



Understanding the physical demands and outcomes of soccer-specific training activities to optimize player development.

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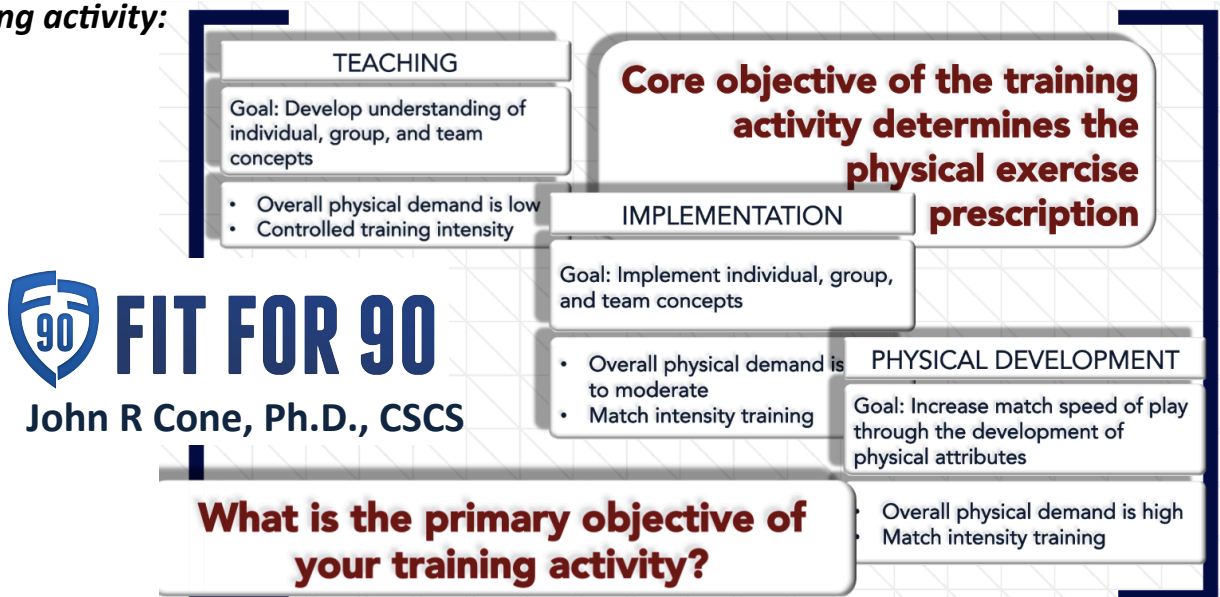
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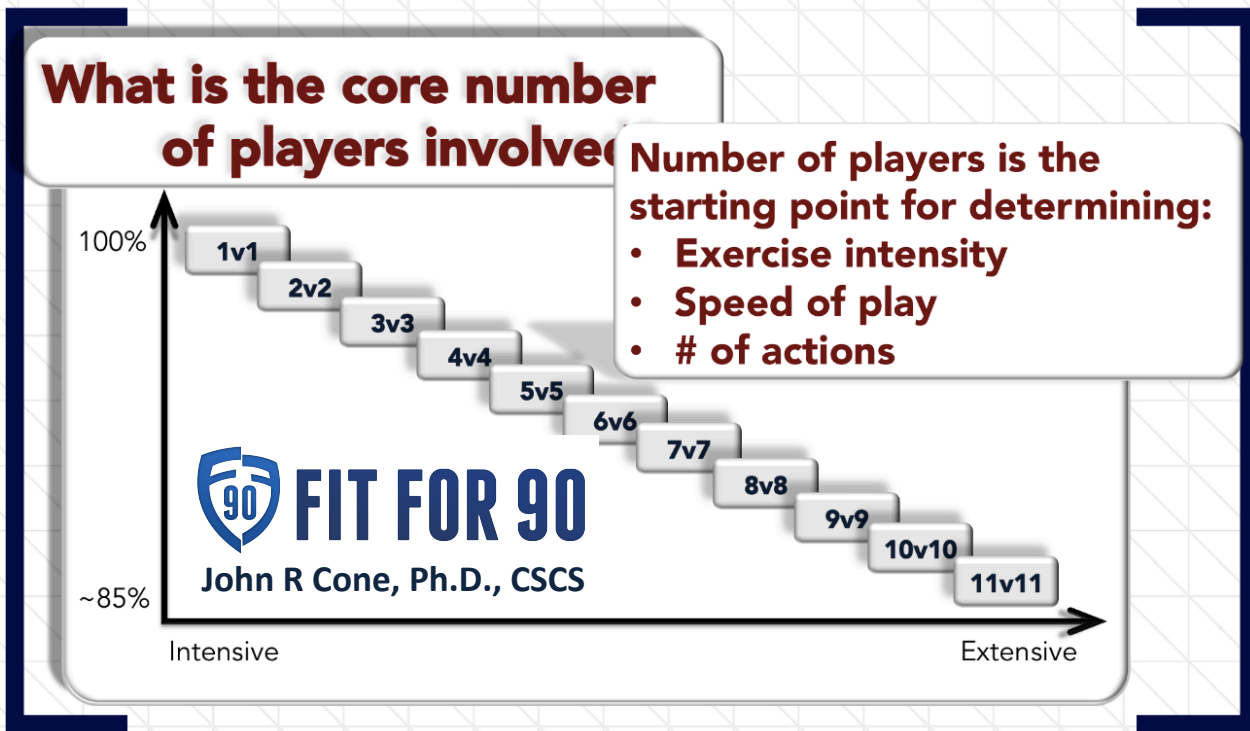
Modern periodization must simultaneously address short-term performance and long-term player development. Effective periodization optimizes both and at the same time limits injury risk. This methodology requires a methodical work flow, working from the big picture through to each individual training activity.

The objective of this session was to discuss and problem-solve a training activity, selected and developed by the coaches in attendance, via a systematic and logical approach to comprehensively address all potential nuances of an activity and the complete physical spectrum of training activities developed by coaches.

The first step towards a solution is determining the objective of the training activity:

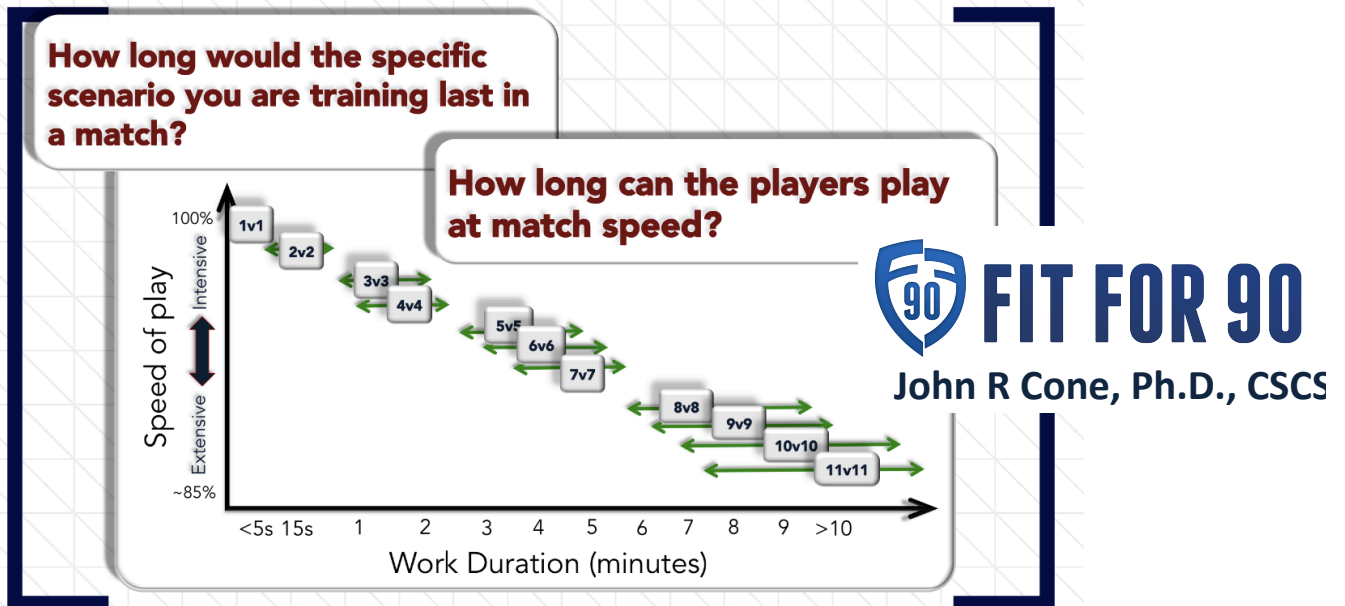


The second consideration the number of players involved in the action.



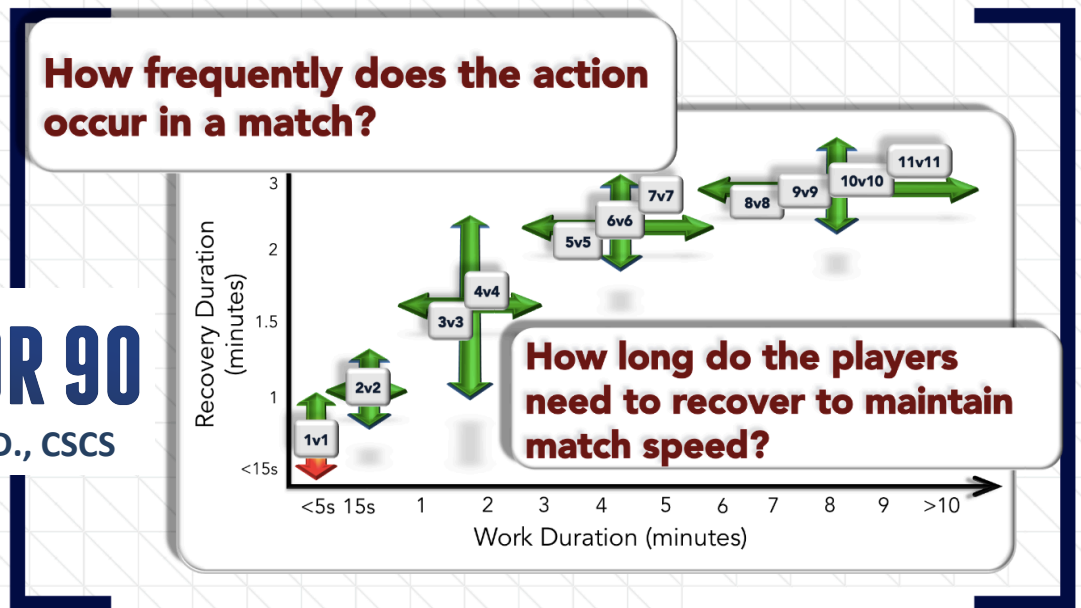
As we know from the game, a 1v1 action defines maximal speed and therein player intensity (i.e. 100%). With an increasing number of players involved, there is an overall decrease in intensity as an action takes longer to develop and is dependent on an increasing number of decisions, combinations, and actions performed in an increasing size of space. The result is a decrease in overall intensity, and actions becoming increasingly extensive.

Training activities having “implementation” as their objective it is important to consider specifically how long the scenario/situation that you are training takes to develop and occur in a game.



Training activities having “physical development” as their objective it is important to consider how long the players are capable of maintaining match speed. It is paramount that the coach put the physical demands in perspective of team performance. For instance is when I play too long and the players’ fatigue negatively effects soccer performance – I am decreasing my players’ ability to play fast. In addition to a sub-optimal training response, the poor movement that results on the day, and its accumulation over time (bad periodization) increases injury risk.

The third consideration is the recovery interval we provide for the players.

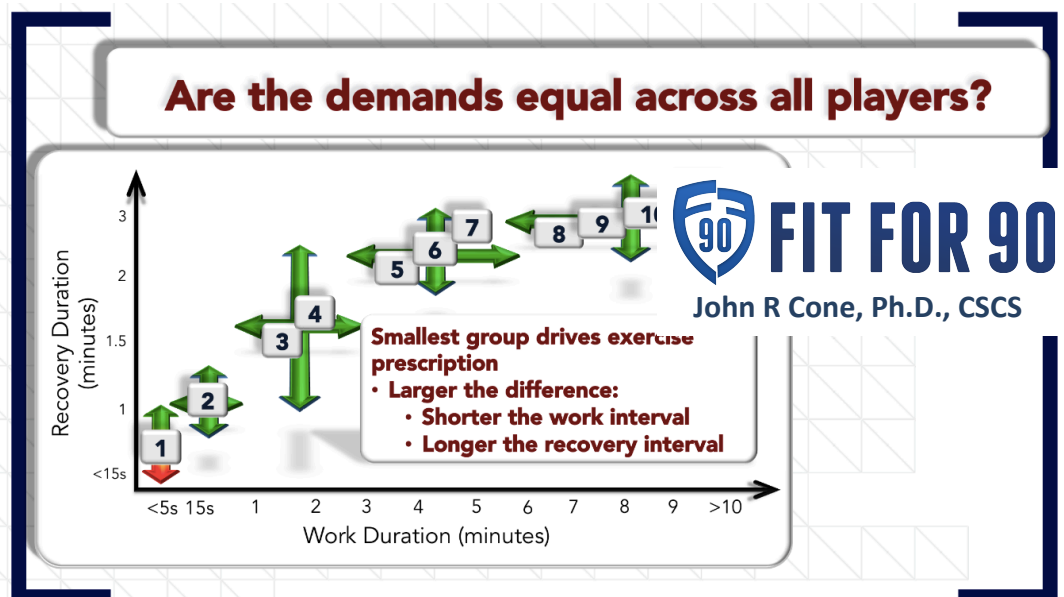


The recovery interval must be considered, again, specific to the training objective.

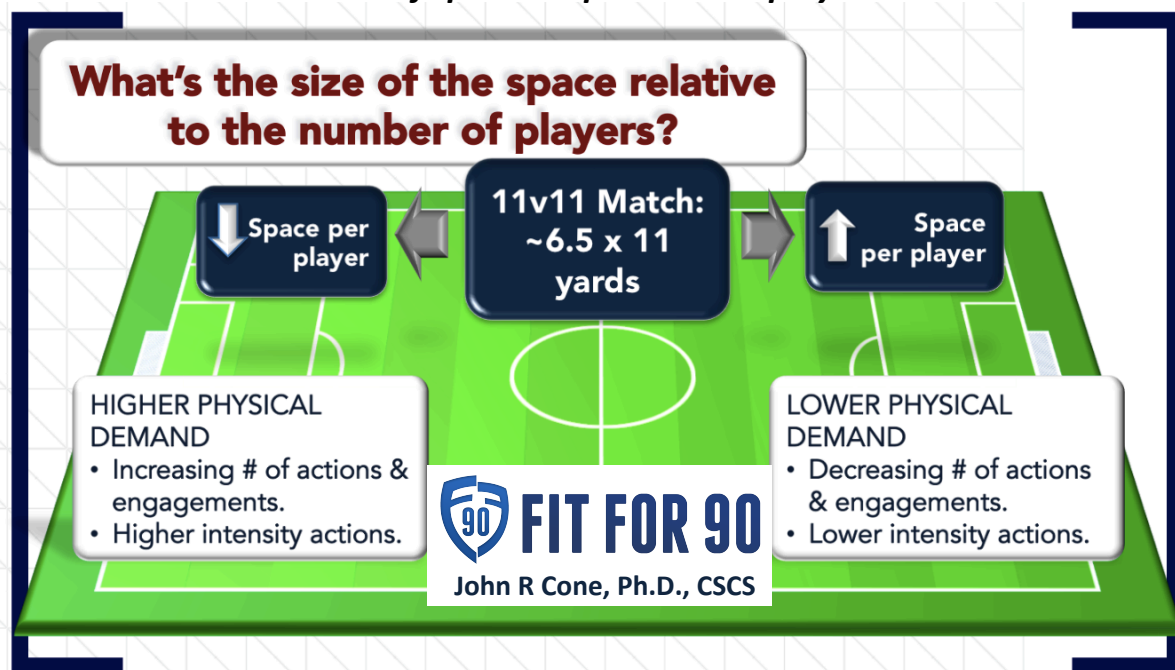
- If my target is implementation, then I must consider how often the action occurs in a game, combined with the stated goal: “implement individual and team concepts at match speed/intensity, while controlling the physical training stimulus.” This in mind, consider how frequently the action you are training occurs, and then ensure that the player(s) are performing this either in a similar way, or minimally have adequate time to recover so they can maintain match speeds of play.
- If my target is physical development, similar to our discussion of work duration, it is important that I provide enough recovery time so match speed of play is maintained for my planned number of repetitions or work intervals. Not enough recovery, will again result in fatigue and sub-optimal training.
- Similarly, I must consider the number of repetitions/actions that the players are capable of in an exercise and ensure that I am within the ability/fitness-level of the player(s) with my overall prescription.

An extremely important consideration, and a detail often over-looked is the variability in physical demands we place on players. The result is that we often over-load a group of players with work, while we under-load a separate group.

The incongruence across players is problematic both on the day, and over the long-term. This leads to some players likely over-training and others under-training. The result is a breakdown in the periodization plan that impacts performance and injury that can be addressed by being more detail-oriented.



The fourth consideration is the amount of space we provide the players in an activity.

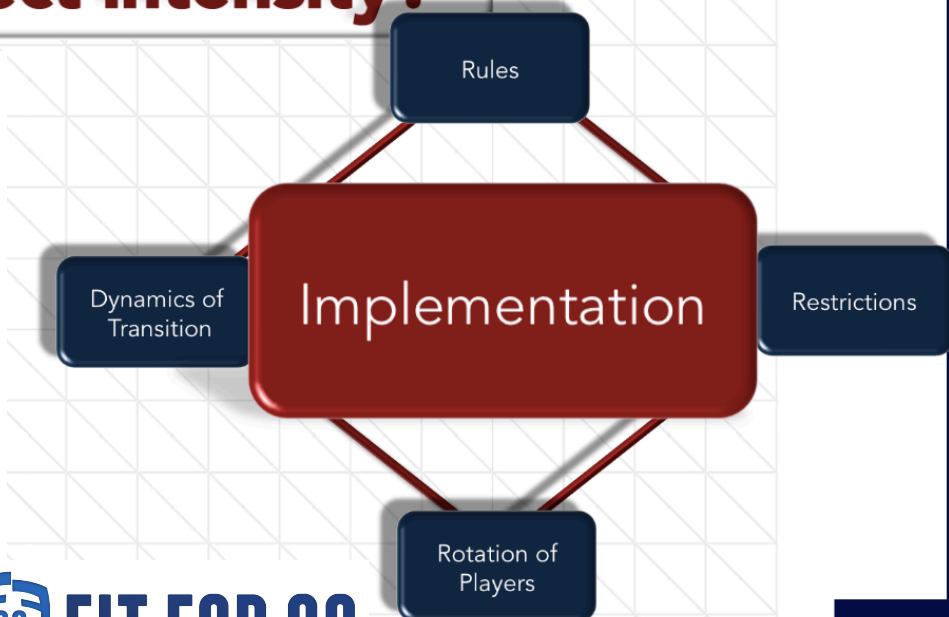


The space we give the players is relative to the normal space that they have in a game. As we decrease the space per player we observe more actions, performed at a higher intensity. The inverse is true as we increase space. For this reason the size of the space must be considered in our training goals, and its affect on the physical exercise prescription addressed.

****NOTE:** The above considers the player in an 11v11, and adjustments for age and size game must clearly be considered.

Does the structure of the activity affect intensity?

Just as we may change the space to create a better environment to achieve our coaching goals, how we manage the rules and restrictions, rotation of player(s), and the dynamics of transition from attacking to defending effect the physical demands placed on the players. Ultimately, how we implement the session as a coach; from stoppages to the encouragement we deliver impacts the training intensity and subsequently physical demands of an activity.



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