

## Ask the Expert by Mike Kernodle, Ph.D.

**Question:** I coach a number of players covering a wide range of skill levels. Can you provide some suggestions as to how I can optimize my practice sessions with regards to the amount of time spent working out versus resting?

**Answer:** There are two types of practice scheduling concerns that must be addressed. *The first* is the length and number of practice sessions. The research in this area suggests that people learn skills more efficiently if there are more practice sessions of shorter length rather than a few number of lengthy practice sessions. In other words, practicing two hours per day over a 10-day period would be more effective than four hours per day for five days.

*The second concern* is to determine the most effective practice/rest schedule to utilize on a daily basis. There are two basic types of practice/rest possibilities. The first is called **massed practice**, which consists of practice with little or no rest. The second is called **distributed practice**, which allows for rest periods. Research examining the appropriate practice/rest distribution during daily practice sessions suggests that for continuous skills (skills that last a relatively long time and require repetitive actions) such as walking, swimming and bicycling, a distributed practice schedule would be more beneficial than a massed practice schedule. When learning a discrete skill (the action of the skill is relatively brief) such as **tennis**, massed practice is usually preferable. However, a coach must take several other variables into account when deciding upon the practice/rest ratio.

- (a) **Stage of Learning:** Initially, a distributed practice schedule is suggested when working with beginners. Many beginners will not be in shape to handle a massed practice schedule and if they become overly fatigued, several problems may arise. The **risk of injury** will increase as the fatigue level rises. Also, the **motivation** to come back for another lesson could easily decrease if all the fun is eliminated because of an overly demanding workout.

The coach should also keep in mind that beginners will need more time to process the feedback acquired both from the instructor and the environment. As these beginners move through the learning stages to advanced beginner, intermediate etc., their fitness level and ability to process feedback will improve, allowing the coach to move towards more of a massed practice schedule.

- (b) **Level of Cardiovascular Fitness:** If you are dealing with more advanced players who are not in shape or advanced players who are returning to the game after a layoff, the initial practices/lessons should operate on a distributed schedule. As with the beginners, when the advanced player becomes fit, the instructor can change the practice to more of a massed schedule. Logically, if the coach is working with fit, relatively accomplished players, the schedule can consist of a massed practice.

- (c) **Proximity to Competition:** If you are coaching a team or individual players and their competition is the next day or the competition is the same day, you should consider using a distributed practice schedule. Keep in mind that you want the player to be as fresh as possible for competition and one or two relatively easy days before competition will allow them to recover from the hard preparation for the competition.

**Appropriate rest period:** This has not been established and may vary from person to person and sport to sport. The instructor should be aware of the age, stage of learning and fitness level of each individual and determine an appropriate rest period that will allow the student to optimize the practice time available.

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Practice vs. Rest