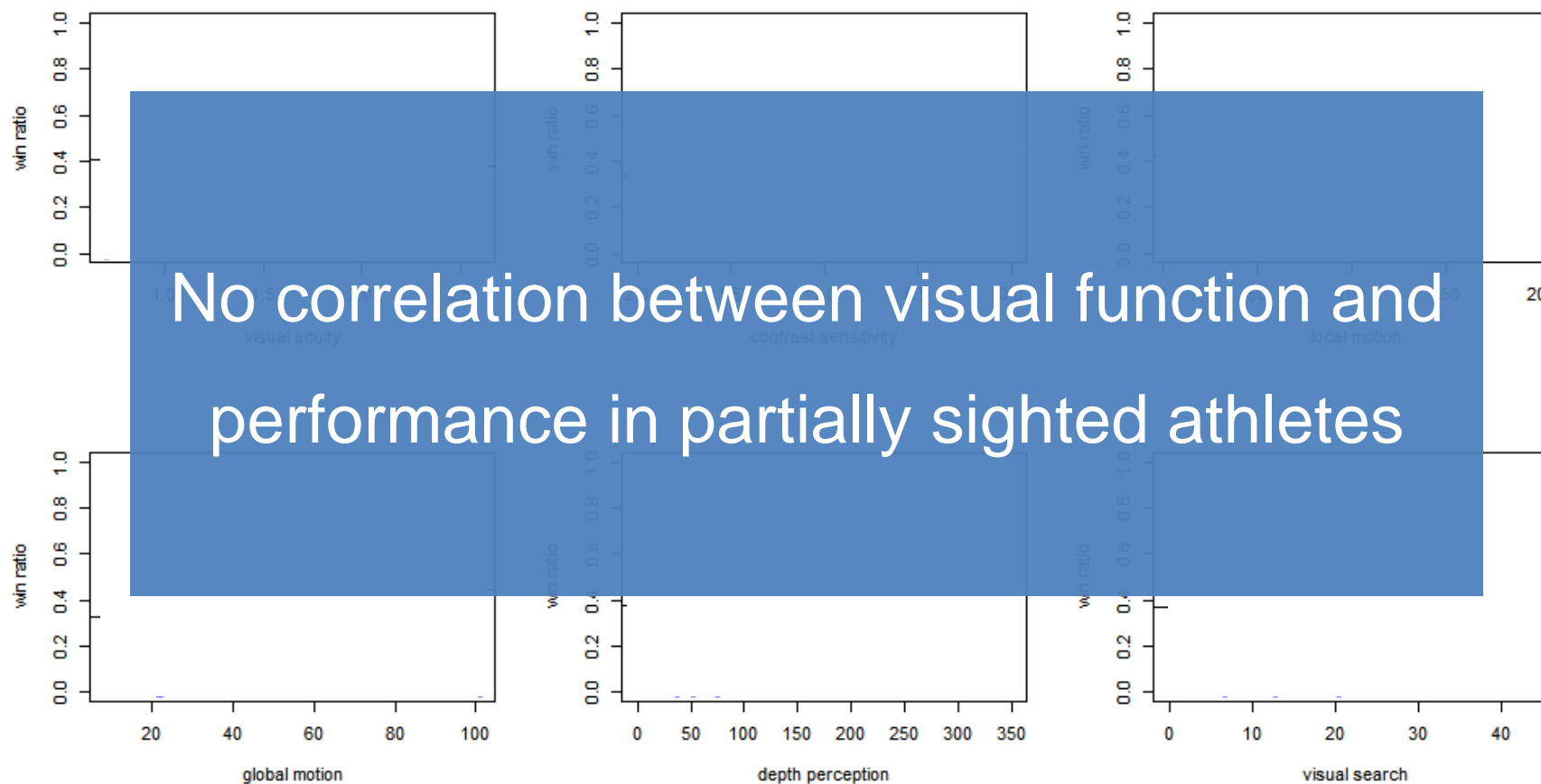
#071 Time-motion analysis in male judo athletes with vision impairment: analysis of the Rio 2016 Paralympic Games

RESULTS: PARTIALLY SIGHTED VS. FUNCTIONALLY BLIND



VISUAL FUNCTION VS WIN RATIO IN PARTIALLY SIGHTED ATHLETES

Better performance



Poorer vision

CONCLUSIONS

- Results confirm that functionally blind athletes perform worse than partially sighted athletes
- No impact of impairment on performance for partially sighted athletes
- Recommendation for a two-class system in VI judo

ADDITIONAL WORK (ONGOING)

- Exploration of additional measures of performance (Kons et al., 2019)
- Determine optimal cut-off point between “blind” and “partially sighted”
- Minimum impairment criteria > simulation studies

ADDITIONAL WORK (ONGOING)



implementation



THANK YOU

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