## S48 TGFU CONFERENCE SUPPLEMENT

decision-making process variables show, by trend, a curvilinear relation to the different-aged U8 to U14 teams. Compared with adults, age-related differences became apparent regarding dynamic inconsistency rates, which indicate that decision-making processes are indeed influenced by developmental changes. To identify sensitive phases for cognitively oriented decision-making training, age-related changes of the decision-making process will be discussed while taking additional study results (t2, February 2016) into account. From a simple heuristics approach, implications for an age-related decision-making training for players, coaches, and clubs will be discussed accordingly.

## Symposium: Dynamic Match Analysis

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Recent technological development has enabled researchers to gather data from different performance scenarios while considering players positioning and action events within a specific time frame. This technology varies from global positioning systems to radio frequency devices and computer vision tracking, to name the most common, and aims to collect players' time motion data and enable the dynamical analysis of performance. Team sports-and in particular, invasion games—present a complex dynamic by nature based on the interaction between 2 opposing sides trying to outperform 1 another. During match and training situations, players' actions are coupled to their performance context at different interaction levels. As expected, ball, teammates', and opponents' positioning play an important role in this interaction process. But other factors, such as final score, teams' development level, and players' expertise, seem to affect the match dynamics.

In this symposium, we will focus on how different constraints affect invasion games dynamics during both match and training situations. This relation will be established while underpinning the importance of these effects to game teaching and performance optimization. Regarding the match, different performance indicators based on spatial-temporal relations between players and teams will be presented to reveal the interaction processes that form the crucial component of game analysis. Considering the training, this symposium will address the relationship of small-sided games with fullsized matches and will present how players' dynamical interaction affects different performance indicators.

## Small-Sided Games: An Optimal Training Tool to Represent Tactical Match Demands in Elite-Standard Youth Soccer Players?

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Small-sided games are an often-used training tool in soccer practices. They have proven to provide a simultaneous physical, technical, and tactical training stimulus for soccer players. Small-sided games replicate the tactical character of a match, but in a simplified format with reductions in number of players and pitch size. Like full-sized matches, players have to interact with team members and opponents to succeed in their task: score a goal or try to keep the opponent from scoring. However, whether teams show similar tactical behavior in small-sided games as in full-sized matches is largely unknown.

Previous research has shown that the pitch size is a major influence on the tactical performance of players during small-sided games. These findings demonstrate the importance of the effect of field dimensions on players' behavior on the pitch. It is also suggested that the dimensions of the full-sized match should be adopted in small-sided games. That is, the individual area of a player in a full-sized match (i.e.,  $320 \text{ m}^2$ ) should also be applied in small-sided games.

To identify the effect of these pitch dimensions on the tactical representativeness, a series of small-sided games was played with a different number of players and with an individual playing area of 320 m<sup>2</sup>. Tactical team variables were calculated from positional data collected (local position measurement system) of an elite-standard youth soccer team during 5-v-5, 7-v-7, 9-v-9, and 11-v-11 games in training sessions and 2 full-sized matches. Results of the tactical team performance and interaction patterns provide tools for the soccer coach to design small-sided games in training sessions to match the specific aspects of tactical behavior of full-sized matches.