

Contributions of the GPET to the GPAI: tactical context adaptation and game behaviour Contribuciones del GPET al GPAI: adaptación al contexto táctico y comportamiento de juego

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Abstract. The Game Performance Evaluation Tool (GPET) is an instrument that allows us to obtain information about the student's decision-making process during their participation in games. The usual instruments reflect the final result of student's decision. However, the GPET offers an analysis of the context in which the decision has been made, and allows teachers to establish a certain degree of quality in the decision taken. Thus, the GPET helps us to distinguish in the decision-making process, not only «what has been done» from «what should have been done» in a specific game situation (Gutiérrez, González, García-López, Mitchell, 2011), but also it gives us information about the player's adaptation to the tactical context in which he/she is involved during game play. According Godbout (1990), this adaptation to the tactical context describes the decisional process, rather than the result. Given that the GPET is an instrument initially designed for research, in this article we present how to take advantage of the GPET novelties, applying them in an instrument with a clear teaching orientation, such as the Game Performance Assessment Instrument (GPAI) (Mitchell, Oslin and Griffin, 2013).

Keywords. Game performance; assessment; decision making; tactical problems; technical skills.

Resumen. El Game Performance Evaluation Tool (GPET, en español Herramienta de Evaluación del Rendimiento de Juego), es un instrumento que nos permite obtener información sobre el proceso de toma de decisiones del alumno durante su participación en los juegos deportivos. Los instrumentos habituales reflejan el resultado final de la decisión del alumno. Sin embargo, el GPET hace un análisis del contexto en el que se ha tomado la decisión, y permite que el docente pueda establecer cierta gradación en la calidad de la decisión tomada. Así, el GPET nos ayuda a distinguir en la toma de decisiones no sólo «qué se ha hecho» de «qué se debería haber hecho» en una situación concreta de juego (Gutiérrez, González, García-López, Mitchell, 2011), sino también nos aporta información de la adaptación del jugador al contexto táctico en el que se encuentra. Dicha adaptación, de acuerdo con Godbout (1990), nos describe el proceso decisional, más que el resultado. En este artículo presentamos como aprovechar las novedades del GPET, que es un instrumento inicialmente diseñado para el ámbito de la investigación, aplicándolas en un instrumento con una orientación claramente docente, como es el Game Performance Assessment Instrument (GPAI, en español Instrumento de Evaluación del Rendimiento de Juego, de Mitchell, Oslin y Griffin, 2013).

Palabras clave. Rendimiento de juego; evaluación; toma de decisiones; problemas tácticos; técnica.

Tactical awareness as a dimension of games competency

A games education goal is, among others, to develop thinking spectators and intelligent players (Bunker and Thorpe, 1982), which main feature is tactical awareness. Tactical awareness is defined by Mitchell, Oslin and Griffin (2013, p. 8) as «the ability to identify the tactical problems that arise during a game and to select the appropriate responses to solve them». Tactical awareness is of great importance in modern Physical Education (PE), because it links to the concept of competency.

The concept of competency introduces the need for students not only to have knowledge, but also to be able to apply it in real-life situations (Rychen and Salganik, 2006). If we establish the relationship between competency and games teaching, we will appreciate how the competent student, the one who applies games knowledge to the real situations of play, is none other than the one who is tactically intelligent (recognizes the tactical problems and is capable of giving them solution), and execute the technical skills correctly, all in this real game situation. As an example, we can say that Nadal is one of the best players in the history of tennis, not because Rafa has fantastic technique, but because he appreciates what the game scenario is at each point (tactical problem: if he must keep the ball in play or try to take the initiative) and choose very well the solutions (decisions about what, how and when to execute the technical skills) to face the plays.

From this it follows that any student immersed in a games learning process should be able to adapt their solutions to the tactical problem set by the play scenario. From the point of view of the teaching process, Game Based Approaches (GBAs) (García López and Gutiérrez Díaz del Campo, 2016) are a very effective tool for the training of thinking spectators and intelligent players. GBAs seek an integrated teaching of the technical and tactical elements of games, using as main tools the following: (1) the tactical classification of games; (2) the knowledge of

tactical problems and technical elements within each category of games; (3) the different ways of modifying games to adapt them to the needs and possibilities of students; (4) questioning; (5) the lesson structure, where the game is a key element; and (6) the learning progression according to tactical complexity (defined by space, number of players...) (for more information, see García López and Gutiérrez Díaz del Campo, 2016).

The importance of teaching technical-tactical skills that are adaptable to the needs of the environment is so high that the official curricula in Spain highlight it. Thus, the Primary Education curriculum establishes in its assessment criterion number 3 that students should be able to «solve basic tactical challenges of the game and of physical activities, with or without opposition, applying principles and rules for solving the motor situations, acting individually, coordinated and cooperatively and performing the different functions implicit in games and activities» (MECD, 2014, p. 19.409). In this same line, the Secondary Education curriculum proposes that the student has to «solve motor situations of opposition, collaboration or opposition collaboration, using the most appropriate strategies based on the relevant stimuli» (MECD, 2014, p. 483).

Tell me what you assess, and I will tell you what your students learn

Teachers, therefore, need tools that allow them not only to teach, but also to assess learning. The classification carried out by Godbout (1990) within the aspects of assessing technique and tactic as elements of game performance is of great interest (figure 1). Game performance can be considered as a way of measuring game competency (García López and Gutiérrez Díaz del Campo, 2016). The combinations between product/process and technique/ tactics result in key aspects in the evaluation of games learning. The technical product (A) refers to the result of the execution of the skill (e.g., whether a basket shot is successful or not). The technical process (B) consists in how the shot has been carried out (for example, the basket shot involves a correct grip of the ball, a correct movement of the arm...). The tactical product refers to

whether the selected solution has been the correct one (for example, if we chose to shoot when it was not the best option). Finally, the tactical process (D) gives us information about whether the student has analysed the tactical problem properly, that is, the different variables that influence it (e.g., if the student has correctly perceived the position of teammates and opponents, or if he/she has adequately considered its strength and accuracy before shooting).

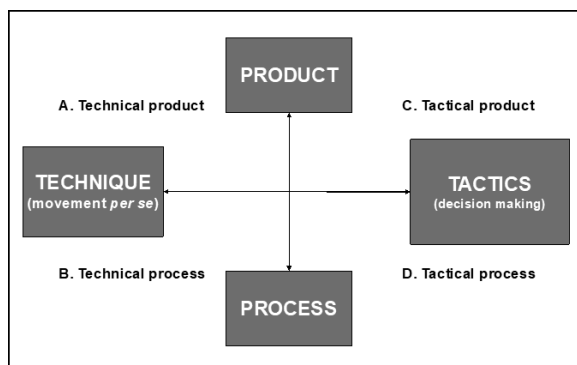


Figure 1. Aspects of Game Performance (Godbout, 1990).

Although teachers have different ways of assessing the technical product and the technical process, as well as the tactical product, few instruments give us information (or they do so in an unclear way) of how to assess the tactical process. Recent studies (Otero Saborido, Calvo Lluch, and González-Jurado, 2014; García-López, Gutiérrez Díaz del Campo, Del Rey Alcaraz, and Sánchez-Mora Moreno, 2015) show that Spanish teachers do not usually assess the learning of the tactical processes because, among other reasons, the available instruments are complex and difficult to use. It is for this reason that in this article we try to provide teachers with a tool that allows them to have information about the tactical process their students perform when making decisions in a game situation.

The most widespread instruments for assessing game performance designed for being used in school settings are the Game Performance Assessment Instrument (GPAI), (Mitchell, Oslin and Griffin, 2013) and the Team Sports Assessment Procedure (TSAP), (Grehaigne, Godbout, and Bouthier, 1997). These two instruments, while making a contextual assessment of tactical learning, do not provide information on how the tactical process has been carried out. This is the contribution of the Game Performance Evaluation Tool (GPET), (García-López, González-Víllora, Gutiérrez, and Serra, 2013). The GPET is an instrument that explicitly provides a way to assess the adaptation of students in their decisions to the tactical problem/context they face. However as the GPET is a research instrument designed for the evaluation of game performance, it needs to be adapted to the educational field.

With the aim that teachers have a more authentic evaluation tool, in this paper we propose an extension of the GPAI for its use in the school environment. Through the contribution of two components proposed in the GPET, such as the Tactical Context Adaptation (TCA) and the Game Behaviour, the main characteristics of each of these instruments are outlined and then a joint proposal with their practical applications is made.

Game Performance Assessment Instrument (GPAI)

According with Steve Mitchell, one of the GPAI coauthors (Oslin, Mitchell, & Griffin, 1998), in a thematic Symposium about this instrument during the last Teaching Games for Understanding (TGfU) international conference, the GPAI was originally developed as a research tool for TGfU studies. However, as many teachers began to use it during their lessons, transforming it into a live observation instrument, authors rethought the scoring systems, so the instrument could be used in live conditions (Mitchell, 2016), becoming an assessment tool easily usable by teachers, coaches and even students. The present paper shows our contribution to this symposium where we presented the theoretical base that supports the practical proposals motive of this

work (Gutiérrez y García-López, 2016).

The above-mentioned symposium, could be considered the inceptions for the GPET evolution exposed in this paper, and, in some way, we intend to mirror and join the travel described by Steve.

GPAI identifies seven observable components of game performance:

1. Base: Appropriate return of performer to a «home» or «recovery» position between skill attempts.
2. Adjust: Movement of performer, either offensively or defensively, as required by the flow of the game.
3. Decisions made: making appropriate choices about what to do with the ball (or projectile) during the game.
4. Skill execution: Efficient performance of selected skills.
5. Support: Off-the-ball movement to a position to receive a pass (or throw).
6. Cover: Defensive support for player making a play on-the-ball, or moving to the ball (or projectile).
7. Guard/mark: Defending an opponent who may not have the ball (or projectile).

GPAI allows to assess the above-mentioned individual components of game performance, and also overall game involvement and performance through the application of simple mathematical formulas (e. g., Game involvement = total appropriate responses + number of efficient skill executions + number of inefficient skill executions + number of inappropriate decisions made).

One of the great virtues of the GPAI, is that these categories covers the assessment of game performance across the four TGfU game categories: invasion, net/wall, target, and striking and fielding games. For a better understanding and application to each of the categories, Mitchell et al. (2003) propose specific definitions of the seven game performance components. For example, Base component in invasion games (in a defence in zone) implies «player sets up in position in a zone defence», while in net/wall games (in badminton) implies «player returns to about the «T» at centre court between shots».

The GPAI is usually simplified. In this sense, depending on the game and game category, and on the learning in which the session or research is focused, teachers, coaches, and/or researchers can select one or several game performance components.

GPAI allows different scoring systems. The two main systems are the tally and a rubric-based scoring systems. The tally scoring system is based on scoring each of the actions, interpreting them as appropriate/inappropriate when relating to decision making, and efficient/inefficient when referring to execution. The rubric scoring system evaluates the game performance components through a five-level Likert scale, from very weak performance (1) to very effective performance (5). In both systems, the GPAI must describe the criteria that students/teachers/researchers must follow to interpret the game performance.

The GPAI made a great contribution in expanding game-based approaches in different senses, from providing an authentic assessment tool (Mitchell, 2016), to expand the use of game performance assessment in PE (Gutiérrez, 2016). Below we summarize the most important contributions and strengths and therefore, reasons for its use in games teaching, both in school and after school contexts:

(a) Thoroughly:

The GPAI divides game performance into different categories, allowing the evaluation of all facets of game performance in real game situation, which means a more complete and contextualized evaluation than traditional assessments. Allows teachers and coaches to give credit for all aspects of performance (on-the-ball and off-the ball, global performance and participation), which benefits the lower-skilled performer (Mitchell, 2016), and girls, as they tend to play more off-the-ball actions and defensive situations (Gutiérrez & García-López, 2016).

(b) Flexibility and adaptability:

- The GPAI can be used across different TGfU game categories.
- Teachers and coaches can select the components of performance to assess.
- Allows two scoring systems, which permits to adapt it to the

type of game evaluated and the capacity of the evaluator.

(c) Alignment: because of the two former features, teachers and coaches can design the assessment criteria based on what has been taught.

(d) Reliability. GPAI is reliable even for peer assessment. It shows an acceptable level of reliability to determine the performance of the game when teachers and students use it in a systematic way.

There are numerous publications where examples of GPAI can be consulted. In Spanish they can be found in García-López and Gutiérrez-Díaz del Campo (2016) or in different works coordinated by Méndez (2009, 2011, 2014). In English, the books published by Mitchell, Oslin and Griffin (2003, 2013) shows numerous examples, as well as a complete pedagogical information on their use.

Game Performance Evaluation Tool (GPET)

The GPET (García-López, González-Víllora, Gutiérrez & Serra, 2013) was the result of a research project whose main goal was to investigate the evolution of game performance in invasion games, with special attention to tactical awareness. It was simultaneously developed for PE students without previous training and youth football players. So far, more than 20 published studies have used GPET.

GBAs (Gutiérrez & García-Lopez, 2015) set tactical problems as one of the key elements for learning progressions. Although we can find in the games teaching literature different tactical problems proposals (e.g., Mitchell et al., 2013, in Tactical Games Model; Launder & Piltz, 2013, in Play Practice), they are quite similar. The tactical problems contemplated by the GPET are included in the proposal of García-López and Gutiérrez-Díaz del Campo (2016). This proposal is based on Mitchell et al. (2016), although differs between invasion and net/wall games categories. García-López and Gutiérrez-Díaz del Campo (2016) propose three attack tactical problems (maintaining possession of the ball, penetrating the defence, and attacking the goal) and three defence tactical problems (recovering possession of the ball, defending space and defending the goal) for invasion games. For net/wall games these authors propose two attack tactical problems (take the initiative in the game, achieve the goal) and one in defence (keep the ball in play).

For instructional alignment purposes and taking into account the fundamental role of tactical problems in GBAs teaching-learning process, assessment should consider game performance components in relation to the specific problem that the player is facing in each moment of the game (Gutiérrez, Fiset, García-López, y Contreras, 2014). However, before GPET, there were no instruments that evaluated this dimension of the decision-making component. Filling this gap was the first motivation in the design of the GPET.

In this regard, previous research had typically assessed decision-making on just one level, though two levels are possible. The first level involves the technical-tactical skill, in which the teammate and opponent are directly implicated in the action (e.g., correct decision making would be if the player passed the ball to another player who was free from an opponent, and an incorrect decision would be trying to move to a space where one opponent was standing). The second level of decision making considers the tactical context adaptation, which is adjusting the response to the tactical context (defined by the tactical problem that predominates in that context) in which the action takes place. The tactical context is determined by the scenario composed by all performers that could have any influence on the game play, as well as the area where the action takes place. To evaluate the TCA, the evaluator needs: 1) to identify which is the tactical problem the player is facing and 2) to determine if his/her actions have the intention to solve this problem or another.

In addition to the aforementioned components of game performance, the data recorded by the GPET allows to analyse the Game Behaviour (GB), understood as the tactical quality of participation, especially in attack. Through this component we can detect which players behave in a conservative way, (their main objective is not to lose the ball or point, so they perform mainly actions related to the tactical problem of maintaining possession of the ball or maintaining the rally), or on the contrary, which ones play in a very direct way (they try to advance or

the get the goal at any cost).

GB does not imply additional measures, only analysing in what tactical contexts their participation is usually located and to what tactical problem their actions are associated. It can be also completed through the study of the number and nature of technical tactical elements, for example, how many passes, dribbling and shots have performed in total, and in comparison with their mates. For instance, if in a 4 versus 4 game, where the team has thrown 20 times on goal and the student that we are evaluating has only made one shot, we can infer that his/her behaviour is not very offensive, but if in total, the whole team has thrown to the goal 4 times, it is not an individual issue, but a group one. This component can provide information that is very relevant to the teaching-learning processes. For a complete explanation of game behaviour component, see Gutiérrez and García-López (2012), where a gender approach to this component is studied.

As main contributions, the GPET proposes an in-depth analysis of game performance through two novel components: adaptation to the tactical context and game behaviour. In this sense, Harvey and Jarret (2013) consider that, in comparison with other instruments as GPAI or TSAP, and due to the multi level coding required, the GPET expanded the complexity and possible utility for research. Thus, as a research instrument, the GPET is more complete; however, it is a complex instrument that requires training and a high understanding. On the other hand, the GPAI has the ideal characteristics as a pedagogical instrument.

The objective of this paper is to propose a mixed instrument that combines both strengths. In the following section, two practical examples of assessment are proposed, in which, starting from GPAI, TCA and game behaviour are contemplated. The coding system of these components has been adapted so that the resulting instrument remains a tool for training use.

Real life applications

Below we present two cases of assessment, one for invasion games and another one for net/wall games. An example for each of the two main GPAI scoring systems are shown: the tally and a rubric-based scoring systems. Either of these two systems would be appropriate for both categories. The rubric-based scoring system would be more appropriate for live assessment and the tally scoring system should be implemented through video recordings.

In both cases we start from a figurative situation that allows us to make a more accurate approximation. We want to emphasize that teachers should choose what and how to assess before teaching. We assume the principle of «instructional alignment» (Cohen, 1987), according to which the planning of objectives, contents and evaluation must be joint. It does not make sense to plan the teaching of some contents before deciding what is going to be assessed, because knowing key points and the time to be dedicated to teaching them is valuable information. For this reason, we assume that teachers have already made this reflection, and this has led them to choose certain components of the GPAI to be assessed. In the first example, we show an assessment using the rubric-based scoring system. In the second example, assessment is done using a tally scoring system for each action.

According to our proposal, first teachers should design an assessment game that exaggerates those aspects that are going to be evaluated. It does not make sense to assess a student in a game in which there is not a large number of selected behaviours. Below readers can find the components of game performance chosen to be assessed according to the principle of instructional alignment, as well as the criteria that must be taken into account to establish the correct and incorrect answers. Finally, there is a table on which the evaluator must record students' actions.

An example for invasion games: Ultimate Frisbee

Figure 2 shows an example of a tool for the assessment of passing decision making and marking, applying a modified GPAI with the contributions of the GPET. In our case, we have chosen to evaluate a

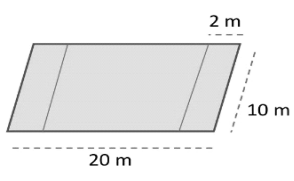
Student _____ Class _____
 Evaluator _____ Team _____ Game _____

Game:

- Court dimensions: 20 x 10 m. Goal area: 2x10 m.
- Players: 4vs4
- Aim: catching the frisbee in the opponent's goal area
- On-the-frisbee player can tag the opponent, so this has to sit for 3 seconds
- Defense: one-on-one
- On-the-frisbee player can not advance

Scoring key:

1. Very weak performance (Never)
2. Weak performance (Rarely)
3. Moderately effective performance (Sometimes)
4. Effective performance (Usually)
5. Very effective performance (Always)



Components and Criteria:

COMPONENTS	CRITERIA
PASS DECISION MAKING (DM)	The on-the-frisbee player (OnTBP) passes the frisbee to a free player.
TACTICAL CONTEXT ADAPTATION (TCA) IN DM	In case there are two free teammates, the OnTFP passes the frisbee to the teammate nearer the opponent's goal area, trying to advance to the goal.
OFF-THE-FRISBEE PLAYER (OffTFP) MARKING	When defending, the player: <ul style="list-style-type: none"> - Keeps closed to the opponent. - Pays attention, not only to his direct opponent, but also to the OnTFP.
TCA IN OnTFP MARKING	Far from the own goal, the player: <ul style="list-style-type: none"> - Marks 1-2 m from the opponent, no physical contact is necessary. - Avoids the opponent to advance catching the frisbee after moving towards our goal zone. Near the own goal: <ul style="list-style-type: none"> - Marks closed to the opponent, keeping physical contact. - Avoids the opponent to score catching the frisbee inside our goal zone or closed to it.

	SCORE	COMMENTS
DECISION MAKING (PASS)		
TCA IN PASS DM		
OTBP MARKING		
TCA IN OTBP MARKING		

GAME BEHAVIOUR:

- Regarding the passing decision making, pay attention on what tactical problem the observed player faces more often. What does it mean that the tactical problem that the player faces more often is to penetrate the defence? And if it is to maintain possession of the frisbee?
- In the case of marking, what does it mean that the observed player faces more a defending space scenario (play far from the goal he or she defends) than in defending the goal scenario (within or near the zone of goal)?

Figure 2. GPAI: decision making, TCA in decision making and marking in Ultimate Frisbee

group of year four Secondary School, who have developed an Ultimate Frisbee Unit, working on scenarios ranging from 4 vs 4 to 6 vs 6.

Some pedagogical considerations about this proposal are the following:

- Reduced pitch dimensions involve that distances are not very long and passes, therefore, are not too difficult.
- The fact that there is not an excessive number of players allows a high participation of all players, which in turn means that a large number of passes can be assessed.
- Regarding the rules:
 - o To avoid excessive pressure on defence, on-the-frisbee player can touch the opponent, in which case he/she must sit for two seconds.
 - o One-on-one defence will be compulsory. Teachers should make the pairings, trying that paired students have similar level of aptitude.
 - o Teachers will establish other rules (e. g., what to do when the frisbee falls).

As for the game behaviour, a series of reflections can be carried out, which can be directly introduced into the tool used. On the other hand, these reflections can be used by teachers once the application is done. In relation to the case we are concerned, next ideas should be considered.

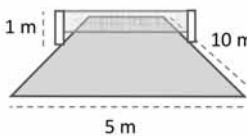
Regarding the first question about game behaviour (figure 2), if a player mostly had options to pass forward would mean that he/she is a defensive player or organizer, because it tends to be in rear positions. You could also assume that his/her teammates do not offer him/her an adequate support to move forward. On the other hand, being usually in a scenario where passing to maintain possession is the most appropriate response would mean that this player usually adopts advanced positions, or his/her teammates do not move to advance towards the opponent's goal.

Regarding the second question, we find a similar scenario. As it is an individual defence, the type of marking gives us information about the way the attacker plays, mainly the movements he/she makes, more or less away from the goal area.

An example for a net/wall game: twohands

The evaluation form in figure 3 assesses the Base component, the Skill Execution and the Tactical Context Adaptation (TCA). Twohands, when played without an implement and allowing a bounce, would be located in the intermediate level (level II) proposed by Mitchell et al. (2003) for net/wall games in Primary School. It could therefore be applied from the 4th grade of Primary School. It would nevertheless serve as an evaluation game for higher courses if they are starting in this

Student _____ Class _____
 Evaluator _____ Team _____ Game _____



Game:

- Court dimensions: 10 x 5 m. Net: 1 m. Ball: foam handball size.
- Players: 1vs1.
- Aim: send the ball over the net into the opponent's field area.
- Friendly serve: players have to serve from the center of the court and with a bottom-up trajectory after a bounce. Serve should go to the center of the opponent's court. Each player serve five times in a row. Service will not be evaluated.
- Striking technique: Players can strike with any surface of the forearm or hand. Being able to use one or two hands/arm strike. It is allowed both to strike after boat or volley, except in the rest, where a previous bounce is mandatory.
- Score: Match to the best of three sets of 11 points with two points of difference. If the serve does not comply with the "friendly" rule and the return is failed, the action will not be counted on the scoreboard.
- For the rest of the rules, the more general norms present in net/wall games will be applied.

Coding procedures: Study the criteria. Watch your partner play and tick when he or she does an appropriate action or an inappropriate action.

COMPONENTS	CRITERIA				
BASE	Correct (B co)	Player returns to about the center court between shots.			
	Incorrect (B in)	Player does not return to about the center court between shots.			
SKILL EXECUTION	Efficient (SE ef)	Returns the mobile to the opposite field within the limits of the field of play and without committing infraction.			
	Inefficient (SE in)	Does not return the ball to the opposite field or commit infraction in the beating.			
TACTICAL CONTEXT ADAPTATION (TCA) IN STRIKING DECISION MAKING	Correct (TCA co)	<ul style="list-style-type: none"> • If you have an easy hit, direct the hit to a free space trying to move the opponent (try to maintain or recover the initiative). • In case of having a risky return and being displaced from the center of the court (base position), player strike to the center of the court (try to keep the phone in play) • If the opponent is very displaced and / or makes a return very centered and at half height, player make a decisive strike by a smash, drop or clear (try to score). 			
	Incorrect (TCA in)	<ul style="list-style-type: none"> • The player tries to get the point by risky striking when the he or she is not in a situation of clear advantage. • When the player has an easy strike, and he or she returns the ball to the center of the court without any offensive intention. 			
BASE		SKILL EXECUTION	TACTICAL CONTEXT ADAP.		
Correct	Incorrect	Efficient	Inefficient	Correct	Incorrect
Total:	Total:	Total:	Total:	Total:	Total:
PERFORMANCE MEASUREMENTS		SCORE	COMMENTS		
Base index (BI) =	$\frac{B\ co}{B\ co + B\ in} \times 100$				
Skill Execution Index (SEI) =	$\frac{SE\ ef}{SE\ ed + SE\ in} \times 100$				
Tactical Context Adaptation Index (TCAI) =	$\frac{TCA\ co}{TCA\ co + TCA\ in} \times 100$				

Figure 3. GPAI: Base, TCA and Skill execution

games category. In addition, the proposed material would serve, with the only modification of the criteria of the Technical Execution component (including a possible implement), for other net/wall games, especially badminton.

Some pedagogical considerations:

- Space. Court measures (10 x 5 m²). They will be the minimum that allow players to find free spaces in the opponent's field, and therefore will make necessary the displacements in depth and amplitude, in such a way that it would be necessary to return to the base position. In addition, these measures are those that can be more easily established by subdividing the 20 x 40m² multi-sport court present in most sports facilities, in which, with two longitudinal nets, we can generate 16 courts, enough to accommodate all the students in a PE lesson. The net should be placed one meter high, which can be increased depending on

the age/height of the students or if the game is too easy offensively.

- Serve. One of the problems that teachers and students face when playing net/wall games is that too many rallies are limited to the first two strokes. For this reason, «friendly service» is included as a rule that allows rallies with a greater number of exchanges. The serve as an offensive skill will be incorporated when players' performance is not a limit for participation.

- Stroke technique. As in volleyball, it is allowed to hit the ball with both arms, separately or jointly. However, a bounce is allowed. Introducing these rules we intend to limit the technical demands, facilitating a greater number of hits in each rally. In addition, it allows for bilateral work and transfer of technical-tactical learning to most of net/wall games.

Not all the rules are stated exhaustively, but rather the teacher, or

better, the students, must apply the generic rules of the net/wall games (e.g., the line is considered part of the field). They could also reach agreements when several possibilities are available (e.g., what to do if the serve hits the net).

As for the game behaviour, a series of reflections can be carried out, which can be directly introduced into the assessment form, or can be used by the teacher once the assessment has finished. These questions could be asked both to the evaluator and to the assessed player (once he/she knows about the GPAI results), and being the following:

- Regarding the beating decision making, do you think he/she strikes the ball with offensive intent or just intends to keep it in play? Does he/she strike depending on what is happening in the play or does he/she not take into account where the opponent is and how he or she returns the ball? Would you recommend him/her to be more offensive or more defensive?

- Regarding the type of stroke, have you noticed what striking technique he/she mainly uses (bottom-up, smash, drop, etc.)? Does this have something to do with how he/she play more or less offensive?

Regarding the first question, that a player mostly hits the centre of the track regardless of what his opponent does, it allows us to know if the player does not have a high tactical awareness, since he is not interpreting all the information of the game and is limited to worry about winning or losing.

Regarding the second question, and the recommendation of a more offensive or defensive strategy, the player will have the opportunity to develop their procedural and strategic knowledge, allowing him to improve as a literate spectator and try to increase his autonomy in terms of being able to self-analyse. This is especially true if after analysing several teammates they analyse themselves through video recording.

Conclusions

In this paper, we present how and why to add the GPET main novelties (tactical context adaptation and game behaviour performance components) to GPAI. This way a research focus instrument (GPET) could be introduced in teaching settings through a well-known and pedagogical oriented tool (GPAI).

Games assessment must, little by little, take steps towards greater authenticity, in such a way that teachers can measure students' progress, both in the content learning *per se*, as well as in its functionality. That is, it is necessary that the students' learning can be applied to real life, and that the assessment collaborates in the verification of that situation. Therefore, when we refer to the student's ability to transfer what they have learned to real life (functional learning), we mean that the child must participate in the game in all its facets (both attack and defence), with high degree of involvement and with tactical intentionality. In this sense, this article aims to help the teacher by contributing to the improvement of an instrument such as the GPAI, by deepening the assessment of students' ability to adapt to tactical contexts, as well as describing the nature of their game. Research shows the importance of taking into account these components, as they are directly related with tactical awareness and participation, which in turn are related to sports habits for life (Bailey et al., 2009).

It is also necessary to highlight that the effectiveness of this type of assessment tools, as well as the previous games teaching through GBAs, go through a teacher's domain of both content knowledge and pedagogical content knowledge. Any attempt to improve games teaching will be in vain without adequate teacher training. In this sense, the initial and permanent training of the PE teacher is key to be able to apply current and research-based approaches.

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