

PERFORMANCE ROUTINES IN SPORT

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What about routines?

1. Definitions of the terms: pre-performance routines, during-performance routines, and post-performance routines
2. why athletes can benefit from the use of task-pertinent routines
3. Mechanisms that make routines effective
4. Developing a routine: the physical component and the psychological component
5. Examples
6. Using routines
7. Hands on... 😊

Definition of routine...

- Define routine....
- “a fixed and regular way of doing things”
(Oxford Advanced Learner’s Dictionary, 1992, p. 1103)
- Looking at another version of the Oxford Dictionary (Concise Oxford Dictionary, 1984) yields the following: “a regular course of procedure, unvarying performance of certain acts” (p. 910).

Definition of routine

- A performance routine can be defined as a systematic sequence of physical (motor) and psychological behaviors that are demonstrated before, during, and after the execution of a sporting task
(e.g., Velentzas, Heinen, Tennenbaum, & Schack, 2010).
- In some sports such as gymnastics, swimming, and track and field, athletes are required to perform fixed sets of movements which have been repeatedly and extensively practiced.
- Why??? (Discuss...)

Definition of routine

- A performance routine is an integral part of the athlete's repertoire when he or she:
 - (a) is preparing him or herself for the sporting act (i.e., a pre-performance routine)
 - (b) is executing the sporting act (i.e., a during-performance routine) and
 - (c) is assessing and reacting to the way he or she performed the sporting act and/or the outcome of the act (i.e., a post-performance routine).

Scenarios

LIDOR, HACKFORT, & SCHACK, 2014

- He is standing on the free-throw line, waiting for the referee to hand him the ball. Until the ball is handed to him he imagines himself shooting the ball. He focuses on his breathing to control arousal. He likes to stand on the line and feels good being there. In his mind he sees himself performing the shot smoothly and perfectly, as he has done numerous times before. When the referee hands him the ball, he directs his eyes to the rim of the basket, dribbles the ball three times, takes a deep breath, and makes the shot. He does not have to look at the outcome of the throw; he listens to the noise generated by the ball as it whooshes into the net. The ball is in.
- She feels that she is not able to focus appropriately before and during the serve. Sometimes she focuses on the net, and sometimes she focuses on one of the players from the opposing team. Her eyes move from one point to another. She feels that she would be happier if instead someone else from her team were standing in the serving zone and serving the ball. After receiving a signal from the referee, she performs the serve. The serve was easily received by one of the players from the opposing team. She felt that she did not perform well.

Some bowling routines

- Try to observe what do they include...
 - Cognitive elements?
 - Behavioral elements?



Practically speaking

- Overt physical behaviors demonstrated by the athlete before he or she begins the sporting task. For example:
 - A) *the same warm-up session before he or she begins to perform*
 - B) *a tennis player bouncing the ball a number of times immediately before serving can also be considered as a physical component of a routine*
- Psychological elements, For example:
 - *Such as focusing attention, in order to enable the performer to cope effectively with distractions associated with the performed act – both external (e.g., noise generated by the crowd) and internal (e.g., negative thoughts).*

Practically speaking

- An effective routine should also include elements that can be applied by the athlete at the end of his or her practice/competition/ game. For example:
- A performance routine should help him or her cope with feelings such as disappointment or frustration.
- Also, routines should help the athlete to re-organize his or her thoughts after the competition/game in order to be ready for the next competitive event

Example 1: Getting ready to jump

A long jumper's routine

- *10 minutes prior to jumping* mentally rehearse my jump and relax with 10 breathes
- *3 minutes prior to jumping* I remind me of my positive thought, which I have always in writing in my bag
- *2 minutes prior to jumping* I physically rehearse my hand movement
- I take position
- *1 minute prior to jumping* I say to myself: "I am strong & ready"
- *30 seconds prior to jumping* I am ready to execute

How do they work?

- The mechanisms are not 100% clear

It is suggested that...

- Their cognitive and behavioral elements when used intentionally
 - help regulate arousal and
 - enhance concentration (*Boutcher, 1990; Boutcher*)
 - thus induce optimal physiological & psychological states (*Crews, 1987*)

Mental calibration model

- The mental calibration model (Schack & Hackfort, 2007; Schack et al., 2005) suggests that most of the problems that arise during competition are more likely to be caused by a mental breakdown rather than by physiological difficulties.
- This means that the basic elements and sequences from which a motor action is built are integrated and organized in order to attain a specific action goal.
- Moreover, the physiological problems that arise are often due to failures in athletes' mental functioning.
- The best way for athletes to affect physiological functioning is to direct mental skill strategies towards resolving the cause of the physiological deterioration – for example, changing the negative thinking that causes anxiety during competition.

Practically speaking

- For example, bouncing a ball in a volleyball serve routine supplies the server with information about the ball, the floor, and the state of his or her muscles.
- This information can then be used to calibrate the motor system in order to be optimally prepared for the serve.

Other possible explanations for pre-performance routines

- Attentional control
 - PPR help direct attention to task-relevant cues (Gould & Udry, 1994; Weinberg & Gould, 1995)
- Warm-up decrement
 - PPR create the psychological and physiological readiness, that was lost during game breaks (in closed skills) (Schmidt, 1988)
- Automatic skill execution
 - PPR prevent the athlete from consciously controlling specific movements that may inhibit smooth and coordinated skill thus promote automaticity (Boutcher, 1990)

*Performance routines focus on execution NOT on
outcome*

Performance routines in macro and micro sporting events

- A macro sporting event is the entire event in which the athlete is engaged, such as a practice session, a competition, or a game.
- A micro sporting event is considered to be a specific event within the macro event.

In essence, what the athlete does on a regular basis throughout: (a) the days/hours/minutes before the event; (b) the actual event; and (c) the days/hours/minutes after the event, can be considered as performance routines.

A performance routine is very personal...

- Each athlete's routine may include
 - behaviors
 - Cognitionsthat suit him/her and help him/her perform

The main objective of an effective performance routine is to facilitate learning, performance, and achievement. Effective performance routines are usually mastered with a high degree of consistency; they become an integral part of the micro event – the self-paced act – either deliberately or subconsciously, depending on the skill level of the athlete (Lidor & Singer, 2003).

What kind of behaviors?

- Mental rehearsal
- relaxation
- Mimicking part or whole actual movements

Cognitions to be included?

- Thoughts
 - Positive
 - On execution elements
 - Motivational
 - Focusing on an specific element of the skill

Teaching beginning athletes performance routines.

- Why???

it is assumed that all skilled athletes who are involved in sports more or less use some kind of performance routine, either taught by the coach/instructor or developed intuitively.

A three-phase model of teaching pre-performance routines

- Phase 1 – Preliminary preparatory instructions

The athletes should experience different routines in order to be able to select the most appropriate ones for them. In this phase, a dialogue concerning how to use the routines should be conducted between the coach and the athlete. The coach should listen to the athlete's demands and preferences when he or she practices different routines. The coach should present various routines to the athlete that can be used when performing self-paced tasks.

Phase 2 – Task-specific preparatory instructions.

- The objective of Phase 2 is to enable the athlete to adopt a consistent set of routines that best reflect his or her individual needs and preferences. After experiencing different routines in Phase 1, the athletes should establish their own routines. They should feel comfortable with the selected routines and integrate their components with the techniques of the performed self-paced task.
- Example: Free-throw shot: dribbling the ball three times while standing on the shooting line) and psychological (e.g., looking at the front area of the rim before and during the shot) components when performing the free-throw shot.

Phase 3 – Preparatory instructions for the real-life self-paced event.

- The objective of Phase 3 is to enable the athletes to practice their selected routines in conditions simulating the real-life self-paced events that they may face during actual practices, games, or competitions. Two situational conditions are taken into account in this phase – time constraints and external distractions.
- Example: five seconds are allotted to the basketball player to prepare him- or herself for the free-throw shot and should be practiced under noisy conditions (e.g., performing while a tape recorder generates the noise of hostile fans).

Golfers' routines: What's the common element?

- Jack Nicklaus



- Tiger Woods



- A routine is prepared and its effectiveness tested during training season not close to competitions!
- You may need a lot of changes in order and content as you assist and athlete develop a routine that works!

In general when do we usually use a routine?

- Before executing a task
- Before a race/competition
- To refocus
- To mentally come back after a mistake

What is a superstitious behavior?

- A behavior that does not have a clear technical function in the execution of skill, yet is believed to control luck and/or other external factors (Moran, 1996)
- Superstitious acts, or 'rituals' as they are better known, are part of a 'widely accepted' practice used by athletes across many different cultures (Womack, 1992, as cited by Bleak & Frederick, 1998). The repetitive nature of these actions leads to use of the term 'Superstitious Ritual'. Although the use of these behaviours is prevalent, little research has been done to specifically examine superstition in sport, the psychological implications of superstitious ritual on the athlete and particularly on their subsequent performance

Routine or Ritual?

- the Jacksonville Jaguars' John Henderson may have the most awesome pregame ritual ever.
- He has a trainer slap him as hard as they can.
- Just watch the video below and see Henderson get worked up into a raving lunatic. I would *not* want to play against this guy after watching this video.



Routine or Ritual?

- James Lebron
- Pre-performance routines are often developed by sports psychologists (Bleak & Frederick, 1998) or coaching staff for individuals or teams. The subjective nature of superstition means the athlete establishes all rituals independently (ceremonial aspect, superstitious elements with no real influence on performance).



A pre-execution routine

- Sense of flying
 - What are its elements?
 - When does it really start?



A 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).
- For the psychological components,
 - (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”)

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Let's design some routines...

1. Write a pre-performance routine for a sport of your choice

Preset cognitions & behaviors

**Focus on execution
NOT on outcome**

**Prior to execution
Individualized routines**