A position stand guiding the sport-specific classification of athletes with vision impairment

What you need to know

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VISTA September 2017

VU VRIJE UNIVERSITEIT AMSTERDAM

International Paralympic Committee

Classification Research Partner

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IS VERDER KIJKEN

PARALYMPIC VI SPORTS

Athletics

Swimming

Judo

Cycling

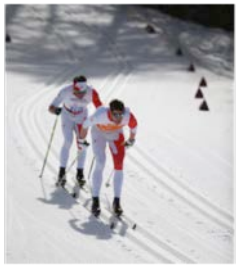
Triathlon

Goalball

Football

Equestrian

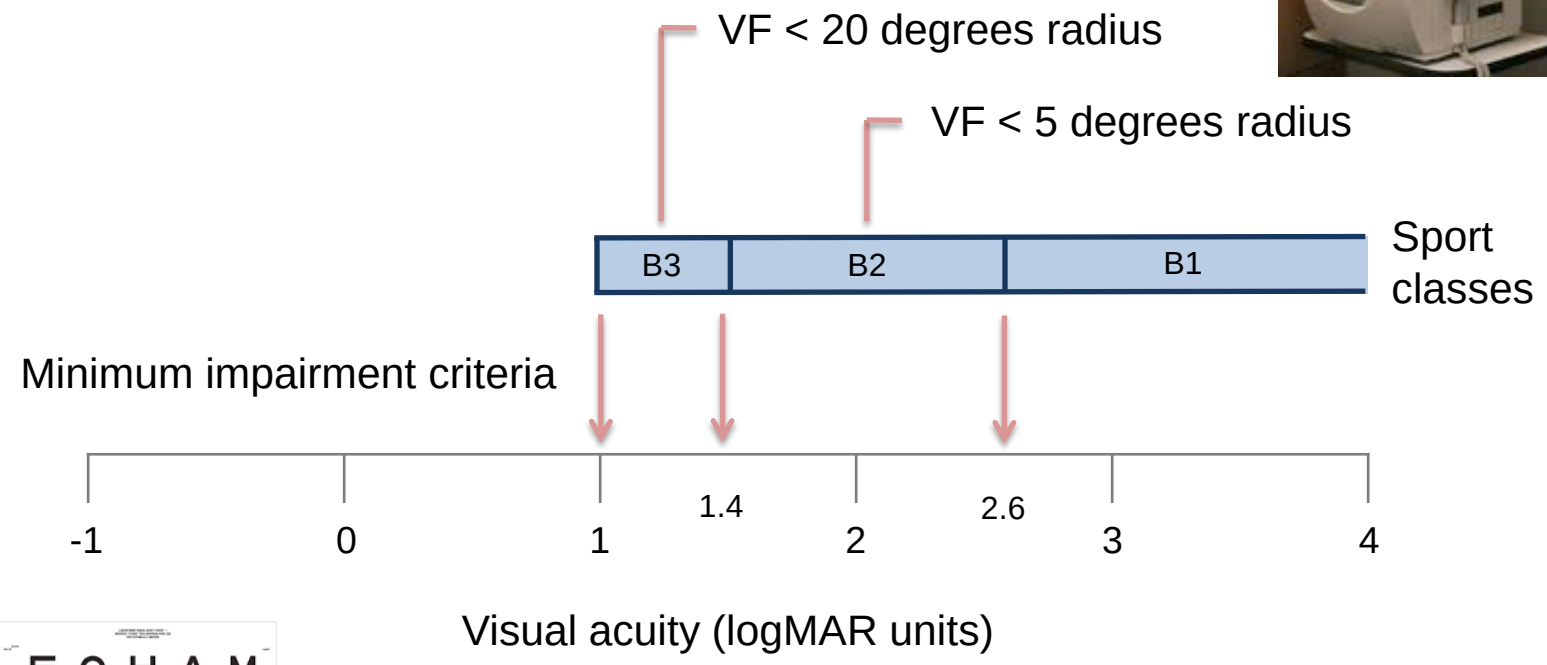
Alpine skiing

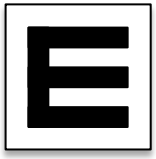


Nordic skiing

Rowing

CURRENT VI CLASSIFICATION





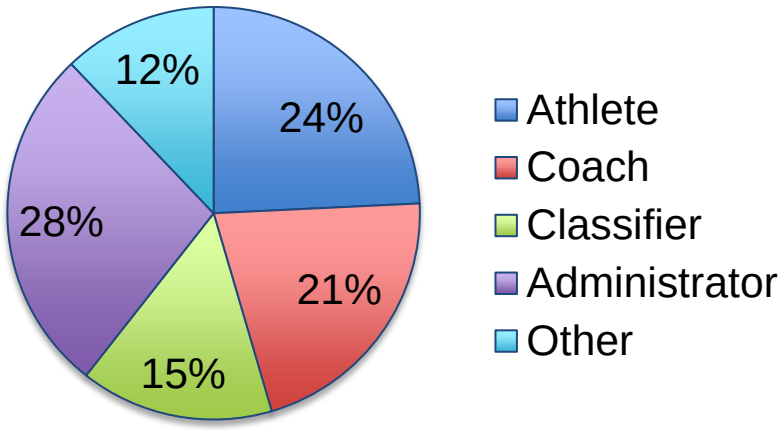
UNIQUE CHALLENGES IN VI SPORT

AIM: to provide guidance for how sport-specific classification should be achieved in sports for athletes with vision impairment.

METHOD

1. EXPERT CONSULTATION

Expert meeting 23-25th Jan 2015



This project was supported by the Agitos Foundation Grant Support Scheme 2014-15

METHOD

2. STAKEHOLDER CONSULTATION

Original art

Expert consensus statement to guide the evidence-based classification of Paralympic athletes with vision impairment: a Delphi study

H J C (Rianne) Ravensbergen,[1] D L Mann,[1] S J Kamper[2]

Expert consensus statement

Running Head: POSITION STAND FOR VI CLASSIFICATION

International Paralympic Committee and International Blind Sports Federation position stand on the sport-specific classification of athletes with vision impairment

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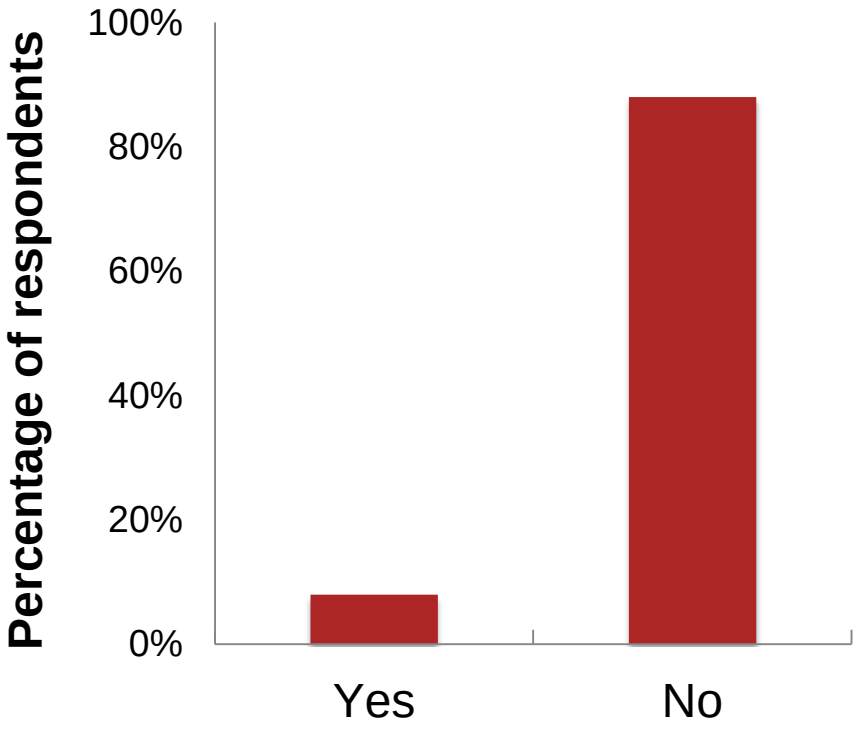
VI Position stand

International Paralympic Committee

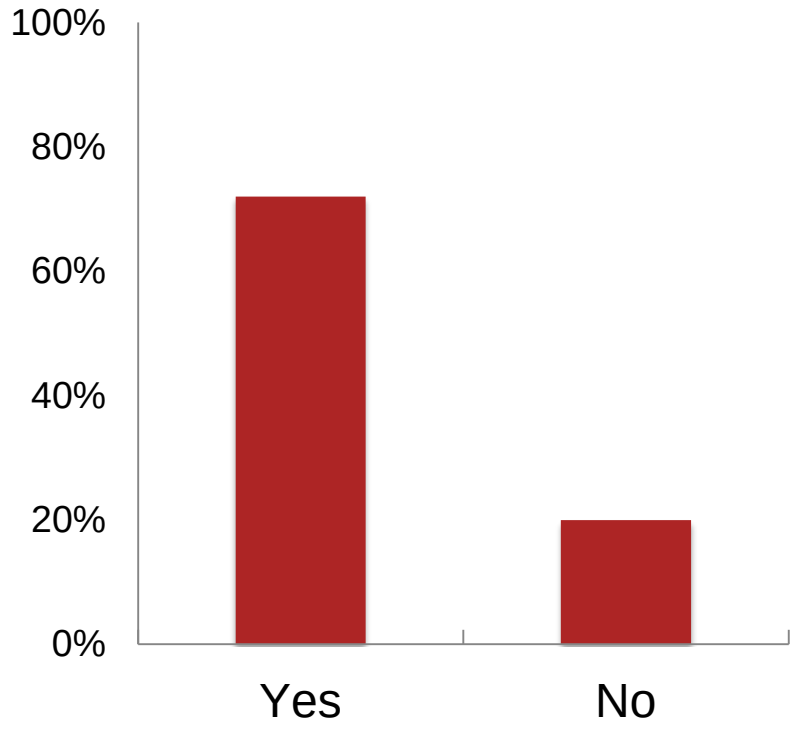
INTERNATIONAL BLIND SPORTS FEDERATION

1. THE USE OF BLINDFOLDS

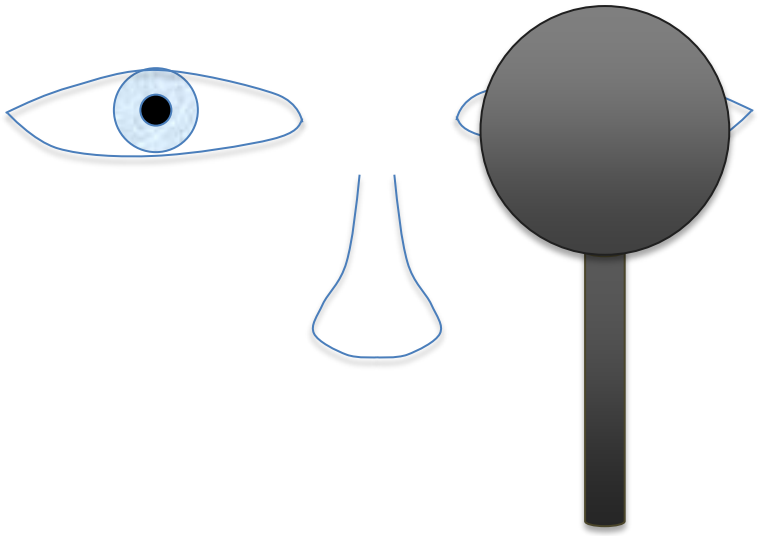
Should <u>all VI athletes</u> be required to use a blindfold?



Are there <u>any</u> situations in which blindfolds are appropriate?

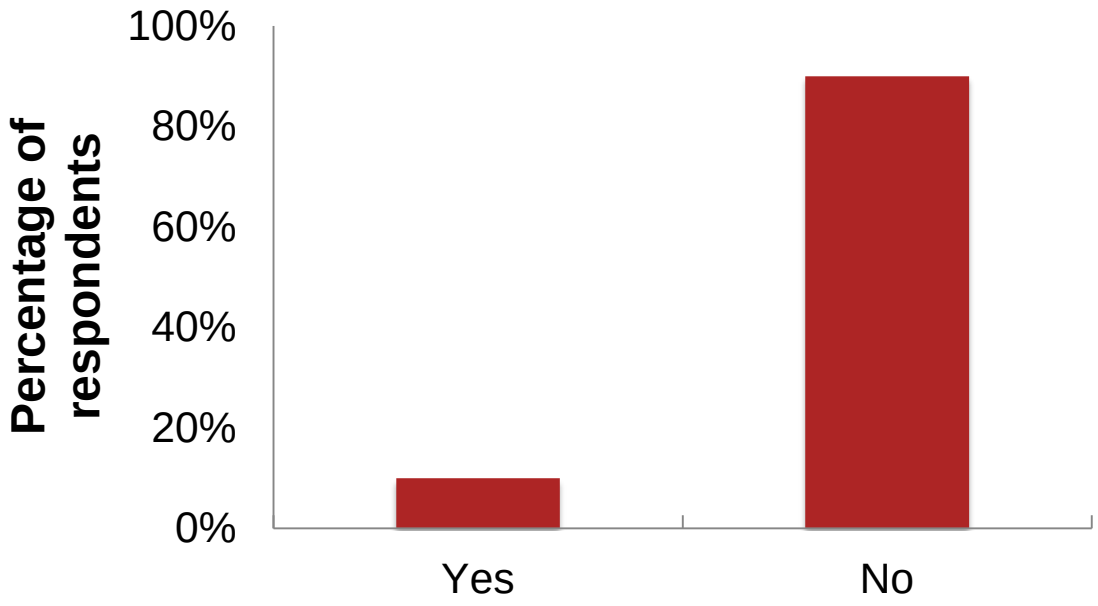


2. TESTING BEST EYE VS. BOTH EYES TOGETHER



3. MORE FUNCTIONAL ASSESSMENT OF VISION

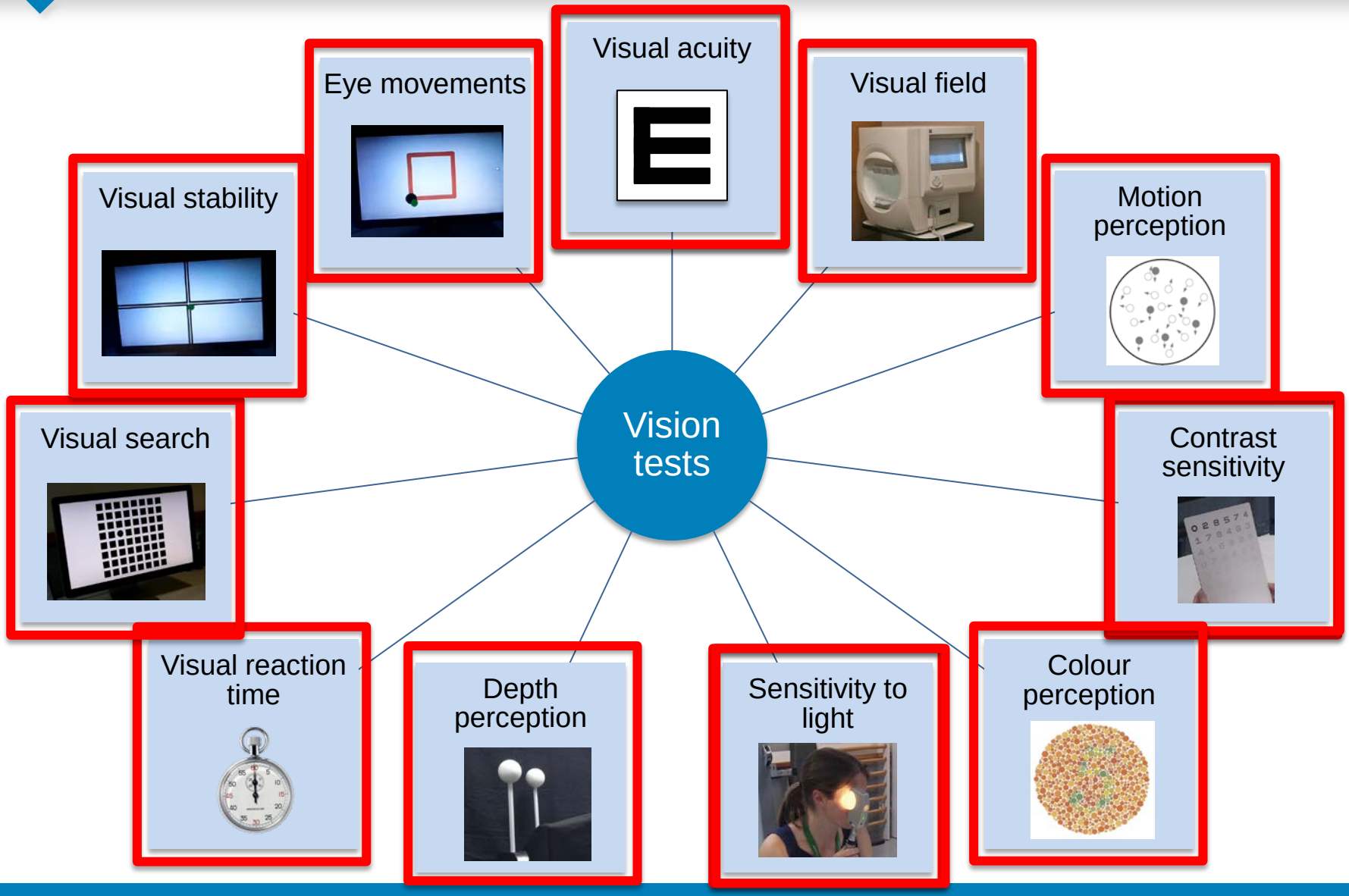
Is the assessment of visual acuity and visual field sufficient for classification?



- Contrast sensitivity
- Sensitivity to light
- Motion perception

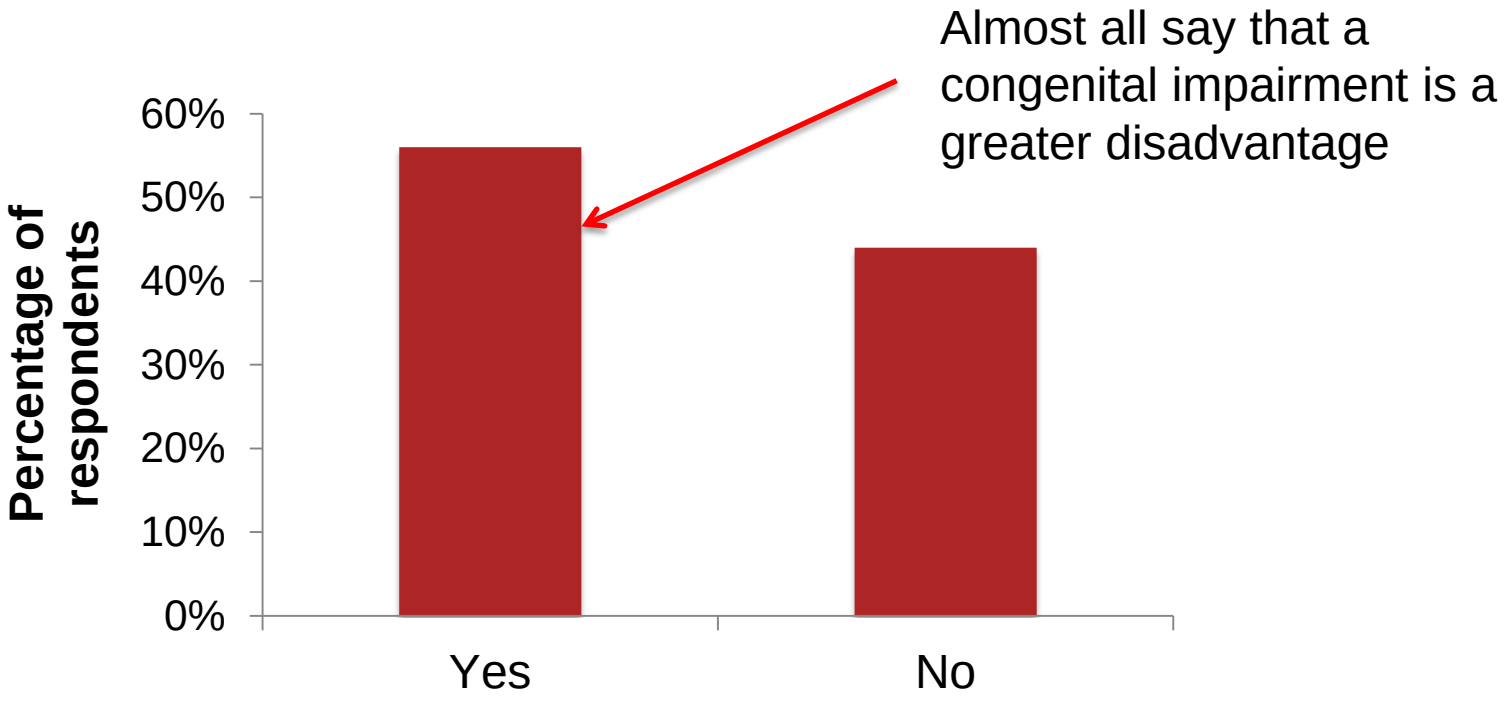
KEY RECOMMENDATIONS

3. MORE FUNCTIONAL ASSESSMENT OF VISION



4. CONGENITAL AND ACQUIRED IMPAIRMENTS

Do you believe that there is a difference in the impact of a congenital and acquired vision impairment on sport performance?



5. ESTABLISHING THE MINIMUM IMPAIRMENT CRITERIA

Unadapted form of the sport

Should be used to establish the minimum impairment criteria

Adapted form of the sport

Should be used to establish the sport classes

ACKNOWLEDGEMENTS

International Paralympic Committee

This project is supported by a Classification Research Grant awarded by the International Paralympic Committee.

International Blind Sports Federation

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Agitos Foundation

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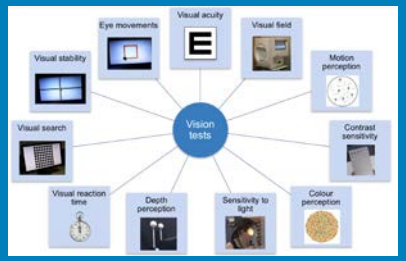
THE PROCESS

STEP 1: Expert consultation

athletes, coaches, administrators, referees, scientists

STEP 2: Measure vision on tests relevant to the sport



STEP 2: Measure ability on sport-specific tests of performance

STEP 3: Establish the relationship between impairment and performance

KEY RECOMMENDATIONS

(1) whether blindfolds should be used to minimise the impact of VI on the outcome of competition.

(2) the need to test vision during classification when using both eyes together (i.e., habitual vision) rather than with the best eye only (as is presently done)

(3) the potential inclusion of new vision tests during classification (e.g., contrast sensitivity, motion and depth perception) to better account for the sport-specific impact of VI on performance

(4) the need during classification to account for the different types of lighting experienced during competition

(5) the potential impact on sport performance of the age at which an athlete acquired their impairment

(6) the minimum level of VI necessary to take part in competition

Background: The IPC Classification Code requires sports to develop an evidence-based classification system that is based on the impact of impairment on performance in that particular sport. However, sports for athletes with vision impairment (VI) classify athletes using a system based on the legal definition of low vision or blindness, employing essentially the same classification system across all VI sports. One key barrier to the development of evidence-based classification in VI sport is the absence of an agreed approach for how to perform research which addresses classification issues unique to athletes with VI.

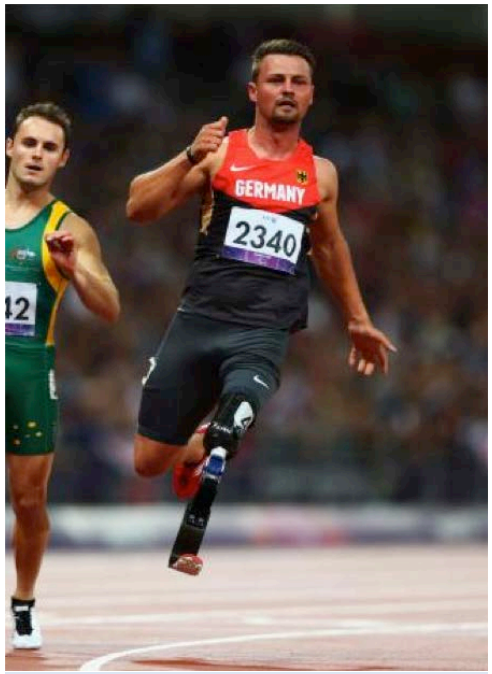
Purpose: The aim of this position stand is to provide guidance for how sport-specific classification should be achieved in sports for athletes with VI.

Method: A four-round Delphi review of 25 experts in VI sport (athletes, coaches, classifiers, & administrators; Ravensbergen, Mann & Kamper, 2016) uncovered the issues to be addressed in the Position Stand. In response, the stand was developed by the IPC Research and Development Centre for the Classification of Athletes with Vision Impairment, in coordination with the International Paralympic Committee and the International Blind Sports Federation.

Results: On the basis of the expert consultation performed during the Depth review process, we provide guidance on how classification research can be performed to take into account (1) the minimum level of VI necessary to take part in competition; (2) the potential inclusion of new vision tests during classification (e.g., contrast sensitivity, motion and depth perception) to better account for the sport-specific impact of VI on performance; (3) the need to test vision during classification when using both eyes together (i.e., habitual vision) rather than with the best eye only (as is presently done); (4) the need during classification to account for the different types of lighting experienced during competition; (5) the potential impact on sport performance of the age at which an athlete acquired their VI; and (6) whether blindfolds should be used to minimise the impact of VI on the outcome of competition. Three specific research models are presented that can be used to develop sport-specific classification: (1) a correlational model that directly examines the relationship between impairment and sport performance; (2) a simulation model that simulates vision impairment to examine changes in performance in able-sighted athletes; and (3) a component-analysis model that establishes the visual information relied on by skilled able-sighted athletes, and examines the impact of impairment on the ability to pick-up that information.

Conclusion: The recommendations provide a clear pathway for sports to develop an evidence-based system of classification for athletes with vision impairment.

IPC R&D CENTRES FOR CLASSIFICATION



Physical Impairment
University of Queensland
Australia

Intellectual Impairment
University of Leuven
Belgium

Vision Impairment
Vrije Universiteit Amsterdam
Netherlands

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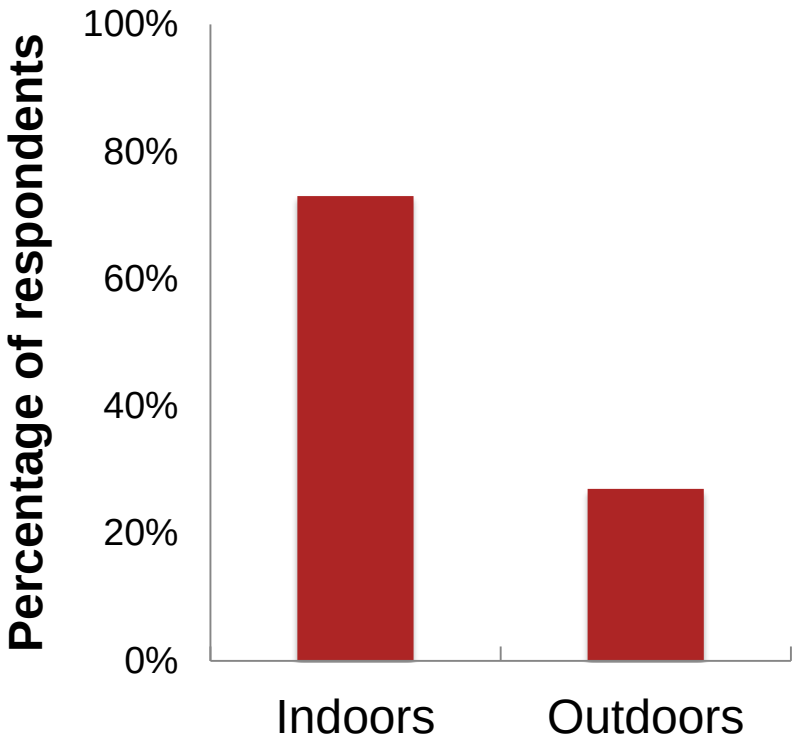
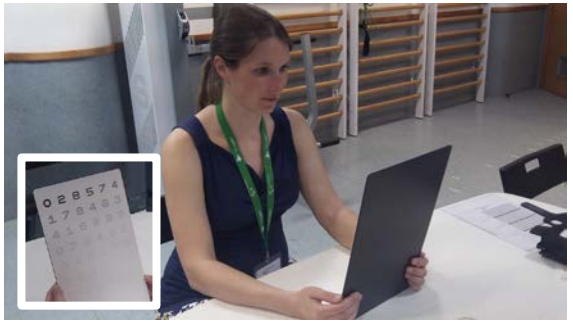
Department of Human Movement Sciences

4. THE IMPACT OF LIGHTING CONDITIONS

Where should classification take place for sports played outdoors?





Widespread support for sport-specific classification

2. VI POSITION STAND

AIM: to provide clear guidance for how classification research can be performed to meet the needs of athletes with VI

Running Head: POSITION STAND FOR VI CLASSIFICATION

International Paralympic Committee and International Blind Sports Federation position stand on the sport-specific classification of athletes with vision impairment

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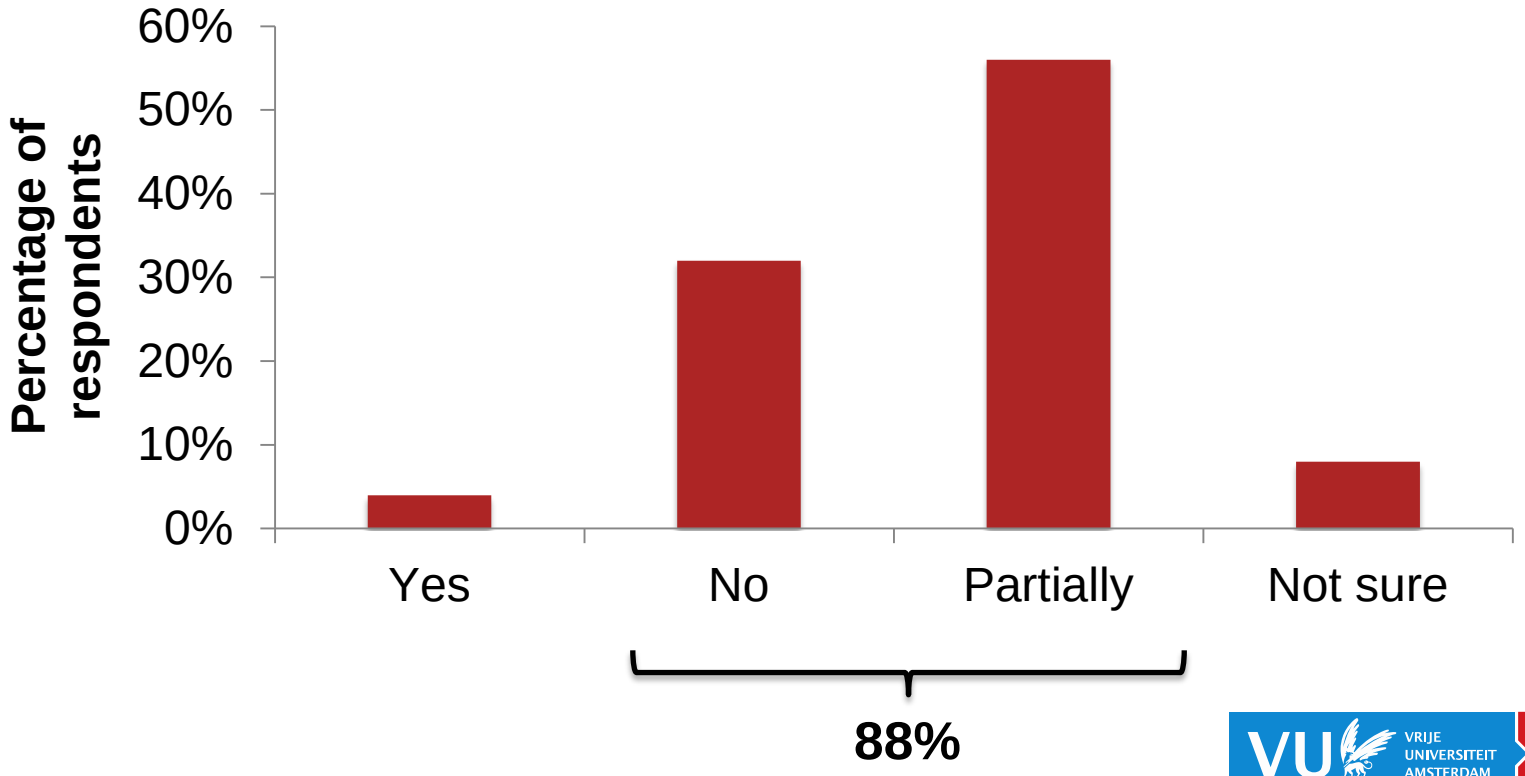
1. The impact of sport rules on VI classification
   - Blindfolds
   - Guides
2. Procedure for the classification of VI athletes
   - Generic vs. sport-specific tests
   - The incorporation of additional tests for VI classification
   - Testing the ‘best’ eye or both eyes together
   - Ambient lighting during classification
   - Congenital vs. acquired impairments
3. Models for VI Classification research

AIM OF CLASSIFICATION

Do you feel that the way that vision impairments are currently classified fulfils the aim to ‘minimise the impact of eligible impairments on the outcome of competition’?



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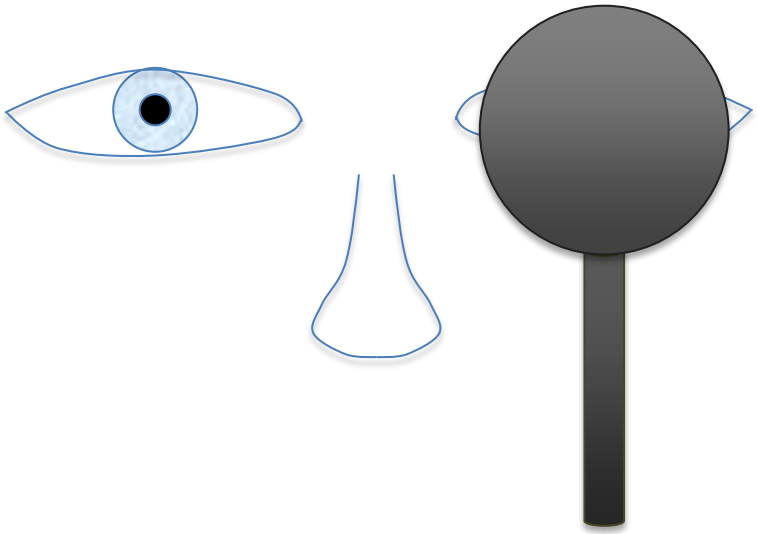
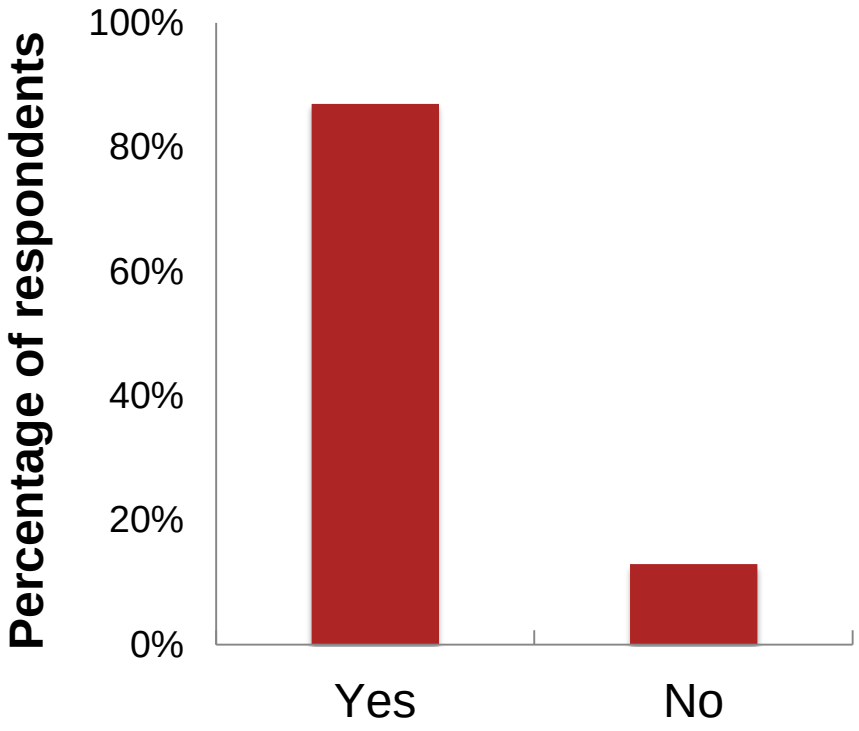


Should the decision to test one eye or both eyes be sport-specific?



DEVELOPMENT OF SPORT-SPECIFIC CLASSIFICATION

R&D across all sports

VI Swimming

VI Judo

VI Snow sports

VI Shooting

VI Athletics

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Anglia Ruskin University