

Yannis Theodorakis

- **Regulating attention
and concentration**

Listening well-while attending a lecture

- We hear half of what is said (50%)
- We listen to half of that (25%)
- We understand half of them (12.5%)
- We believe half of them (6.25%)
- And we remember half of that (3.125%)

Focus on what you CAN control!



Attentional focus in soccer:

When shooting a soccer ball toward the goal, where should your

eyes be looking?

- <http://www.sport-fm.gr/article/podosfairo/ta-duo-gkol-apo-to-belgio-ellada/3344065>

Russia's Yelena Isinbayeva and her blanket

- I only saw the end of the women's pole vault last night, which was basically just Yelena Isinbayeva trying to break her own record. It was interesting watching her little routine as she prepared for each jump.
- She would sit under blanket, doing something, I am not sure what. As she stood on runway each time, she talked and talked to herself. I suppose it is her way of psyching herself up for the jump. If anyone knows Russian, please tell me what she is saying. She eventually cleared 5.05 meters and celebrated by doing a flip.
- "I just like to go under there to get my focus and concentrate," she said . "Sometimes the cameras get close and I don't like it and that allows me to shut things out."

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- VIDEO

Topics

- **Definitions**
- **Types of attentional focus**
- **Internal external focus of attention**
- **Relevant studies**
- **Proper attentional focus**
- **Tips and exercises to improve concentration**

Exercise 1

- **Watch the ball**
- **Try to focus for 1 min**
- **only on the ball but**
- **not watching anything**
- **else, and not thinking**
- **anything else**



Attention definition

*offensive Versus defensive player
the ball, the legs, the face, the hands, the body?*



ATTENTION DEFINED

- *The process that directs our awareness as information becomes available to the senses.*
- *The ability to select the correct stimuli or cues to which athletes should attend from countless irrelevant and competing stimuli*



Attentional focus

- **the ability to selectively direct and sustain a focus of attention required for the successful execution of a specific activity.**

Alertness

- **the capacity to develop and maintain optimal sensitivity and readiness to respond to particular stimuli when they appear.**

- .

** Method of measuring attentional demand*

Performance of two tasks simultaneously, the primary task of interest and a secondary task that is hypothesized to selectively load conscious attentional resources.

** Method of measuring attentional demand*

- For example, a golfer may be asked to perform a putt (the primary task) and at the same time generate letters randomly from the alphabet
- pursuit tracking, mental arithmetic

Concentration

- *The ability to focus one's attention on the task at hand and thereby not to be disturbed or affected by irrelevant external and internal stimuli.*
- *Scmith, A., & Peper, E. (1998). Training strategies for concentration. In J.M. Williams (Ed.), Applied Sport Psychology: Personal growth to peak performance 3rd ed. (pp. 316-328). Mountain View, CA: Mayfield.*

Types of concentration

- **What is**
- **Internal & external**
- **Broad & narrow**

Examples from basketball

Internal Broad External

- **In analyzing the opposition's play before, during or after the game**

- **During the game, reading the game,**
- **making a pass**

- **In preparing to take a free throw,**
- **in controlling frustration over referee's decision**

- **In making a shot**
- **Receiving a pass**

• **Internal Narrow**

• **External**

Concentration and the duration of the event

- **Short and continuous**
- **Sprinting, swimming, running**
- **Long and continuous**
- **Distance running and swimming**
- **cycling**
- **Short and intermittent**
- **weightlifting**
- **Long and intermittent**
- **Golf, gymnastics, long jump,**
- **high jump**

Attentional Focus Model

	internal	external
Task relevant	Bodily sensations Task relevant thoughts Self talk	Task irrelevant thoughts
Task irrelevant	Task irrelevant thoughts	External distractions

Noel Brick, Tadhg MacIntyre & Mark Campbell (2014) Attentional focus in endurance activity: new paradigms and future directions, *International Review of Sport and Exercise Psychology*, 7:1, 106-134

Stevinson and Biddle (1998)		Proposed extension to associative categories	
Category	Thought examples	Category	Thought examples
Internal Association (<i>Inward Monitoring</i>)	Breathing, muscle soreness, fatigue, perspiration, thirst, blisters, etc.	Internal Sensory Monitoring	Breathing, muscle soreness, fatigue, perspiration, thirst, blisters, etc.
		Active Self-Regulation	Technique, cadence, relaxing, pacing, <i>strategy</i>
External Association (<i>Outward Monitoring</i>)	<i>Strategy</i> , split times, route, mile markers, conditions, water stations	Outward Monitoring	Other competitors, split times, route, mile markers, conditions, water stations

Stevinson and Biddle (1998)

Proposed adjustment to
dissociative/distraction categories

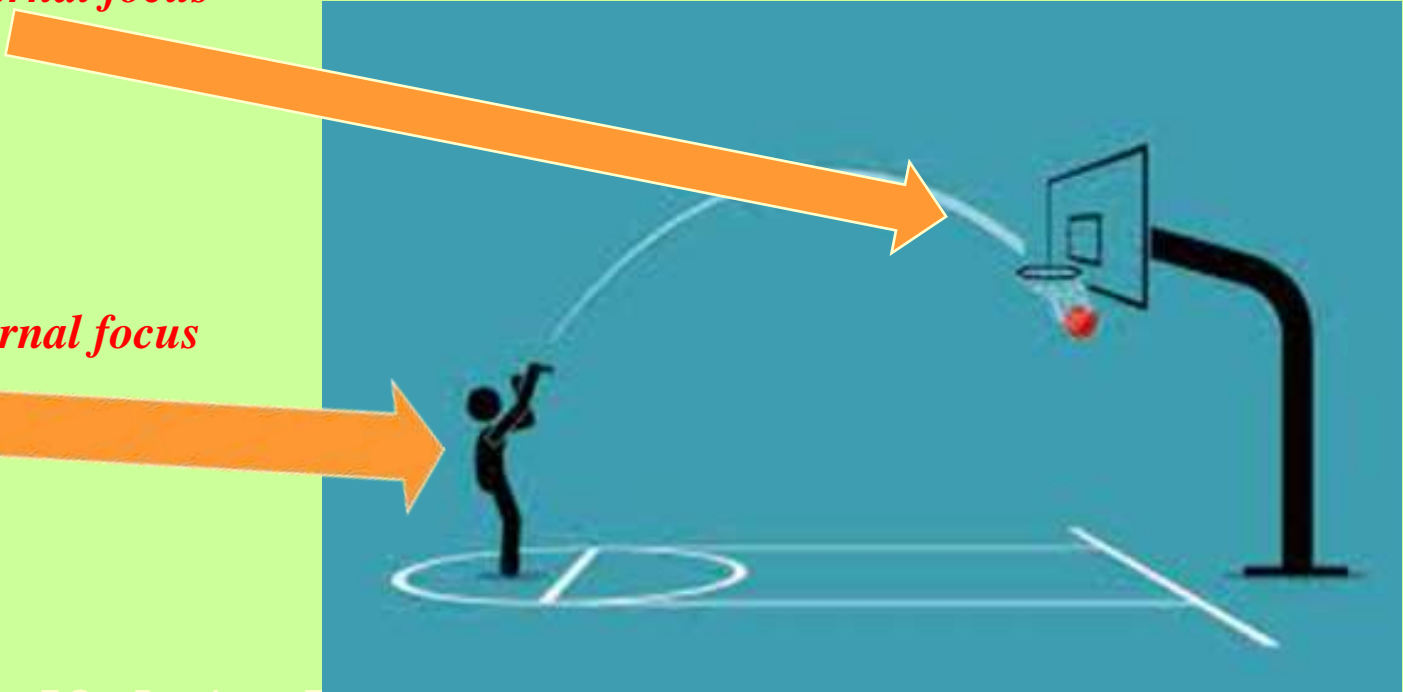
Category	Thought examples	Category	Thought examples
Internal Dissociation (<i>Inward Distraction</i>)	Irrelevant daydreams, imagining music, maths puzzles, philosophy, religion	Active Distraction	Attention-demanding tasks (e.g. puzzles), attention-demanding environment (e.g. urban street), intentional distraction, conversing
External Dissociation (<i>Outward Distraction</i>)	Unimportant scenery, spectators, other runners, environment	Involuntary Distraction	Unimportant scenery, attractive environment, spectators, other non- competitive runners, reflective thoughts (e.g. philosophy, religion), irrelevant daydreams, imagining music

Exercise 1

External focus.

- *Participants were asked to focus on the basket itself or some other aspect of the immediate environment such as the front rim or the backboard.*
- *Not to encourage any specific focus on the part of the participants, merely to encourage them to concentrate on anything other than their own bodies*

- *External focus*



- *Internal focus*

Internal focus

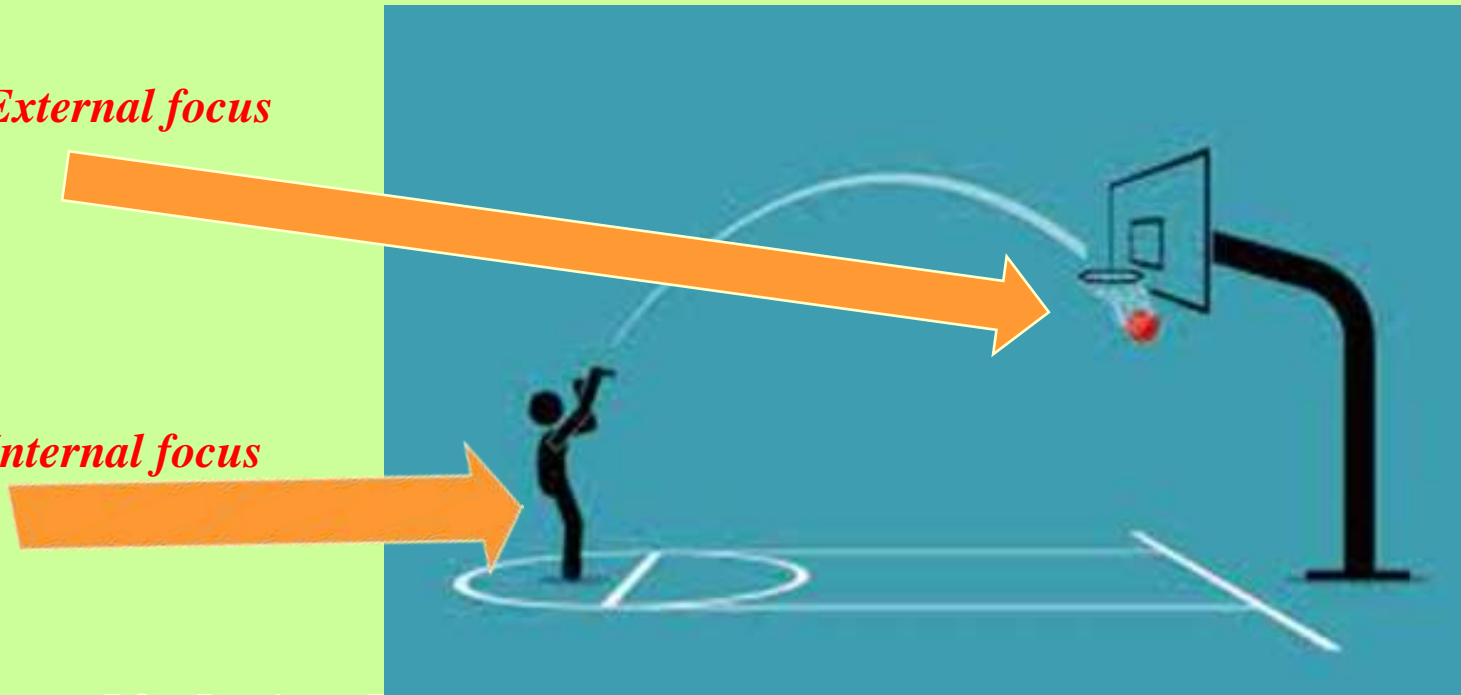
- *Participants were encouraged to concentrate on their arm angles (forearm and wrist) relative to the upper arm and of the positions of their legs and feet while shooting the ball.. Each participant heard statements directing them to a certain part of their body.*
- *Instructions: ‘‘As you are preparing to shoot the basketball, try to think about your arm and wrist angles. Notice that when I bend my elbow to shoot I am forming a right angle or ‘L’? Think about this as you are shooting the ball. Also, think about your feet position and if you bend your knees think about this, too. Think about all your body movements and angles’’.*

Internal or External focus?

- For **an internal focus**, participants were instructed to concentrate on their body movements, while for **an external focus**, they were instructed to focus on aspects in the environment. They were then asked which strategy they preferred.
- **Participants then continued either with their preferred focus or were instructed to switch to their non-preferred focus**

- *External focus*

- *Internal focus*



- **RESULTS AND Implication:**
- **Focusing on the effects of movement (basket EXTERNAL) rather than on movement itself resulting in more efficient performance.**
- **Encouraging individuals to adopt an internal focusing strategy is counterproductive in complex sensorimotor tasks.**
- **Individual preferences play a role.**

- **The locus of focus: ON COMPLEX MOTOR SKILLS, FREE TRHROW, BASKETBALL**
Weiss, S., Stephen, M., Reber, A., & Owen, D. (2008). Journal of Sports Sciences, 26, 1049–1057

Internal or external focus

- External focus yields learning effects compared to internal focus.
- It is more beneficial, if one attends to movement effects, rather than to the movement execution itself.
- An internal focus leads to more controlled execution.
- External focus promote automatic movement execution (Wulf, 2007)

Exercise 2

Association versus dissociation

- **Association.** While you are swimming, I want you to think of the word AIR every time you inhale.....
- **Internal Dissociation.** While you are swimming, I want you to imagine yourself doing something that is pleasant but unrelated to strenuous exercise. **Lying on the beach, solving mathematical problems, or thinking about someone you care about...**

External Dissociation.

- While you are swimming I want you to focus on the ends of the pool. Every time you approach one end, you will notice either one, two or three large geometric shapes (square, circle, or triangle). Try not to lose count.

Couture et al. (1999). Can associative and dissociative strategies affect the swimming performance of recreational swimmers The Sport Psychologist, 13(3), 334 - 343

- After the first swim, participants were assigned to one of four groups equated with swim performance times: control, associative, internal dissociative, and external dissociative groups.

- **Results showed that the group assigned to the associative strategy swam significantly faster ($p < .05$) than the control group.** No changes were found in perceived fatigue and perceived rating of exertion among the groups between the first and second swim.
- These findings support the position that associative thinking is an important cognitive strategy in timed performances

Table 1 Descriptive Statistics for Swimming Times in the First and Second 500-m Swims (in seconds)

Groups	First Swim		Second Swim		Difference
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>
Internal dissociation	723.50	150.06	722.38	145.65	1.13
Association	715.65	129.25	661.12	113.40	54.54
External dissociation	727.26	134.26	727.47	108.46	-0.21
Control	732.06	103.82	724.59	93.52	7.47

Attentional focus for runners

Masters and Ogles

- They asserted that association tends to be associated with faster running times and is used more during races than dissociation.
- In contrast, dissociation is related to lower rates of perceived exertion and is used more in training than association.
- Olympic level athletes prefer to focus on their strategy of the race.

Attentional focus for runners

World class runners results revealed they were focusing on bodily sensations, or using “**associative**” strategies.

They reported attending to their pace, choosing to stay with other runners, and using self-talk.

- Wininger, S. R., Gieske, D., & Abo, M. (2007). Examination of the Measure of Attentional Focus via Cognitive Interviews. Presentation at the 2007 Association for Applied Sport Psychology Annual Conference, Louisville, KY.

Associative and dissociative strategies

- Novice rowers performed multiple 40-minute rows on a rowing ergometer. Ss were divided into three groups, each experiencing a different condition: listening to a task-related "associative" audio tape that included reference to experiences associated with the ergometer task; listening to a "dissociative music" tape, and watching a "dissociative videotape".
- The associative tape condition produced increased performance levels without any overlapping data points. The dissociative music condition did not produce any marked performance changes. The dissociative videotape produced small improvements with overlapping data points in two of the three Ss. **Clearly, the associative condition was most effective.**
- **Implication. Associative thinking, that is attending to the sensations and elements of the task at hand, produces clear demonstrative improvements in rowing ergometer performance in novice athletes.**
- Scott, L.M., Scott, D., Bedic, S.P. & Dowd, J. (1999). The effects of associative and dissociative strategies on rowing ergometer performance. *The Sport Psychologist*, 13, 57-68

The focus of attention in adults, injured, etc.

An external focus of attention enhances balance learning in older adults (Gait & Posture 32 (2010) 572–575)

THE balance of subjects with Parkinson's disease and a fall history can be enhanced by instructing subjects to adopt an external focus. (Physiotherapy 91 (2005) 152–158)

External focus of attention is advantageous for the learning of a postural control task following an ankle injury. (Arch Phys Med Rehabil Vol 88, 2007)

Attentional focus

According to Wulf (2007), while executing motor skills, an individual's attention that is directed towards his or her own movements (e.g., the foot position, while kicking the ball) is called internal focus. In contrast, an external focus is when the individual's attention is directed towards the movement effects (e.g., the trajectory of the ball after a soccer free kick). Research demonstrates that an external focus of attention, as opposed to an internal focus, increases performance output. Focusing on movement effects is more beneficial than focusing on the movements themselves within motor performance and learning.

In contrast, Beilock and colleagues (Beilock & Carr, 2001; Beilock, Carr, MacMahon, & Starkes, 2002) have extensively demonstrated that the appropriate focus varies according to different kinds of tasks (i.e., skill learning or well-learned skill execution) and expertise levels (i.e., novice or expert). For motor skill learning, an internal focus of attention is beneficial, and the learning is compromised if attentional demands are drawn away from the task at hand. Also, expert performance of well-learned skills tends to be harmed when attention is directed to their step-by-step processes (e.g., foot position during ball dribbling). Conversely, novice performance is improved when attention is drawn to this micro step-by-step level.

Attentional focus

- The adoption of an external focus allows players to perform well-learned motor skills as in autopilot.
- In reference to soccer performances, Wulf's (2007) findings suggest that when a player finds him or herself in a situation where the game is stopped and there is time to think and plan where to kick the ball (e.g., free kick, corner kick or penalty kick), it is beneficial to adopt an external focus, especially one that directs the attention towards the movement effects. Coaches may train their players to focus on the trajectory of the ball for long kicks, such as a corner kick, or instruct them to concentrate on the desired spot in the goal where they want the ball to be placed in a penalty kick. This allows the player to avoid attending to his or her own movements, thus not disrupting the automaticity of well-learned skill execution.

Attentional focus in soccer

- The practical application of these research findings suggests that during moments when an expert player is preparing to pass the ball or is about to receive a pass, both with the dominant foot, coaches may tell them to focus on the ball motion (e.g., imagining the ball leaving after the kick), as opposed to focusing on the leg movements (e.g., thinking about the foot position before passing).
- Such situations, where an internal focus would prove beneficial, include players evaluating their performance after a game and when a skill must be improved, corrected, or changed. In these circumstances, performance is carefully monitored to provide ways of improvement.
- As a result, focused attention to the processes of performance is required in order to maximize feedback and correct future actions.
- *Tedesqui, R., & Glynn, B. Focus on What?": Applying Research Findings on Attentional Focus for Elite-Level Soccer Coaching. Journal of Sport Psychology in Action, 4:122–132, 2013 DOI: 10.1080/21520704.2013.785453*

Attentional focus in Penalty kick



ATTENTIONAL FOCUS FOR GOALKEEPERS

Psychological Preparation of Goalkeepers for the 11-m Penalty Kick in Soccer—A Review
Lidor, R., & Gal Ziv, & Tamar Gershon. The Sport Psychologist, 2012, 26, 375-389.

- **Kicking accuracy was reduced by 32 cm (i.e., kicks were directed closer to the center of the goal) when the GK moved his arms.**
- **Waiting for foot-ball contact appeared to be a better strategy than trying to guess the ball direction before the foot-ball contact.**
- **Video clips showing penalty kicks performed by different kickers can be used in sport psychology programs for GKs.**
- **SPCs should convince them that when anticipating a penalty kick they should initiate their movement as late as possible to have a better chance of diving in the right direction**
- **Standing slightly to one side of the goal can increase the chances of the ball being directed to the side of the larger area.**
- **It appears that GKs can also distract penalty takers and impair their kicking accuracy by moving their arms up and down.**

“Look around while running!” Attentional focus effects in inexperienced runners



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ARTICLE INFO

Article history:

Received 30 March 2016

Received in revised form

18 July 2016

Accepted 29 August 2016

Available online 31 August 2016

Keywords:

Running economy

Optimal attentional focus

Novices

ABSTRACT

While attentional focus effects on running economy have been shown in different settings for trained athletes, it is unclear how attentional instructions should be formulated to improve running economy for inexperienced runners. The present study was designed to fill this gap and test attentional focus effects in runners with little running experience. An experimental design was implemented and participants ran 4×6 min at a slow and fixed running pace with different attentional instructions for each block (video, breathing, running movement, no instruction), while oxygen consumption was measured continuously. The results showed best running economy (lowest oxygen consumption) in the video compared with the breathing and movement condition which goes in line with effects for trained runners. Therefore, inexperienced runners can also profit from directing their attention externally and commonly taught principles such as focusing on the coordination of breathing and stride patterns should be reconsidered.

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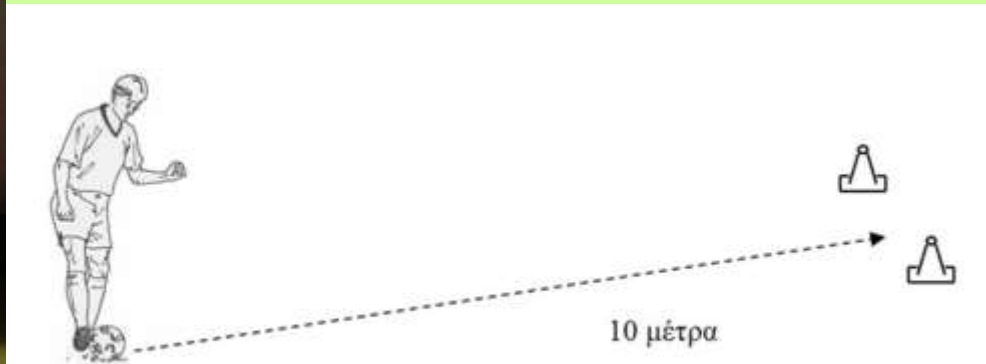
**Therefore,
inexperienced runners can also profit from directing their
attention externally and commonly taught principles such as
focusing on the coordination of breathing and stride patterns
should be reconsidered.**

Attentional focus: summary

- **Internal or external?**
- **For motor skills....**
- **For swimmers...**
- **For runners....**
- **For recreational athletes**
- **For enjoyment.....**

What to attend

- **The body of outside the body?**
- **Ball games: The ball, or the destination of the ball?**



2. Make the game simple

- Το ποδόσφαιρο είναι απλό. Αλλά το δυσκολότερο πράγμα είναι να παίζεις ποδόσφαιρο με απλό τρόπο.
- Johan Cruyff 2010



Sampras versus Moya Australian Open 1997

- **Total play time** **87 minutes**
- **Action time** **17 minutes**
- **Time between action** **70 minutes**
- During these 70 minutes, there was the opportunity for both positive and negative thoughts and self talk. Plenty of time to think oneself into or out of the match.

Γιώργος Σαμαράς 2010



- ...Ο Ρεχάγκελ ήθελε να εκτελέσει άλλος το πέναλτι, εσύ πήρες την μπάλα και το εκτέλεσες.
- Δεν είχα καταλάβει καν τι συνέβη. Θυμάμαι λίγα πράγματα. Είχε γίνει πέναλτι, πήρα τη μπάλα, ξέχασα τα πάντα και θυμάμαι μόνο την Κατσουράνη να μου φωνάζει «διάλεξε γωνία, είναι γκόλ»....Δεν συνέβη τίποτε, απλώς είχα αυτοπεποίθηση, δεν έχω χάσει πέναλτι στην καριέρα μου, και ένοιωθα έτοιμος.

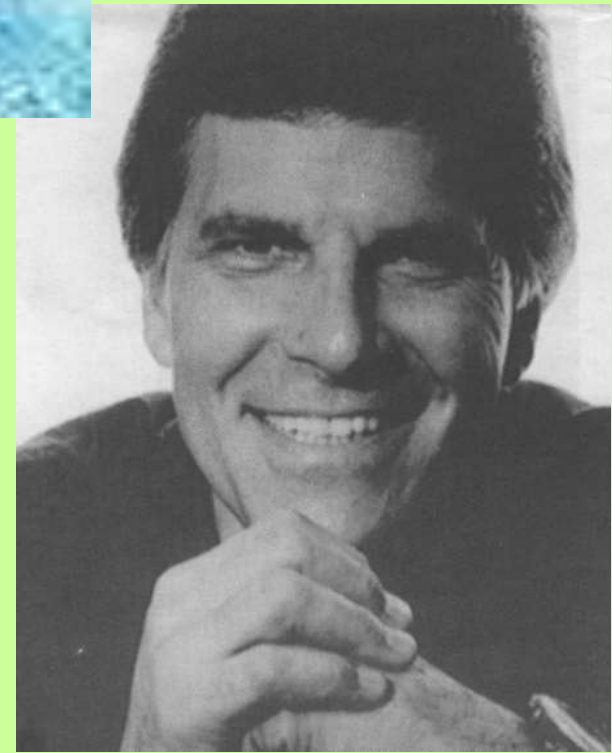
The importance of concentration

- *Πιστεύω, μερικές φορές, ότι ο φόβος πηγάζει από έλλειψη εστίασης στο αντικείμενο, ειδικά στον αθλητισμό. Αν κάθε φορά που ετοιμαζόμουν για ελεύθερες βολές σκεφτόμουν ότι δέκα εκατομμύρια άνθρωποι με παρακολουθούν από την άλλη μεριά του φακού, δε θα κατάφερνα τίποτα!*
- **Michael Jordan**, βετεράνος καλαθοσφαιριστής

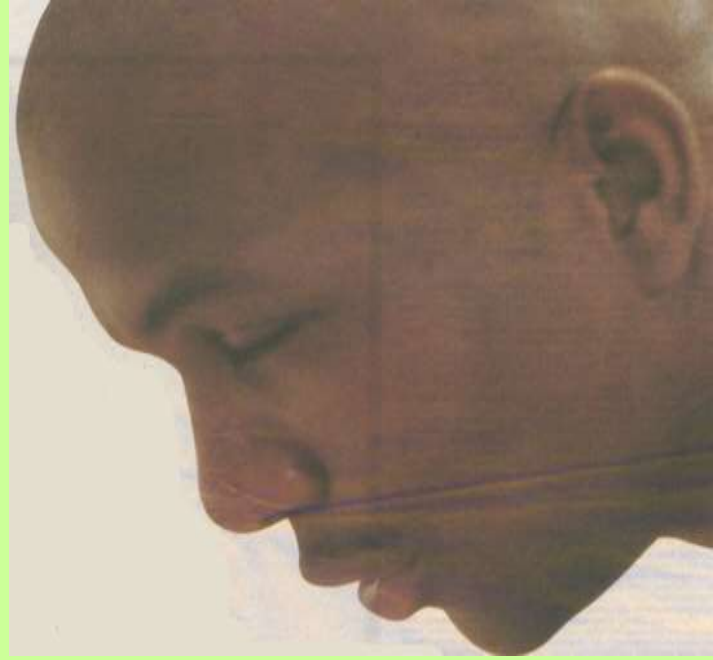
The importance of concentration

Mark Spitz

- *Γιατί χάνει ένας γεννημένος νικητής;*
- *Γιατί χάνει την αυτοσυγκέντρωσή του. Η νίκη είναι μια μάχη με τον εαυτό σου. Απέχει ένα λάθος η νίκη από την ήττα.*



THE IMPORTANCE OF CONCENTRATION MORIS GREEN WORLD CHAMPION, 100 M ATHENS, 1997,



- «Εκεί στο στίβο, οι άλλοι, οι θεατές, οι προπονητές, οι αθλητές, παίζουν όλοι το δικό τους παιχνίδι.
- Εσύ πρέπει να συγκεντρωθείς στο δικό σου. Να κάνεις όλα εκείνα που διδάχθηκες πως γίνονται. Να τα κάνεις στον πιο απόλυτο βαθμό των δυνάμεών σου και για τίποτε άλλο να μην ξοδέψεις ούτε μια γωνιά της σκέψης σου».

Implications: attentional focus for distance runners

- **Fatigue:** irrelevant thinking, mathematics
- (σκέφτονται ότι χτίζουν ένα σπίτι, ή μετρούν)
- **Rhythm:** internal, breathing
- **The strategy of the race**

Destructions

- Negative thinking
- Spectators
- The coach
- Family
- friends



distractions

External

- Background noise
- Players talking at inappropriate times
- Aeroplanes trains
- Noticing family and friends in the audience

internal

- Thinking about other competitors
- Attending to past events like a recent mistake
- Attending to future events like “ what if a lose this match”
- Thinking too much (Body movements, technique)

ATTENTIONAL PROBLEMS **during the competition**

Internal distracters (worries, irrelevant thoughts)

Attending past events

Attending future events

What if I lose the game

What if I win the game

Choking under pressure

3. Overanalyzing... paralysis by analysis

Bad concentration

- **thoughts**
 - Negative/ what if I lose
 - Poor decision making
- **Feelings**
 - tense, heavy, tired
 -
- **Focus**
 - Scores/outcome
 - Back mistakes
 - The weather
 - spectators

Good concentration

- **thoughts**
 - positive
 - **Challenged**
- **Feelings**
 - **Calm**
 - **Control**
- **Focus**
 - **The here and now**
 - **The ball**

List of factors that an athlete or a coach can or cannot control

- Concentration
- Diet
- Effort
- Travel arrangement
- Technique
- Time management
- Thoughts and emotions
- Outcome of the competition
- Weather
- Decision of the officials
- Spectators
- Illness

In summary

- *Try to identify and*
- *control the controllable*
- *and not worry about those you cannot control, because these will induce anxiety and distract you and your performance from the task*

Improving concentration

Practical Implication

- 1. Use simulations practice*
- 2. Use cue words*
- 3. Stay focusing in the present*
- 4. Overlearn skills or perform automatically*
- 5. Employ non-judgment thinking*
- 6. Establish routines*
- 7. Develop competition plans*

Improving concentration

practical Implication

8. Practice eye control

(the strings of the racket/

Eg. Before the free throw shooting focus on.. the floor, the basket, the rim

9. Teach your athletes what cues to attend and in what order

10. Keep the cues as few as possible

11. Attend to the present and immediate forthcoming action, not the past or future

12. Focus on factors such as execution no to the past or future

13. Use imagery

14. Use goal setting

15. Use anxiety control techniques

Improving concentration

practical Implication

- *For games like football, basketball, volleyball, or tennis, focus on the ball.*
- *“Watch the ball”*
- *After a frustration, anger, non- controlling emotions, or a bad call of the referee, focus on your breathing, on the shoes.*

Improving concentration

practical Implication

- *Attentional focus on tennis:*
- *Not on: the set, the game, the point*
- *But only on the next few seconds before the hitting of the ball*
- *“the best focus strategy in tennis, “watch the ball”*

Centering

- Focusing attention on the centre of your body, the area just behind your navel. This is a technique that is particularly effective during sports that have breaks in the action, such as in between sets in tennis, or prior to a penalty in soccer. Centering has a calming and controlling effect, providing a simple but effective way to counteract the negative effects of anxiety:
- Stand with your feet flat on the ground, shoulder width apart, arms hanging loosely either side of your body;
- Close your eyes and breathe evenly. Notice that when you breathe in, the tension in your upper body increases, but as you breathe out, there is a calmer, sinking feeling;
- Inhale deeply from your abdomen and, as you do, be aware of the tension in your face, and your neck, and your shoulders, and your chest. As you exhale, let the tension fall away and focus on the feeling of heaviness in your stomach;
- Continue to breathe evenly, focusing all your attention internally on the area immediately behind your navel;
- Maintain your attention on that spot and breathe normally, feeling very controlled and heavy and calm;
- On each out-breath use a word that encapsulates the physical feelings and mental focus that you want eg 'loose', 'calm', 'focused', 'sharp', 'strong' etc.

Concentration cues

Function	Verbal cue	Visual cue	Action cue
Instructional	Footwork	Watch the ball	Get your weight forward
motivational	Go, just do it	Seeing yourself on the winning podium	Pulling up your socks
emotional	Relax, calm	The cool, calm coach displaying positive signals	Three deep breaths
psychological	Think broad, here and now	Look for the dot on the ball, or the seam (tennis)	Squeeze the racket

Effective real word refocusing reminders in stressful situations begin with a reminder to breathe

- **Breathe, relax**
- **Focus, focus, focus**
- **Connect, connect, connect**
- **Change channels, change channels**
- **Focus on my game plan**
- **Be totally here. Be in the moment.**
- **I control my focus.. It's my choice. It's my focus**
- **Let it go, let it go, and focus on the next step**
- **T.Orlick (2016) In pursuit of excellence.**

Attentional problems external distracters

- Visual distracters (spectators, friends
- Compliments of an opponent...nice technique...)

Precompetitive routines

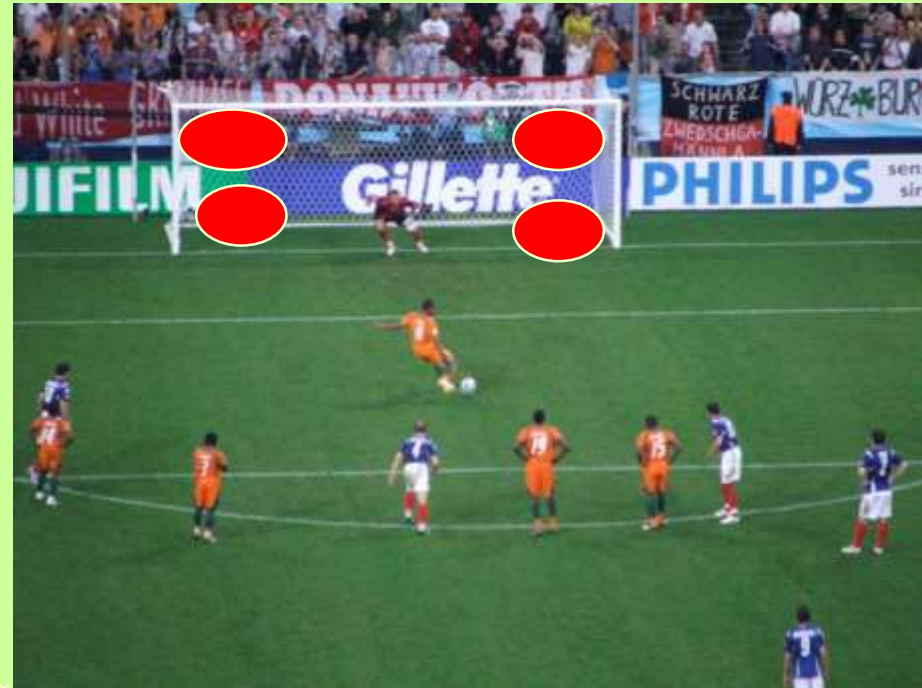
- **Time before**
- 30 min relaxation/ review tactics
- 15 min imagery
- 2 min self talk
- 1 min focus on the appropriate cues

Specific Routines before individual techniques during the competition

- Just before the penalty/ the free throw/ the long jump/ the high jump/ the tennis service/ ect.
- **Relax:** take a long slow breath, relax..
- **Imagine:** technique
- **Think:** Self talk, cue word
- **Focus:** specific
- **Act:** Just do it

Routine for penalty kicking

- **1. Make a decision how to kick the ball and the specific point of the goalpost**
- **2. Image an excellent execution**
- **3. Take a deep breathing**
- **4. Not change your decision if the goalkeeper predict your intention**
- **5. Just do it**



Routine: free-throw shot in basketball

- For the physical components, the player is recommended to:
 - (a) Get a position on the free-throw line (e.g., setting the feet and assuming a comfortable position);
 - (b) Dribble the ball a number of times (e.g., bouncing the ball three to five times);
 - (c) Hold the ball after completing the dribbling act;
 - (d) Spin the ball while it is held in his or her hands;
 - (e) Use breathing control (e.g., inhaling deeply and exhaling slowly while holding the ball in the hands);
 - (f) Release the ball;
 - (g) Follow-through (e.g., hands should follow the ball to the basket).

free-throw shot in basketball

- For the psychological components, the player is recommended to:
- (a) Imagine her/himself performing the shot while standing on the shooting line (e.g., imagining the trajectory of the ball to the basket; imagining how the ball goes through the rim; imagining the sound generated by the ball when it goes through the rim and touches the net);
- (b) Focus attention on the front area of the rim before and during the shooting act (e.g., directing the eyes at the rim; clearing the mind of any thoughts; relaxing);
- (c) Self-talk while holding the ball (e.g., using selected words associated with the shooting task: “be focused,” “be relaxed,” and “do it”);
- (d) Evaluate the techniques of the shot and its outcome, if time permits (e.g., after the completion of the first attempt and while preparing for the second attempt).
- An assessment can be made of the physical aspects of the shot: “Did I release the ball on time?” “Was the arc of the shot at a correct angle?” “Did I follow through?” Also, an assessment can be made of the psychological aspects of the shot: “Was I relaxed?” “Was I confident in my shot?” “Did I focus on the front area of the rim?”

My Free Throw Routine

Exercise in real setting.
Next exercise in tennis or basketball.
Watch the ball!
Implications. Learn to move your attentional focus
in basketball

- *Για να κατεβάσεις τη μπάλα πρέπει να βλέπεις*
όλο το γήπεδο
- *Για να δώσεις πάσα πρέπει να βλέπεις*
τον παίχτη
- *Για να βρεις ελεύθερο χώρο να δεχτείς την πάσα πρέπει να βλέπεις*
όλο το γήπεδο
- *Για να πιάσεις τη μπάλα που έρχεται πρέπει να αλλάξεις οπτικό*
πεδίο, μόνο στη μπάλα
- *Για να αποφασίσεις που θα τι στείλεις πρέπει να βλέπεις*
όλο το γήπεδο.
- *Για να σουτάρεις στο καλάθι πρέπει να βλέπεις*
μόνο το καλάθι.

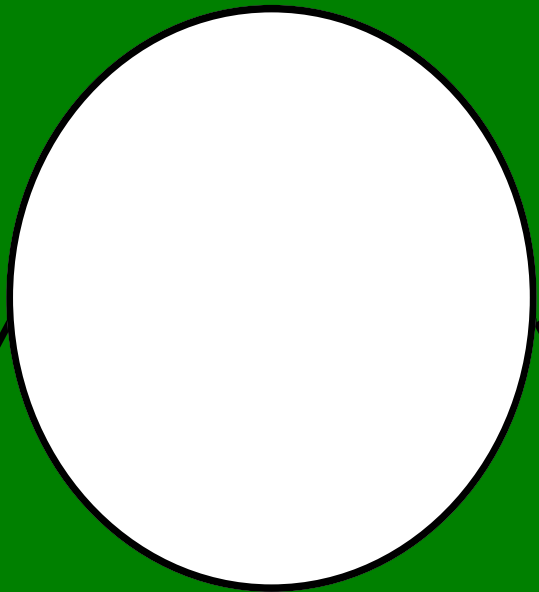
Passing
"The player"

dribbling
"The court"

Moving
"The court"

Receiving a
pass
"The ball"

Shooting
"The center of
the rim"



3

2

1

4

5

Attentional focus on diving



the greatest diver ever,

Video Greg Louganis/ for discussion

three and half somersault diving

- Δες το βατήρα, *see the diving board*
- δεξ το νερό, *split the water*
- δεξ το νερό, *split the water*
- δεξ το νερό, *split the water*
- κλώτσα, *kick/ stretch*
- δεξ το νερό *split the water*



Attentional focus in trampoline

Rosie Maclennan: personal communication: main focus point: the cross of the trampoline,

<https://www.youtube.com/watch?v=e9h0509uad8>



ολογίας της Άσκησης και ποιότητας ζωής

Attentional focus in running:

Breathing?

The body?

The rhythm?

The center of the body?

The environment?

The other athletes?

The strategy of the race?

The next 400 meters? The next kilometer?

One mile to go?

Find the perfect resolution according to the level of expertise, and the goal.

EXERCISE 1v

75	7	50	84	6	73	66	2	49	87	14	70	36	22
40	23	32	56	48	78	34	74	28	57	21	52	64	31
35	47	62	89	5	12	91	1	41	63	39	77	13	42
85	8	19	55	38	71	53	17	79	72	26	97	69	18
27	67	46	98	4	83	11	3	16	76	45	58	61	81
92	9	54	25	59	37	44	96	68	33	93	80	29	90
30	43	94	60	86	10	65	20	82	51	15	95	88	24

Internal or external focus?



Future studies

- What to attend in specific situations in team sports
- Differences in attention focus among top level and recreational athletes,
- or in physical fitness, exercise, physical activities, ect.

A final topic for discussion

- **What to attend?**
- **In the present,**
- **in the here,**
- **and now!!!**