



23 April 2020 - India

Zoom conference on

Psychology in archery

Welcome !

Phylosophy – Conceptual work

Concept 1: “Complete” Coach

Coaching Specialities



Technical Coach
Equipment Coach
Physical Coach



Mental Coach
Competition Coach
Team Leader



Concept 2: Coach-partner

WA concept:

To HELP/ASSIST the archers
in their personal development

Through: observation, analysis, feedback, exchange,
prioritization, plan, individualization/customization,
supervision, measurement, adaptation...



Other possible concepts

Educate the archers to implement
a “predetermined way” of shooting
and training



Training Concept Choice:

According to the directives of the organization /
The coach “applies” or adapts, the archers execute

From the Coach’s concept(s) / The archers execute

Involving the archers to the choices / The archers
and the coach collaborate

Suitability / Pending their respective psychological
profile, any of the above principle can be useful and
chosen

Concept 3: Experience based

Expected Athlete's path



Coach's expectations:

- Athlete to go higher
- In a straighter way

Elite



Achieved Coach's path



Experience used in training, but **could have to operate at an inexperienced level**

Novice



Concepts 4: Coach's role per level

Level 1: Educate the proper shot execution to the **muscular memory** of the novice archer

Level 2: Assist the competitor archer to **identify how to shoot** in motor memory (mind-set, behavior...)

Level 3: Assist the elite archer to **reach and maintain** the proper **mind-set** allowing to shoot in motor memory in various situations

In parallel: Several developments are required

Concepts 4: Coach's role per level

My Sequence

Name : _____ Date : ____/____/____

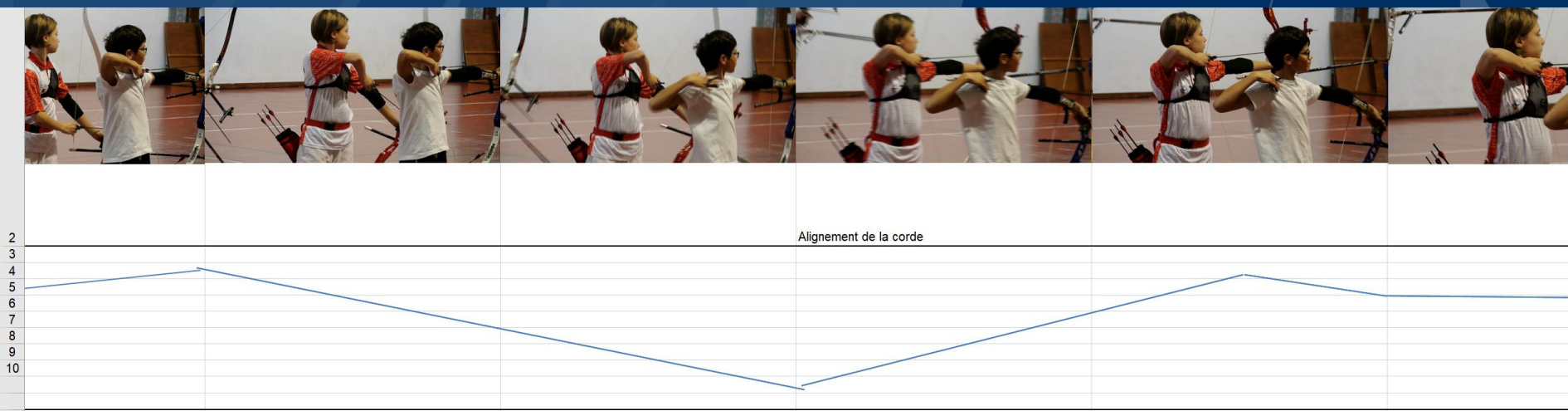
Sequences	From stepping the shooting line until leaving this line
Movements	
Visual	
Breathing	Deep Breath _____ 3 / 4 _____ 1 / 2 _____ 1 / 4 _____ Empty Lungs _____
Perceptive	
Attention	





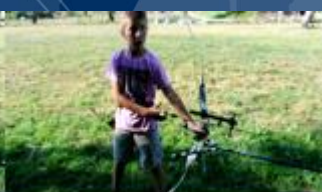

Revised on February 1, 2002

Level 1

Advanced

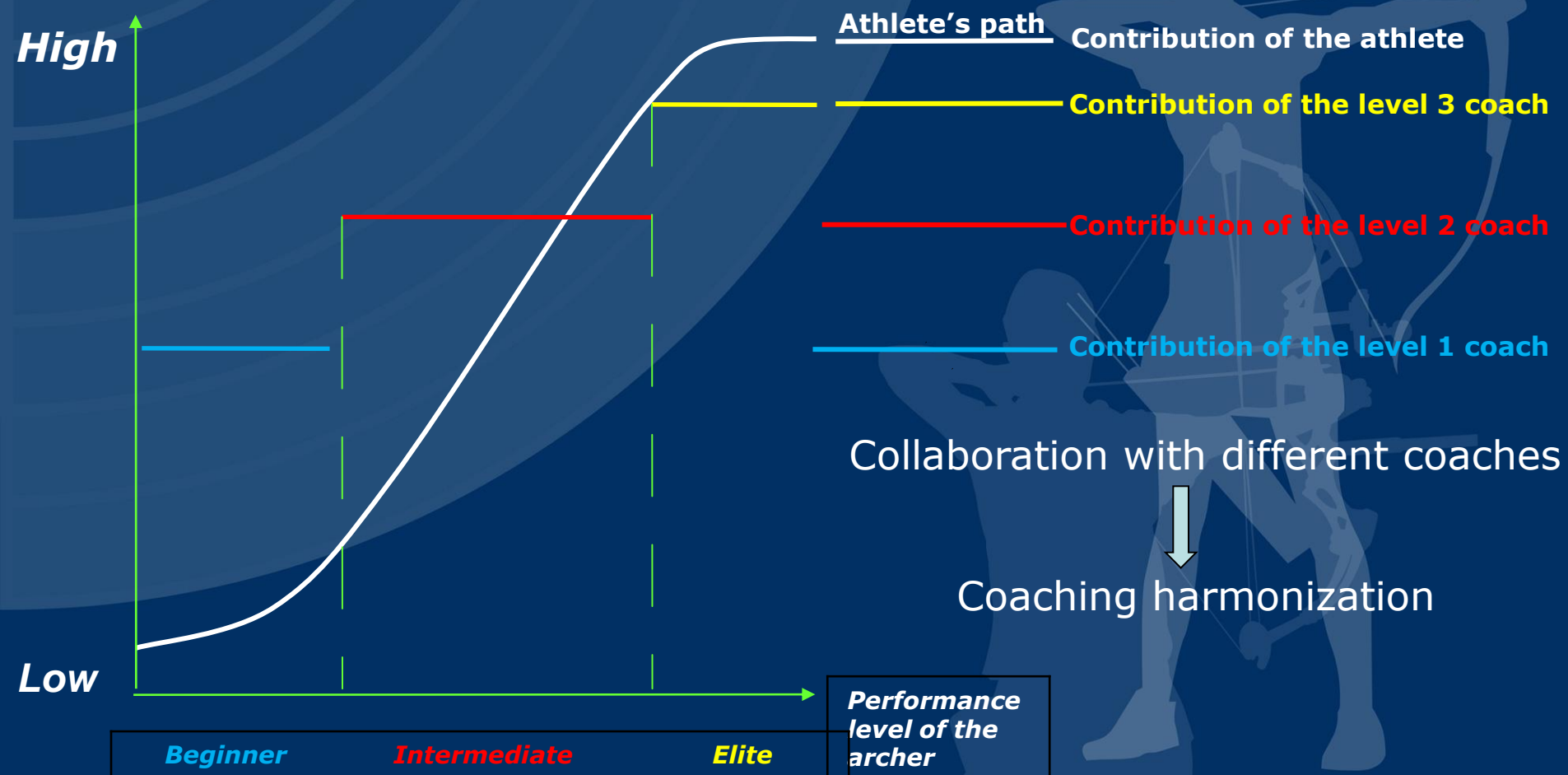
Sequences or script identification / record



					
100 - String fingers setting with little body leaning	105 - End of hooking & start head rotation with straight body	110 - Head & body pre-oriented	117 - Bow hand setting with little elbow extension	118-294 - Rotating predraw - Bow on foot	120 - Bow elevation start with a little elbow flexion
Target	Target				

Concept 5: Coaching Cohesion

Help the archers in their own development



Concept 5: Coaching Cohesion

A physical injury is usually curable with rest, medication, physiotherapy sessions, an operation ...

Do you think there is something similar with a Mental injury?

If not, cohesion among coaches could reduce the risk of injury, mental ones as well.

Concept 5: Coaching Cohesion



Awareness of other coaching levels

To coach well at entry level it is necessary to know what a coach is supposed to do at level 2 and at level 3.

Qualities of the Coach

Availability

Dedication

Sincerity – Objective - Honesty - Integrity

Group Attitude

Respectful – Fair – Responsible

Observation - Analyse

Communication

Phylosophy – Coach' skills

Communicating



What you want to say

What you can say

What you really say

What the student hears

When the student listens carefully

What the student understands

What the student keeps in mind

What the student can repeat

**What the student can
practically use**

90%
Loss of information

**To coach by
talk does
not develop
Know-how's**

Concept 6: Not up to the coach ONLY!

Also helps:

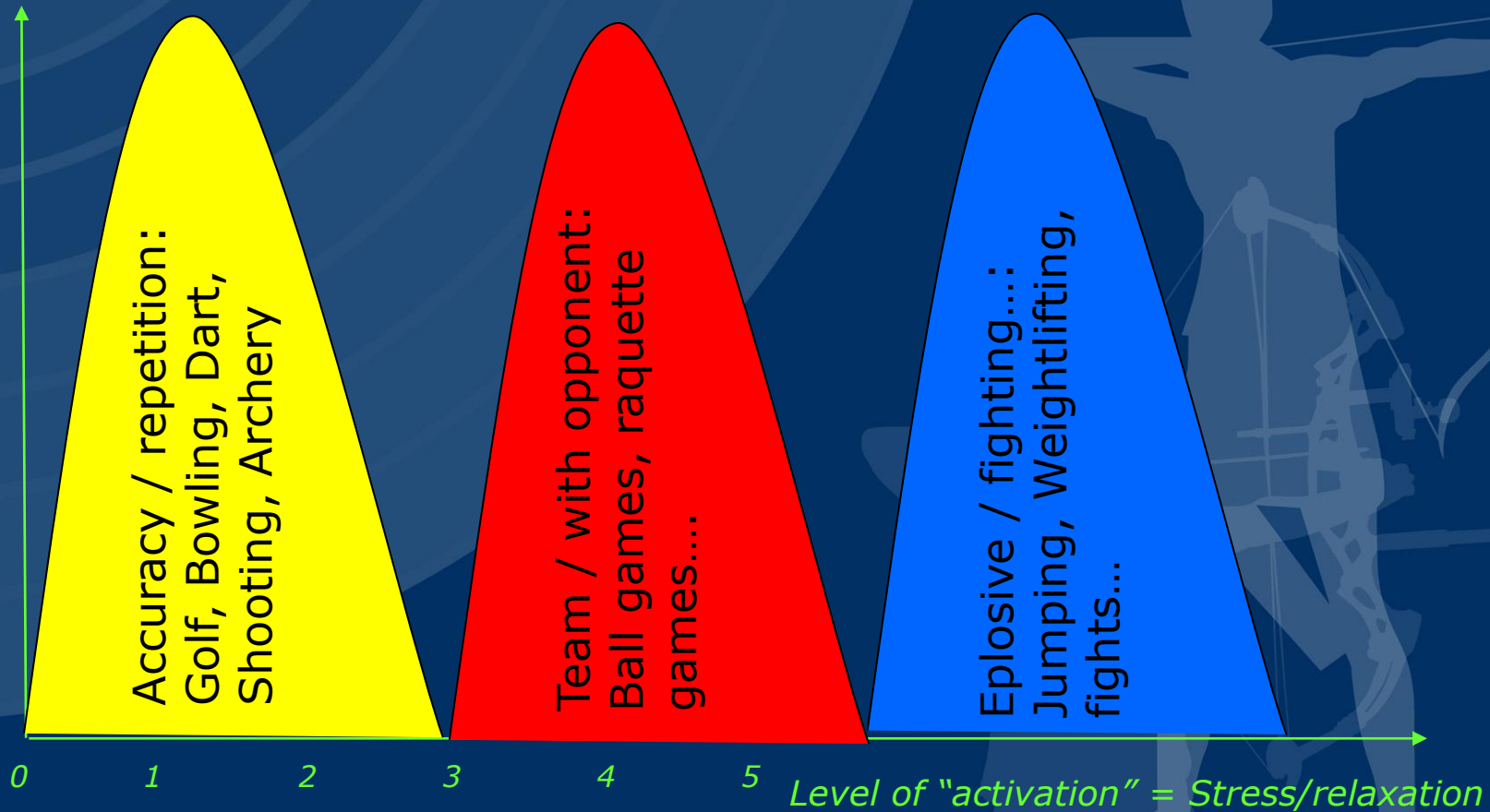
- **Access to archery equipment & facilities**
 - **Competitions network**
 - **Good Administration of the National Archery Organization**
-

- Role-players **recognition**
- A comprehensive and fair **decision process**
- Good **communication** at all levels
- **Transparency** of all activities
- Good methods of **administering the budget**
- ...

1. Relaxation

Level of "activation" (stress/relaxation)

Performance level



1. Relaxation

Different methods are available:

- Part by part with heaviness / lightness feeling
- Tense / relaxed (PRM)
- Emphasize the exhaling
- Eyes closed
- Internal singing / Musique
- Self visualization in cosy place
- Humour / de-dramatization (from Coach)



1. Relaxation / Effortless & in Control

1st learning in discipline using a device = Relax on it

Master looks simple, "easy", Effortless and in Control.
They do not struggle

Coach should:

- "Purify" the technique = avoid/remove any unnecessary component. **Simple = easier to control and repeat**
- Teach the difference between muscular contraction and nervous tension. **For better feeling + Energy saver**
...

2. Concentration & Attention

Concentration = to be here & now on the task at hand

Attention:

- Niedeffer, Schmid & Peper: **Orientation** & **Diffusion**



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- **Soft & hard eyes**

2. Concentration & Attention

Over aiming is a trap in archery!

Because archer uses too much an external-narrow attention and/or too early

Coach should help the archer to increase the use of other type(s) of attention; particularly a more **Internal orientation**.

For instance by suggesting to adopt soft eyes, and/or to harden the eye(s) a little later

2. Concentration & Attention



1.2.2 Standard Teaching Process in Archery

Double click on
the illustration
and go to slide 2
of this
**Standard
Teaching
Process**

3. Mental Activity

High when:

- Switching among different attention types
- Particularly with external type
- Moving the eyes a lot (looking at many things)

Mental activity is **low** when:

- Staying in the same attention type
- Particularly with internal type (like breathing)
- Keeping the eyes stable (on the same spot), like in meditation. Exercise on next slide

Low Mental Activity

Eyes are mind window. Link with Neuro-linguistic programming (NLP)

From a starting point to be set by Archer-coach – For instance behind the waiting line.

ALWAYS keeping the eyes motionless in the centre of their socket, archer walk to the shooting line and complete the entire shooting sequence

To transfer the gaze from one place to another (ex: from quiver to arrow-rest), move the head and eyes as a whole.

The coach constantly checks that the eyes are not moving.

No visual zooming and/or traveling at full draw

Quite eyes = Quite mind

4. Positive Self-Talk

If I shoot only a 9, I could lose the match

Outcome or
consequence

Pessimist
view

Process or
origin

Optimist
view

By behaving and shooting well, good thing should happen

5. Visualisation

Two methods:

- See your face as on a screen
 - Just visualize what you usually see: hands, equipment, target....
- The 2nd one is more popular among archers, but both are efficient.



Speed of visualization:

- Slow for technique development (analytic - details)
- Fast for integration in the sequence (global - essential)
- At speed of execution during the competitive period

5. Visualisation

Speed of visualization in competition period

	1 Flecha		1 serie	
	Real	Visualización	Real	Visualizada
S	10	11.5	44	46
D	10	12	39	47.5
R	8	9.5	28.5	33.5
L	12	10.5	30	53

1" of difference

- or + 10%
Ex. for 30" \rightarrow 27" or 33" OK

- 1st: Visualize 1 shot within +/- 1.5 sec of difference (novice)
- 2nd: Visualize 1 end within +/- 10% difference (intermediate)
- 3rd: Visualize 1 end within +/- 5% difference (elite)

6. Goal setting

Goals should be: SMART or SMARTER

- Specific,
- Measurable,
- Achievable,
- Realistic,
- Timed,

- Exciting,
- Recorded.

Carole FERRIOU exemple

6. Goal setting

There are basically three types of goals:

- Process goals
- Performance goals
- Outcome goals



Goal setting

Process goals:

These are the goals that mark the **path** of where the athlete would like to end up.

These are good goals and give the athlete a path to follow in their training programme.

Often set in terms of skill and technique. This could then be broken down into areas such as Mental Skills, Physical Skills, Technique and Fitness etc.

"By doing (a skill, or....) like (form, or level...) at (time, date...) I will perform much better"

Goal setting

Performance goals:

These are the goals that are made when an athlete wants to achieve a particular performance level.

These are usually short term goals with no training programme, unless process goals are included.

Goal setting

Performance goals: Self-contract challenge

Before each end, archer **writes down** the minimum score/goal = contract.
After the end is shot, if this contract is :

- **reached or exceeded**, the entered score = **the contract** (no more!)
- **not reached**, the entered score = 0

Contract	Real score	Cumulated score
54	56	54
55	53	0
54	57	54
55	55	55
56	57	56
56	54	0
As EXEMPLE	Total	199 points

Benefits?

Goal setting

Outcome goals:

These are usually made when an athlete wants to beat another competitor or win a competition.

This is not a good goal as other athletes are there to do their best, and you cannot control your competitors to **win**.

An outcome goal is only useful when the athlete aims to perform to a certain level, **the problem is the athlete could be setting themselves up to fail.**

Goal setting

Outcome goals: Up-&-down event

After a short ranking round, or randomly, matches are organised.
If after a ranking round, set the match as below:

1 st	2 nd	3 rd	4 th	5 th	6 th	.../...	2 nd last	Last
-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	---------	----------------------	------

Have a match, even over 1 end. 1 arrow shoot-off in case of tie.

Winner moves 1 target "up", looser 1 target "down". See below

1 won	2 lost	3 lost	4 won	5 won	6 lost	.../...	2L won	L lost
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Have another match, and so on...

1 won	4 won	2 lost	5 won	3 won	2L lost	.../...	6 won	L lost
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Benefits?

7. Stress Management

What it is?

Emotional reaction due to a relation with a possible future.

How to avoid it?

- Familiarisation with stressful situations
 - ➔ Anticipation / Rehearsals
- Familiarisation to the stress symptoms
 - ➔ Practice with challenges
- Be here and now on the task at hand
 - ➔ Mental discipline & sequence (see *STP*),
Breathing focus ... to be on the immediate task at hand.

7. Familiarisation to stressful situations

Example: First scoring arrows of a tournament

Experiment a warm-up plan: until it works most often, and then stick at it.

Warm-up plan example:

- Physical Warm-up (Routine to be experimented)
- 1st end: Pleasure. Fluidity. Shooting sequence. Rough sighting
- 2nd end: Feeling. Efforts & routine adjustment. Sigh refinement
- 3rd end: Shooting rhythm. Breathing and eye controls.
- 4th end: Projection in the coming event. Attention distribution

Stress symptoms

How does it show up?

Through various symptoms:

Yawn

Muddled up vision

Humming

Tension in the neck

Need to go to the toilet

Feel nervous

Thirsty

Nausea

Hands / trembling legs

Elevated heart beats

Fear / insecurity

Memory loss

Strength loss

Wet hands

Stomach pain

Heat

Mental confusion

Dizziness / intoxication

Belly pain

Breast pain

...

7. List of Stress symptoms & impact

		LEVEL			EFFECT	
Symptoms	High	Medium	Low	Negative	None	Positive
Weak legs						
High heart beats						
Sweat hands						
Vertigo or Dizzy						
Need bathroom						
Warm						
...						

7. Familiarisation to tress symptoms

How to do with it?

Practice familiarizing in the disruptive symptoms:

Shaking legs → Do squats then Shoot

High heart beats → To run then Shoot

Strength loss → Strengthening then Shoot

Wet hands → Vaseline on hands then Shoot

Dizziness → Turn rapidly on spot then Shoot

...

How to reduce it?

Low level of mental activity

Use relaxation techniques

Change the attention type & subject

Humour

...

A critical psychological step of the shooting process

Many things to do in a brief moment when string reach the face:

Anchoring. Sight centring. Aligning the string / scope-peep. Hold the breath. Feel/check good dispositions to pursuit or not. Expansion start. Aiming start. *Option: visually check point/clicker.* Maybe more...

Without an organization plan to set all those things, risk of:

- Different mindset during the main action
- Mental confusion under stress like shoot-of
- Aiming more & more early (external-narrow attention) leading to target panic

The coach should help to build a customized and efficient plan

Importance of a first good shot

Rule evolution → *Short event, like a match, even a shoot-off*

Psychological influence → *Have the lead...*

Suggestions:

Require archers to always be behind the waiting line before each end, so that they develop the same preparation routine as in competition

Score 36 first arrows. Moving back behind the waiting line after each shot

...

Importance of a good start

At least 2 formats of shooting session

Development period:

- 1st: Improve a shooting skill
- 2nd: Adapt it to aiming
- 3rd: Test it under challenge

Performance period:

- 1st: Simulate preparation (warm-up's)
- 2nd: Strive to perform
- 3rd: Work what could be improved

To coach in tournament

Case of study:

An experimented professional archer started well the tournament. Suddenly his/her score drop down and you notice a technical change. **What do you do?**

Suggestions:

With experimented / professional archers, if the technique change, it is often NOT a technical reason.

Unless an equipment or physical issue, there is often a mental origin

Because we cannot be sure 100% of the reason, do not provide THE solution, particularly a technical one...

Because athlete must learn to make choice on how to shoot capital arrow, to adapt... force self-assessment with **"I noticed WHY?"**

Process to be completed during the conference

Ideal Performance State (IPS)

IPS identification

Help archer to describe their state when you shoot well. Observe and take notes as well.

IPS introduction

It can come by chance, **but can also be introduced.**

Practice various preparations to performance – several times each – until identifying one that works often



Thank you...
Ready to answer your questions!

