HEALTHY & ACTIVE CHILDREN
lifespan motor development science & application
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FACE VALIDITY OF THE PICTORIAL SCALE OF PERCEIVED WATER COMPETENCE

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INTRODUCTION

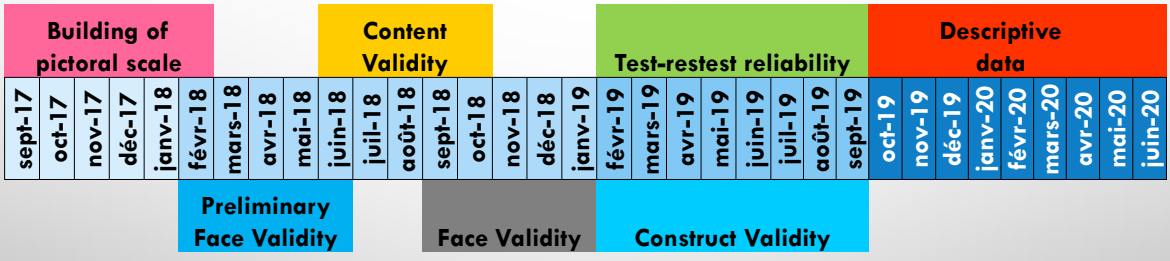
- PERCEPTIONS OF PHYSICAL COMPETENCE ARE AN IMPORTANT CORRELATE OF PHYSICAL ACTIVITY IN CHILDREN AND ADOLESCENTS (1)
- PERCEIVED COMPETENCE APPEARS - AT LEAST AS IMPORTANT AS ACTUAL COMPETENCE AS IT MAY MORE DIRECTLY AFFECT MOTIVATION TOWARDS AN ACTIVE BEHAVIOR (2).
- INTEREST TO DEVELOP PICTORIAL INSTRUMENT FOR ASSESSING FMS PERCEIVED COMPETENCE IN YOUNG CHILDREN (2,3).
- IT IS WORTH DEVELOPING SUCH A PICTORIAL INSTRUMENT FOR ASSESSING CHILDREN'S PERCEIVED WATER COMPETENCIES.

AIM OF THE STUDY

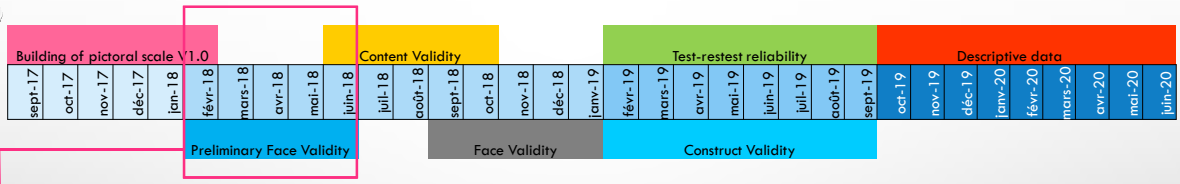
THE AIM OF THE STUDY IS THE FACE VALIDITY (UNDERSTANDING OF ITEMS) OF THE TEST BATTERY ENTITLED "PERCEIVED WATER COMPETENCE – PICTORIAL SCALE" (PWC – PS) IN CHILDREN AGED 5 - 8 YEARS.

POSSIBLE DIFFERENCES IN THE STRENGTH OF THE LEVEL OF PERCEPTION OF AQUATIC COMPETENCES ACCORDING TO GENDER AND AGE (GROUP) WILL ALSO BE INVESTIGATED.

TIME LINE



TIME LINE (ALREADY DONE)



- A TOTAL OF 50 CHILDREN (GIRLS = 25) ; 4 TO 8 YEARS (6,1 ± 1,4)
- INDIVIDUAL INTERVIEW
- Q1 "DO YOU KNOW THE SITUATION ?"
- Q2 "CAN YOU PLACE THE IMAGES IN ORDER OF INCREASING DIFFICULTY OF REALIZATION"?
- Q3 "WHAT IS IT THAT MAKES ONE PICTURE GOOD AND ONE NOT SO GOOD?"
- Q4 "WHAT IS THE CHILDREN WHO LOOKS MORE LIKE YOU"

PRELIMINARY FACE VALIDITY (RESULTS)

➢ Checking the understanding of the items:

✓ Similar results: good compreension in fonction of the age (13 out of 17 situations)

× Problematic results in 4 situations; (situations less understood or not respecting a progression according to the age.)

Perhaps due to:

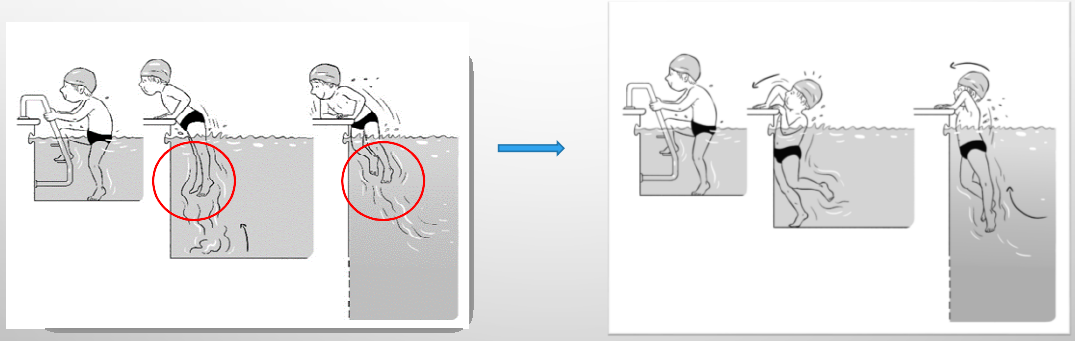
1 - The age of the children (4 to 6 vry difficult);

2 - Quality of the images;

3 - Images complexity.

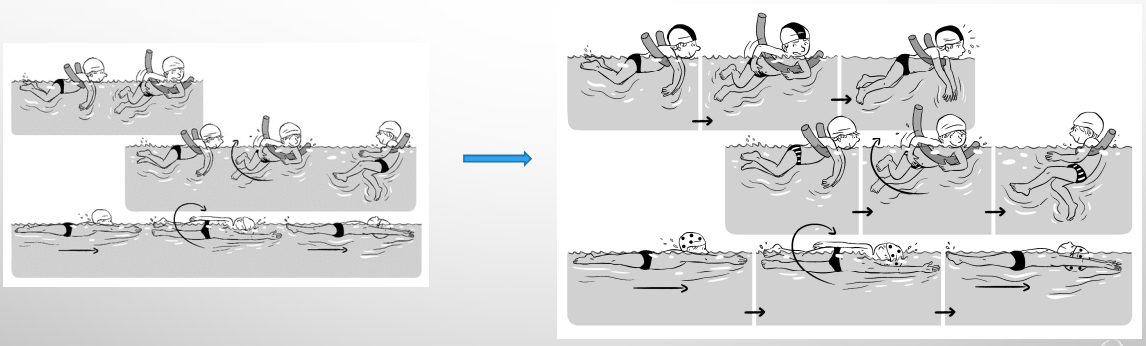
PRELIMINARY FACE VALIDITY

Situation 13: Water exit: climbing out (deep water)



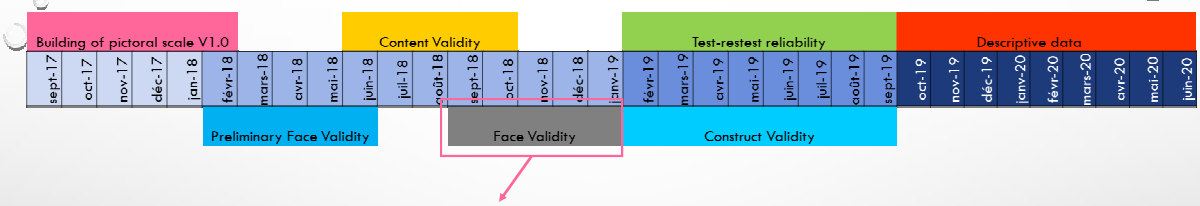
TIME LINE (ALREADY DONE)

Situation 15: Turn from the front to the back in aligned position (deep water)



The same for :
Situation 16: Change direction while swimming on the front (deep water)
Situation 17: Turn from the back to the front or transverse rotation (deep water)

TIME LINE (ALREADY DONE)



- A TOTAL OF 120 CHILDREN (GIRLS = 67) ; 5 TO 8 YEARS
- INDIVIDUAL INTERVIEW

Q1 "DO YOU KNOW THE SITUATION ?"

Q2 "CAN YOU PLACE THE IMAGES IN ORDER OF INCREASING DIFFICULTY OF REALIZATION"?

Q3 "WHAT IS IT THAT MAKES ONE PICTURE GOOD AND ONE NOT SO GOOD?"

Q4 "WHAT IS THE CHILDREN WHO LOOKS MORE LIKE YOU?

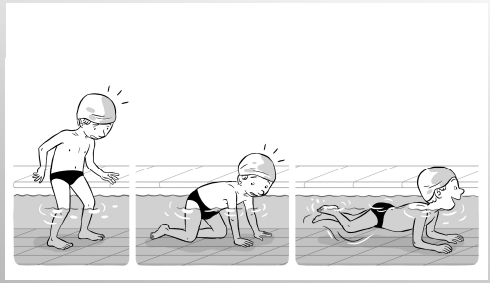
FACE VALIDITY (RESUTATS)

➢ Checking the understanding of the items:

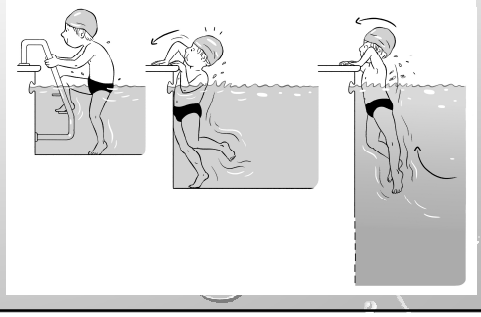
✓ Similar results: good compreension according to the age (15 out of 17 situations)

× Problematic results in 2 situations; (situations less understood or not respecting a progression according to the age.)

SITUATION 1



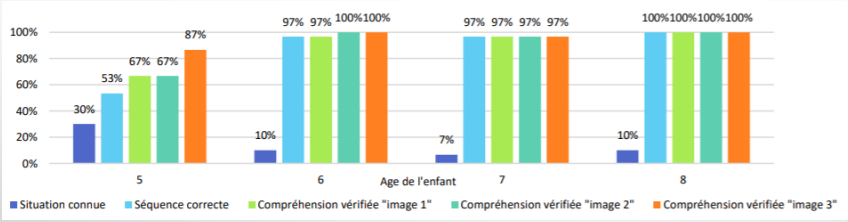
SITUATION 13

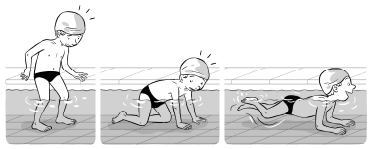


FACE VALIDITY

➢ Checking the understanding of the items:

× Less understood situations.





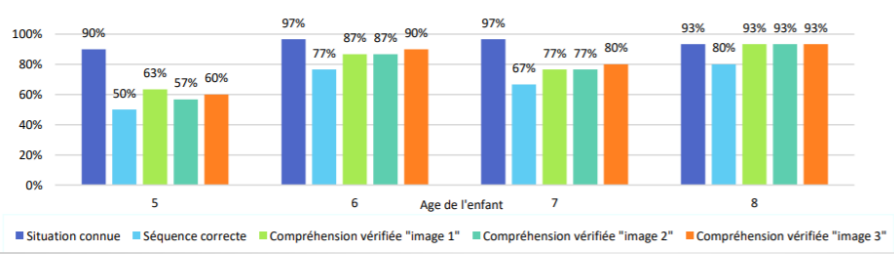
Situation 1: Move forward on the ground using hands on the bottom (as a crocodile)

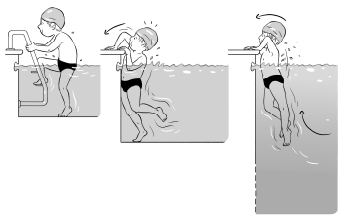
- AT 6 TO 8 YEARS THE KNOWLEDGE OF THE SIYUATION IT'S VERY HIGH
- CORRECT SEQUENCE ACCORDING TO THE AGE
- IT DOES NOT REALLY EXIST A COMPREENSION OF IMAGES 1 AND 2 AT 5 YEARS;

FACE VALIDITY

➢ Checking the understanding of the items:

× Situations less understood or not respecting a progression according to the age.





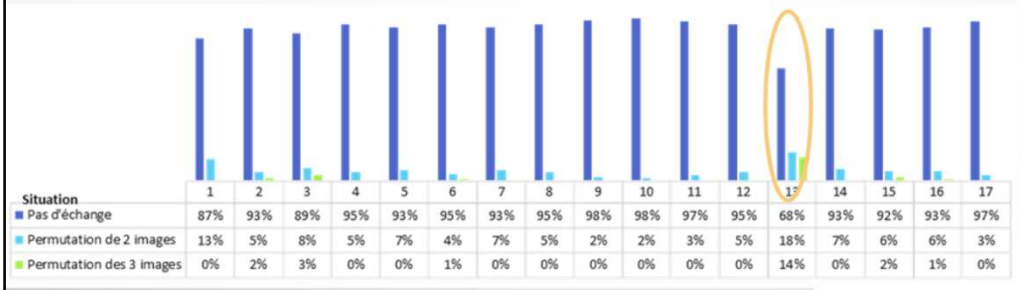
Situation 13: Water exit: climbing out (deep water)

- AT 5 TO 8 YEARS THE KNOWLEDGE OF THE SIYUATION IT'S VERY HIGH
- WE DON'T HAVE A CORRECT SEQUENCE ACCORDING TO THE AGE
- IT DOES NOT REALLY EXIST A KNOWLEDGE OF IMAGES 1, 2 AND 3 AT 5 YEARS;

FACE VALIDITY

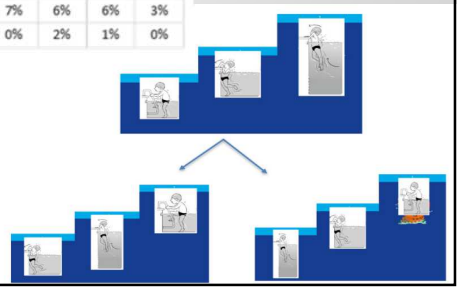
➢ Checking the understanding of the items:

× Representation of the permutation of images



Situation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Pas d'échange	87%	93%	89%	95%	93%	95%	93%	95%	98%	98%	97%	95%	68%	93%	92%	93%	97%
Permutation de 2 images	13%	5%	8%	5%	7%	4%	7%	5%	2%	2%	3%	5%	18%	7%	6%	6%	3%
Permutation des 3 images	0%	2%	3%	0%	0%	1%	0%	0%	0%	0%	0%	0%	14%	0%	2%	1%	0%

- Situation example 13:
  - High permutation results (32% - 1/3)
  - Permutation 2 images (18%)
  - Permutation sequence (14%)
  - 2 frequent combinations (321) and (231)



FACE VALIDITY (RESULTS)

➢ Perception of aquatic skills according to age:

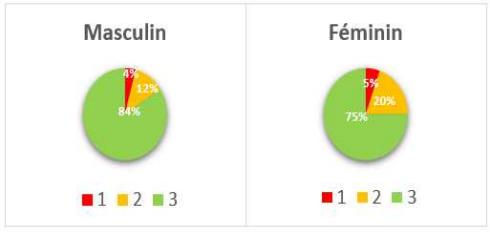
- Previous study: perception evolve at 6 to 7 years then stabilization at 7 to 8 years

- When we analyze the graphs we can see that level 3 “feels able” decreases with age; which contradicts the initial hypothesis.
- Very low rates level 1 "does not feel able"
- Perhaps due to :
  - The group 5 years more competent ?
  - Difficulties of self-evaluation at 5 years ?

FACE VALIDITY (RESUTATS)

➢ Perception of aquatic skills according to the sex:

• No significant differences were found for the main effect of sex. (Murcia & Pérez, 2008)



- When we analyze the graphs we can see that level 3 “feels able” in boys is 10 % higher than girls; which contradicts the initial hypothesis.
- Very low rates level 1 "does not feel able“ in boys and girls.

FACE VALIDITY (CONCLUSION)

➢ **Verification of the understanding of the scale:**

• Good understanding of the scale as a whole.

• Confused elements in situations 1 and 13.

• In most cases, an improvement in understanding of images according to age (1situations).

➢ **Perception of competence according to age and sex:**

• Results obtained are not in agreement with the literature.

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FOR YOUR ATTENTION