

MASTER THESIS

THE IMPACT OF TM STRATEGIES ON PERFORMANCE OF ORGANIZATIONS

A research on the relationship between TM strategies
and performance in the world of football.

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“Some people succeed because they are destined to, but most people succeed because they are determined to”. (Harvey B. Mackay)

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Abstract

Nowadays, organizations have become aware of the importance of human capital and the presence of talents to be competitive on the market. It is therefore up to the organizations to identify the right talent management strategy to achieve their goals and success. An important sector in which to test talent management strategies is represented by the world of football, defined as one of the fiercest arenas in the talent war (Brady et al., 2008). The aims of this research are to explore the impact that talent management (TM) strategies have on the performance of organizations and to examine the role that career experience, change of coach and group cohesion play within this relationship, in the football industry. A quantitative research has been conducted, analyzing the 98 teams that make up five of the most important European football leagues, i.e. the Italian, English, Dutch, Spanish and French championships. This study hypothesizes that talent management strategies, represented by the make or buy strategies or by a combination of the two strategies, positively influence the performance of the football clubs and that this relationship is stronger, thanks to the positive impact that the career experience, the change of coach and the cohesion of the group have. It has been shown that only a hybrid solution, based on a combination of make and buy strategies, positively affects the performance of football clubs, unlike the make strategy that has an insignificant impact and the buy strategy that has a negative one. The effect of talent management strategies on the performance of football clubs is moderated by the group cohesion, so that the combination of the two strategies has a stronger effect on their performance. Instead, the change of coach and career experience make this relationship weaker. Football clubs should, therefore, focus on an hybrid strategy for talent management and create a strong and cohesive team environment, in which talents manage to integrate easily, in order to increase their performance.

Keywords: *Talent management strategies, performance of clubs, career experience, change of coach, group cohesion, football industry*

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1. Introduction

“A team is not simply the addition of 1 plus 1 plus 1 all the way to 11. It is a multiplication. $T = (1+2+3+4+5+6+7+8+9+10+11)$ to the power of N. N is the influence of the manager.”

(Paul Frantz, French football manager)

Nowadays, the business world is characterized by a dynamic and competitive environment, where companies are focused on choosing the right strategy to achieve their goals and to compete successfully on the market. In this regard, companies have decided to focus their attention on talents and talent management practices, since they have become aware that human capital and the presence of talents are fundamental elements for achieving success. Talents can be identified all over the world (Bryan, Joyce & Weiss, 2006): their presence on the global market allows companies to have a wide variety of available resources to choose from, in order to obtain a competitive advantage (McDonnell, Collings, Mellahi & Schuler, 2017).

Since organizations have different points of view when they talk about talent, the literature has still not managed to provide a single and clear definition of talent and talent management. There are, in fact, multiple perspectives including those that follow an inclusive approach, according to which all individuals are considered as talents (Thunnissen & Van Arensbergen, 2015) and those that are based on an exclusive approach, considering as talents a limited number of individuals (Gallardo-Gallardo & Thunnissen, 2016; McDonnell et al., 2010).

Despite this, through different perspectives and theories such as the transaction cost (Williamson, 1975), the human capital theory (Becker, 1964) and the resource-based perspective (Barney, 1991; Wright et al., 1995), it was possible to identify two general strategies that are adopted by companies for talent management: a make or a buy strategy. The first strategy is based on the internalization of work and the internal development of talents (Miles & Snow, 1984). The second, however, focuses on the outsourcing of work and on researching and buying talents, which an organization needs, on the market. The choice of a strategy does not exclude the other: in reality, in fact, organizations can use them simultaneously, making one prevail over the other (Davis-Blake & Uzzi, 1993).

The choice of the right talent management strategy assumes a role of primary importance as it is able to influence the performance of organizations. To this end, it is also necessary to consider the HR practices that organizations adopt. Different authors, like Youndt et al. (1996) and Paauwe & Richardson (1997), highlight a direct and indirect relationship at the same time between HRM practices and performance. HRM practices can affect the performance of an organization directly or indirectly, thus having a complementary effect. Only the right combination of HR practices and strategies will allow organizations to develop an inimitable human capital pool and to achieve better results, both in performance and in financial terms.

An important sector in which to test and apply the talent management strategies is represented by the world of football. Football is one of the most popular sports in the world (Hoffmann et al., 2002) and, nowadays, represents a real business. The football environment is a highly competitive

environment, equivalent to that of many companies operating in the contemporary economic context (Brady et al., 2008). Sports clubs and businesses face daily management issues related to human resource management, organizational performance and results. For example, identification, selection, development of talents are just some of the practices and issues that clubs face. The football sector, especially at a European level, is defined in fact as one of the fiercest arenas in the talent war (Brady et al., 2008). To survive within the arena, clubs make talent management their core business, focusing their attention on the best strategies and practices to adopt for talent management.

The talents of the football clubs are the players, who contribute significantly to the performance of the club. Football clubs adopt different talent management systems. They can choose to adopt a make strategy, deciding to develop their talents internally when they are still young or a buy strategy, buying already trained talents they need on the market, to achieve their goals (Chris Debner, 2016). A third option is represented by the choice of clubs to adopt an intermediate solution, through a combination of the two strategies.

The choice of these talent management systems represents one of the determinants of the performance of the clubs. The latter is measured not only by sports performance, given by the results obtained by clubs in the field, but also by the financial performance represented, for example, by the growth in the clubs' turnover (Montanari & Silvestri, 2007; Deloitte, 2020).

By focusing on sports performance, it is possible to note that based on the financial resources they have, there are always clubs that get overperformances and others that, instead, achieve underperformances. In fact, clubs that have more financial resources do not always perform better. Some clubs, despite the investments made thanks to a conspicuous availability of resources, obtain performances lower than those expected (underperformance). Other clubs, on the other hand, despite the limited number of financial resources, obtain a level of sports performance higher than what their resources would normally allow them to achieve (overperformance). By observing the main European leagues in the 2018/2019 season, through an indicator that analyzes the expected points, named xPTS, it is possible to see how some clubs such as Monaco, Villareal and Celta Vigo are underperforming. Others, however, such as Lille, Sampdoria and Leicester City are overperforming¹. The different strategic choices might represent one of the main reasons that lead clubs to these over/under performances. Having a large number of talents is not synonymous with better performance for clubs. What affects performance is the way in which football organizations manage talents and the type of strategy that they adopt. Another reason that leads clubs to obtain over/ under performances, is given by the presence of some factors, which by playing a moderator role, influence the relationship between talent management strategies and the performance. These factors are represented by the career experience (Humphrey et al., 2009), the change of coach (Koning, 2003; Duda & Balaguer, 2007) and group cohesion (Rachel, 2008).

The goal of this study, therefore, is to observe and explore the different strategies adopted by the teams, that make up five of the most important European football leagues² (the Italian, Dutch, Spanish, French and English league), for the management of talents, and how these strategies are

¹ <https://understat.com/>

² <https://sportytell.com/soccer/best-soccer-leagues-world/>

applied by the different clubs, for the achievement of their goals. Through a quantitative analysis, based on the 2018/2019 sports season, therefore, it will be possible to show to what extent the strategic choices of football clubs affect their sport performances and to what extent the moderating factors succeed to influence this relationship. For this reason, the research question is: *“To what extent do talent management strategies, adopted by football clubs, affect their performance?”*.

The study also aims to provide a contribution to academic literature, practice and methodology.

As for literature, the existing literature has always recognized a relationship between talent management strategies and the performance of organizations but has not yet managed to demonstrate *to what extent* these strategies influence their performance. To reduce this gap, this study tries to identify the factors that play a moderator role and influence the relationship between talent management strategies and the performance of organizations. To this end, it takes into account the world of football, a world that has made talent management practices its core business.

For this reason, the theoretical contribution can be summarized as follow:

- bridge the literature gap related to what extent talent management strategies affect the performance of football organizations, identifying the moderator factors that influence this relationship.

The way in which clubs manage talents is a determining factor of their performance. For this reason, football clubs can be an example to follow for other organizations. The latter can take inspiration from the way in which clubs manage their talents, imitating and replicating their strategies. In this way, organizations will be able to achieve greater performance and a competitive advantage in the sector in which they operate, not only in the short term but also in the long term. This represent the first contribution that this study offers to the practice. Moreover, the demonstration of how talent management strategies are effectively applied by football organizations and the identification of the most effective strategies, that can also be applied in other sectors, represent other contributions that are provided for the practice.

The main practical contributions can be summarized in two points:

- understand how talent management strategies are actually applied and identify the best strategies that can also be applied and extended in other sectors;
- provide an example and a lesson useful also for other organizations in the business world.

Finally, this study offers a methodological contribution. In fact, the approach used in this study is an innovative approach compared to those present in the existing literature. Generally, the researchers focused their attention on other areas of sport such as basketball or baseball (Wang and Cotton, 2018), or they explored the world of football but in a restricted geographical area, taking into consideration either a single league or a limited number of teams that belong to the same league. This study, instead, aims to carry out a wider analysis, examining and comparing all the teams that make up five of the most important leagues in Europe, with the aim of exploring the analogies and the differences between the strategic choices, made by the clubs, in the different leagues. To this end, the methodological contribution is:

- understand to what extent the strategic choices of football clubs influence their sport performances with a more innovative and wider analysis that allows to highlight the analogies and differences between the different leagues.

The current study, after a careful review of the literature, will analyze the method used to conduct the quantitative analysis. The results, the related discussions and conclusions on the research will then be shown.

2. Theoretical Framework

2.1. *HRM and its influence on organizational performance*

Generally, HRM is defined as the set of managerial activities and tasks that concern the development and maintenance of a competent workforce-human resource (Jantan et al., 2009). The goal of the HRM is to increase the quality and productivity of organizations, thus guaranteeing their growth and competitiveness. In order to achieve a competitive advantage, in the short and long term, organizations must be able to compete not only in terms of quality and costs but, above all, in terms of innovation. In a world of work characterized by complexity and continuous changes, the development of new knowledge and innovation become fundamental elements.

To respond to these changes, organizations have focused their attention on people, who make up the most important organizational asset (Nilsson and Ellström, 2012). The competitiveness and success of organizations, in fact, depend heavily on the people who are part of them and, therefore, on their employees. The goal of organizations, therefore, is that to identify the right people with the right skills and to place them in the right jobs at the right time (Jantan et al., 2009). For this reason, the human resources department has taken on a key role, becoming a strategic business partner for organizations (Barney and Wright, 1998). It has the task of identifying those people, equipped with particular skills and competences, who make the difference within the human capital of an organization and allow the achievement of strategic success. These people are called talents (Jantan et al., 2009).

The set of HR practices that organizations adopt for the management of talents, such as recruitment, training, and development, also plays a key role, as its quality influences the performance of the organizations (Collings and Mellahi, 2009). In their theoretical models, Youndt et al. (1996) and Paauwe & Richardson (1997) show how HR practices can influence business performance, highlighting how these practices have a complementary effect, as they can directly or indirectly influence, the performance of an organization. In addition, Paauwe and Richardson (1997) show that there is a reversed causality relationship between HRM practices and performance, since it is not only HRM practices that influence performance, but the latter can also influence the HRM practices. Based on this model, the set of HRM practices adopted by organizations will be effective only if in line with other business strategies. HRM practices have a direct impact on employee skills, motivation and behavior with a consequent improvement in organizational performance. They also allow the development of a rare and inimitable human capital pool. This internal resources, or talents, allow organizations to differentiate their business performance and obtain a competitive advantage.

As talent management is one of the most important HRM activities, the next section will provide a more precise explanation of the figure of talents and their importance for organizations. It will also show how the HR practices and strategies, adopted by organizations, will influence their performance.

2.2. Definition of talent

Over the years, numerous authors and researchers have focused their attention on the topic of talent and talent management (TM), and on the importance of these elements for organizations.

It is important to note that the literature does not yet provide a clear definition of talent, as organizations take different points of view when they talk about talent. The presence of different perspectives is due to the existence of an interdependent relationship between talent and context (Wiblen and McDonnell, 2019). Contextual factors (such as industry or customer needs) strongly influence organizations' perception of talent. Furthermore, talent is a socially constructed concept, which cannot be de-contextualized (Wiblen and McDonnell, 2019). Therefore, it is necessary to consider the different levels of an organization (Grant and Marshak, 2011): the micro (individual context), meso (localized context), macro (organizational context) and meta (societal, institutional and phenomenological context) level.

Four perspectives can be identified about the definition of talent.

The first perspective is the individual perspective. It is based on an exclusive approach, identifying only a small group of individuals as talents. Talent is described as a natural ability, that is, that set of factors owned by an individual that allows him to be more appreciated than other individuals (Gallardo-Gallardo & Thunnissen, 2016; McDonnell et al., 2010). Those who are classified as talents contribute significantly to the results of an organization (Michaels et al., 2001).

The second perspective defines talent as a set of particular skills and characteristics that influence strategic direction and organizational performance (Wiblen et al., 2010). As in the previous perspective, some individuals are more appreciated than others but in this case, the greatest appreciation is due to the skills they possess. This perspective is mainly used within the organizational context, for example in customer-facing organizations (Lepak & Snell, 1999).

The third perspective, considered as the main perspective, states that the achievement of success is not given by specific individual skills but by certain roles and functions (Boudreau, 2003). For this reason, organizations will decide to focus and make more investments in these positions.

Finally, the last perspective, based on an inclusive approach, states that talent is inherent in every individual and all individuals must be considered as potential talents (Thunnissen & Van Arensbergen, 2015).

The different approaches show how talents are considered fundamental elements within organizations. Their importance is recognized not only in business organizations, but also in organizations that operate in other contexts such as football clubs. In the world of football, there are many figures that can be identified as talents: players, coaches, staff, office personnel and managers. All, with their skills and potential, contribute significantly to the success of the clubs.

From the different perspectives provided by the literature, it is therefore possible to observe how in this environment, the definition of talent is linked to an exclusive approach: not all individuals are

classified as talents, but only a small group of them. Talent, in fact, is strongly linked to the genetic component and, according to Howe et al. (1998), it can be defined as an innate ability of individuals, that is genetically transmitted.

The talents, that this thesis takes into account, are the players, as they are the ones that most influence the sports performance of a club. For this reason, two types of talent need to be considered: individual talent and team talent.

Individual talent is given by the sum of inherent and contextual talent (Brady et al., 2008). Inherent talent is the talent possessed by each individual and can be defined as natural talent. The second, instead, is linked to the game environment where the player operates and, therefore, to the playing style and ethics of the team. Contextual talent affects the players' performance. In fact, those who integrate within the team and adapt to its culture and ethics, obtain even better performances than the intrinsic talent would allow them to achieve. The players, instead, who fail to integrate into the team, are characterized by negatives contextual talents and performance levels.

The team talent, on the other hand, is created by the head coach and managers. The success of a team is linked to confidence or team potency, which influences and is in turn influenced by performance (Hackman, 1990). Winning and, therefore, obtaining good performances generates trust, and trust allows to continue to win and guarantee the success of the team and of the club.

Since the individual and the team talent influence the performance of the clubs, the latter must take into consideration both types of talent for the choice of their TM strategies. For example, before purchasing a player and, therefore, deciding to adopt a buy strategy, clubs must consider a player's ability and his contextual talent to adapt within the team. The next paragraphs will allow to better understand which are the most convenient strategic choices for clubs to adopt for talent management.

2.3. Talent Management

Since organizations have become aware that their performance and competitiveness are linked to human capital and the presence of talent within organizations (Bryan et al., 2006), they have decided to focus their attention on talent management strategies.

Researchers attribute a strategic value to the term "talent management" (TM) since, when organizations talk about talent management, they focus on the strategic management of talents (Lewis & Heckman, 2006). Due to the lack of a general definition of talent, it is not possible to identify yet a clear definition of talent management.

The definition of talent, taken into consideration in this study, is provided by Collings and Mellahi (2009). The authors define strategic talent management as:

- activities and processes that allow the identification of key positions which contribute to the organization's sustainable competitive advantage;
- the development of a talent pool with high potential and high performance;
- the development of a differentiated human resource management policies that allow the organization to occupy key positions with valid and competent resources that guarantee their commitment to organizations.

The primary objective of each organization for an effective talent management system is, therefore, represented by the identification of strategic positions and roles that allow it to have a greater impact on organizational performance (Collings and Mellahi, 2009). Organizations must also be able to identify and develop a talent pool, with high skills and potential and that guarantees high performance. The development of an effective talent pool can be guaranteed by a combination of internal development strategies and external recruitment. These strategies, which are called make or buy strategies, will be illustrated in the next paragraph.

2.4. Internalization and outsourcing of work: a make or/and a buy strategy

As explained above, organizations can use two different strategies or a combination of them to develop an adequate and high performance talent pool. These strategies are called make strategy and buy strategy (Miles & Snow, 1984).

The make strategy is based on the internalization of work and on the organization's ability to develop talents internally, through training and development initiatives (Rousseau, 1995). It allows organizations to have greater control, greater coordination (Pfeffer & Baron, 1988) and lower transaction costs thanks to the knowledge of the skills stock available (Mahoney, 1992). On the other hand, it is characterized by the excessive stability of human capital, which does not allow companies to adapt easily to environmental changes. Furthermore, the presence of bureaucratic costs, which derive from the management of the employment relationship (Jones & Wright, 1992), represents another limitation of this strategy.

On the contrary, the buy strategy focuses on the outsourcing of work, allowing to acquire on the market the talents the organization needs, either as temporary employees or as contract laborers (Rousseau, 1995). It allows a reduction in administrative costs (Davis-Blake & Uzzi, 1993) and is based on greater organizational flexibility (Miles & Snow, 1992), which allows the organization to focus on developing core capabilities and to buy the workers it needs on the market, for achieving short-term goals. Companies also have access to a wide variety of skills available on the market (Becker, 1964). The disadvantage of this strategy is related to a long-term perspective: by focusing on achieving short-term goals, organizations can decrease their ability to develop key skills in the long run (Bettis et al., 1992).

To understand which of the two strategies is more convenient for companies to adopt, it is possible to use three different perspectives: the transaction cost perspective, the human capital theory and the resource-based perspective.

According to the transaction cost perspective, market transactions and internal production can be viewed as alternatives (Williamson, 1975). Both involve costs for organizations, represented by transaction costs and bureaucratic costs. Organizations decide to adopt the most efficient choice, being aware that the choice of internalization is effective only if they are able to effectively monitor employees' performance and use their skills correctly and effectively (Williamson, 1975).

The human capital theory states, instead, that it is convenient for organizations to develop their talents internally only if the investments, made to develop employees' skills, lead to future productivity gains (Becker, 1964). In fact, it considers the cost of investments for the development of employee skills in relation to the gains obtained from the investment itself. Companies, therefore, decide to invest in programs such as education and training, taking all the appropriate measures to

avoid the transfer of human capital, on which they have invested, to other companies (Flamholtz & Lacey, 1981). Investments in specific training are supported by companies, while investments in the development of generic skills are supported by employees (Becker, 1964).

Finally, the resource-based perspective is based on two factors: the value and the uniqueness of human capital. The value of human capital is closely linked to the skills of employees, defined as core assets of an organization (Porter, 1985). The uniqueness of human capital, on the other hand, is linked to the uniqueness and inimitable nature of the resources available to a company (Porter, 1985). Value and uniqueness function as determinants of the strategic choice (Lepak and Snell, 1999). When the value and uniqueness are high, companies have both financial and strategic incentives to adopt a make strategy (Prahalad & Hamel, 1990). They decide to develop internally the talents that, having unique and decisive skills, represent a strength for companies and a source of competitive advantage (Atchison, 1991). When the value of human capital is high but uniqueness is low, instead, companies prefer to adopt a buy strategy. The purchase of talents on the market allows companies to save costs for the development phase, without making further investments (Becker, 1964).

However, the choice of a strategy does not exclude the other. In reality, in fact, organizations can use them simultaneously, making one prevail over the other (Davis-Blake & Uzzi, 1993). In this way, organizations could differentiate themselves from competitors, thus achieving greater competitiveness and greater results, both in performance and in financial terms (Montanari & Silvestri, 2007; Deloitte, 2020).

2.5. Performance of football clubs

The performance represents a fundamental factor, as the success of organizations is determined by the level of performance they manage to achieve. As previously illustrated for the different talent management perspectives, it is necessary to consider different aspects when it comes to performance in the football industry. Among these aspects, the performance on the field and the financial performance assume particular importance. The first represents the sports results that the team has achieved on the field (Wang and Cotton, 2018); the second, instead, is linked to matchday, broadcast and commercial revenues (Deloitte, 2020). There is a reversed causality relationship between these two types of performance. Baroncelli and Lago (2007), in fact, affirm the existence of a virtuous circle between sports results and revenues: financial resources allow organizations to invest in the development of talents, thus forming winning teams. Sports results represent an attraction not only for sponsors but also for fans and television broadcasters, thus allowing clubs to obtain higher revenues.

Since this thesis focuses its attention on the talents and, therefore, on the players, for the purposes of the analysis only the performance on the field, obtained by the different clubs, will be taken into consideration. The main success factor for performance on the field is, in fact, represented by the players (Montanari & Silvestri, 2007). Since football is a team game, it is necessary to consider the team performances. The latter is represented by the number of wins that a club has managed to achieve in the league (Wang and Cotton, 2018). The team performance plays an important role in determining the competitiveness of an organization: in fact, thanks to the inverse causality relationship (Baroncelli and Lago, 2007), good performances on the pitch will allow football clubs to obtain higher revenues (Szymanski and Kuypers, 1999).

To determinate the performance of sports organizations, it is important to consider not only the level of performance achieved on the field but also the strategic choices made by clubs for talent management. For this reason, the next paragraphs will help to understand the different talent management strategies, adopted by the clubs, and the relationship between these strategies and the sport performance.

2.5.1. The relationship between talent management and sports performance

The relationship between talent management strategies and sports performance can be explained through the models of Youndt et al. (1996) and of Paauwe and Richardson (1997), illustrated previously. According to these authors, in fact, HR practices influence the performance of organizations. From these models, it is possible to create a new one that analyzes the relationship between HR practices, and therefore talent management strategies, and sports performance in the football industry.

As for the TM strategies, football clubs, like other organizations, can direct their strategic choice, for identifying and selecting talents, towards a make or buy strategy. In fact, they can decide to buy talents which they need from other teams, as contract workers (Rousseau, 1995), and then manage them (buy strategy), or to develop their talents internally, when they are still young, through a make strategy (Chris Debner, 2016).

Another option for clubs is to adopt an intermediate solution, focusing on a combination of the two strategies described above. Initially, in fact, they could decide to focus on a buy strategy, buying talents, who have failed to integrate into their teams, at a low price. The goal is to develop internally and fully mature their skills and potential, through a make strategy. Once they reach a certain level of development, the clubs decide to resell these talents on the market, obtaining significant revenues.

The make strategy takes on a greater value in the football sector. It allows to create value not only at the individual level but also at the team level as it leads to the formation of the team talent. The importance of developing talent internally is also underlined by Matt Busby, legendary manager of Manchester United in the 1950s, who states: "If my club decides to buy a player, it is only because every other method of filling a place in the team has failed (Brady et al., 2008) ".

Some clubs entrust the internal development of talents to the second teams, owned by the same clubs, who play in lower leagues than the first team. The still young players are transferred to the second teams, with the aim of growing and fully developing their potential. Once matured, clubs can decide to bring them back to the first team, so that they can take advantage of their value and talent. An example is represented by Juventus (a team that plays in the Italian championship) which has established partnership relationships with its second team, Juventus U23, which plays in Serie C (league of two categories lower than the first team). The adoption of this strategy represents an advantage for both teams: the first team, in fact, can directly exploit the talent already developed, while the second team can have a player who, although he has not yet developed his potential, represents an added and superior value for that category.

Other clubs, instead, prefer to develop their talents internally, through youth academies. The latter are real training schools not only at the football level but also at the educational level, which deal with the growth of the talents at 360°. Youth academies are essential for building a club program

(Eca, 2012). In fact, they not only represent the main source of players for the first team, but are also a source of income for clubs. An example is given by Ajax (clubs famous all over the world for adopting a strategy based predominantly on the internal development of talents) which, through its academy, manages to provide on average three players every two years to the first team (Eca, 2012). Alternatively, clubs can decide to sell the talents developed in the youth academies, once they have reached a certain level of growth, obtaining high earnings.

Especially in the most important leagues, such as the Eredivisie, the Serie A, and the Premier League, the high earnings that the clubs obtain thanks to the transfers of the players (that is the transition of the players from one club to another), make the development of talent within an organization a necessity (Revees et al., 2018).

The need, therefore, to resort to a buy strategy is argued to be a direct consequence of each club's development program (Brady et al., 2008). It is, therefore, necessary to maintain a balance between the two strategies: it is not enough for clubs to focus only on a buy strategy but, above all, it is necessary to develop talent internally. This will allow them to more easily convey their values to players and acquire contextual talent as part of the development process (Brady et al., 2008). The choice of an intermediary solution, based on the simultaneous use of both talent management strategies, represents a fundamental strategy for clubs. In fact, it not only allows clubs to obtain higher revenues, as previously described, but also allows them to focus attention on the growth and development of the talents they have available, and to use the market to purchase the resources they need. The combination of the two strategies can, therefore, be considered as a hybrid form and it will be used in the analysis as a new variable, as it represents a possible strategic choice that can be adopted by clubs.

The choice of a make or a buy strategy or a combination of the two, for the management of human resources and talents, becomes an element of fundamental importance for clubs. In fact, it represents one of the main determinants of their performance (Montanari & Silvestri, 2007; Deloitte, 2020). The right choice of talent management strategies not only entails greater benefits for clubs in terms of revenues but allows to differentiate themselves from their competitors, consequently obtaining a greater competitiveness, both in the short and in the long term (Montanari & Silvestri, 2007; Deloitte, 2020). Based on these statements, it is possible to explore the following hypothesis:

Hypothesis 1: The talent management strategies have a positive impact on the performance of football clubs.

2.5.1.1. The role of moderator factors in the relationship between talent management and sport performance

The impact that talent management strategies have on sports performance depends on the presence of some contextual factors, which play a moderating role within this relationship. These factors are called moderator factors and are represented by the career experience, the change of coach and group cohesion. In fact, a high level of international experience which increases the quality of a team (Humphrey et al., 2009), the presence of a strong and cohesive team environment that allows players to integrate easily (Koning, 2003; Duda & Balaguer, 2007), and the creation of a motivational and supportive climate by the new coach (Rachel, 2008), allow both players purchased on the market (buy strategy) and those developed internally (make strategy) to better express their

potential and perform their tasks more effectively, enabling the team to achieve superior performance.

The first factor is the career experience of players. According to Tesluk & Jacobs (1998), career experience is defined as the length of time spent in a specific field and the number of times a given task is performed in that field. The experience of the players can be of two types: national and international. The national experience is related to the number of games that the player played with the team belonging to the national league. International experience, on the other hand, depends on the participation of the players in European competitions such as the UEFA Champions League and the UEFA Europa League. The members of a team with high levels of career experience have knowledge on how to carry out the tasks effectively and efficiently (Humphrey et al., 2009). In addition, this knowledge can be shared, in order to support other team members with less experience, thus achieving an increase in overall performance (Humphrey et al., 2009). For this reason, football clubs tend to choose and place talents with an important international experience in the team, with the aim of increasing the quality of the team and achieving better sports performance. Based on these argumentations, it is possible to say that:

Hypothesis 2: The career experience positively influences the relationship between TM strategies and the performance of a football club. This relationship is stronger when the career experience of players is high.

The change of coach is the second moderator factor. According to Koning (2003), the coach has an important role within the football clubs, as it is up to him to choose the players to be included in the team. He is responsible for the orientation and training of the players, which translates into a greater number of wins and a higher position in the championship standings (Koning, 2003). Furthermore, the coach is defined as the main architect of the motivational climate (Ames, 1992). According to achievement goal theory (Nicholls, 1984), in fact, a coach able to create a climate based on the task, i.e. on the improvement of talents' technique and on cooperative learning, allows the development of a relationship of closeness with his players and a higher and positive motivation for the latter. This motivational climate, created by the coach, pushes players to obtain better performances (Duda & Balaguer, 2007; Olympiou et al., 2008). When clubs obtain bad results, they usually tend to change coach, with the aim of creating a new and more stimulating climate for the players, which allows them to better express their abilities and the team to achieve better results. Based on these argumentations, it is possible to state that:

Hypothesis 3: The change of coach positively influences the relationship between the TM strategies and the performance of a football club. This relationship is stronger when occurs a change of coach in clubs with bad performances.

The last factor is represented by the group cohesion. A strong and cohesive team environment will not only influence the intention and willingness of the players to stay in their respective clubs, but will allow them to achieve better performance. According to Brady et al. (2008), a team's environment affects the players' performance. In fact, when talents, both those purchased on the market and those developed internally, manage to integrate within the new team and adapt to its culture and ethics, they best express their qualities, thus obtaining better performance. This leads the players to increase their willingness to stay on the team (Rachel, 2008). On the other hand, for players who are unable to integrate, there is a reduction in the level of performance, compared to

what the qualities possessed would allow them to do, and an increase in the intention of turnover (Brady et al., 2008 ; Rachel, 2008). For this, we can say that:

Hypothesis 4: *Group cohesion positively influences the relationship between TM strategies and the performance of a football club. In fact, when group cohesion is high, this relationship is stronger.*

3. Conceptual model

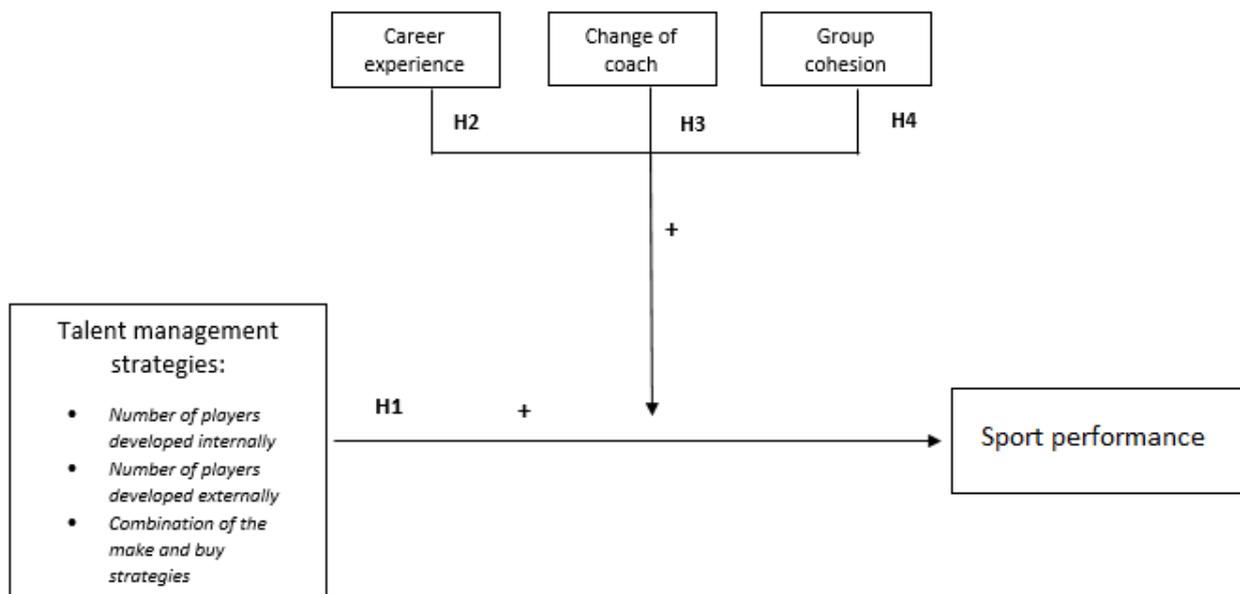


Fig.1. Research model

4. Methodology

4.1. *General research design*

To test the research model described above and, therefore, to examine the relationship between talent management strategies and the performance of a club, a quantitative research approach is used. A statistical analysis, based on the multiple linear regression model, has allow to explain this relationship. The analysis considered five of the most important European football leagues³ (the English, Spanish, Dutch, Italian, and French leagues) in the 2018/2019 season. In this way, it was possible to observe the different strategic perspectives and the different results of the clubs taken into consideration.

For this research, we created our own dataset, based on secondary data sources. First, a desk research was conducted for the development and collection of the raw dataset, based on the use of secondary sources. Multiple sources, in fact, were used, like the Transfermarkt.com website (a German website, recognized as one of the main sources for football statistics and information like transfer of players, rankings, results, etc...) and the websites of the football teams. Secondly, the raw dataset was transformed into the final dataset by calculating our measures.

4.2. *Sample and data collection*

The sample includes all teams that make up the Dutch, French, Italian, Spanish and English leagues for the 2018/2019 sports season. The choice of the sporting season is linked to the will to show how talent management strategies are applied by clubs nowadays. For the purposes of the analysis, the 2018/2019 season represents, in fact, the most current and ideal season to be taken into consideration. Each championship consists of 20 teams, with the exception of the Dutch one made up of 18 teams. Thus, the sample includes a total of 98 teams.

4.3. *Measures*

Multiple variables were analyzed in a multiple hierarchical regression model. The make and / or buy strategies represent the independent variables of the model, while the dependent variable is represented by sport performance. In addition to these variables, moderator variables, which influence the relationship between independent variables and the dependent variable, were taken into consideration.

4.3.1. *Dependent Variable*

The dependent variable of the multiple regression model is represented by the sport performance. The success of a club is evaluated considering the performances on the field, that a team is able to obtain (Montanari & Silvestri, 2007). According to Wang and Cottong (2018), the team performance is measured by the percentage of wins (given by the ratio between the number of wins and the total number of games) that a team has achieved in the season of a given year t . This method is used by two authors to measure team performance in the world of baseball, in which teams can only obtain two types of results (win or defeat), unlike football, where teams can achieve three different types of results (win, draw or defeat), which affects the team's final performance. Two teams can, in fact, obtain the same number of wins but reach different performances, based on the number of draws

³ <https://sportytell.com/soccer/best-soccer-leagues-world/>

or defeats obtained. A practical example is represented by the French championship, where Montpellier and Nîmes Olympique, while obtaining the same number of wins (15) in the 2018/2019 sport season, have achieved performances of different value, due to the different number of draws and, consequently, of defeats obtained, ranking respectively in 6th and 9th place. For this reason, it was decided to measure sport performance considering the final amount of points obtained by each club in the league, in the 2018/2019 season, and not through the percentage of wins. The dependent variable is, therefore, represented by the percentage of the total number of points reached by a team at the end of the season and the maximum number of points that the team could have achieved throughout the season. For example, in the Italian championship, Inter' sport performance is equal to 60.5%, as the team has scored 69 points in the championship out of a total of 114 available points.

The Transfermarkt.com website was used for the collection of the raw data. From the final league tables of the 2018/2019 season, the final amount of points obtained in the league by each team and the total number of matches played by the latter were taken. Before transferring these points into our dataset, it was necessary to multiply the total number of matches by three, i.e. the number of points that a team gets in a game when it reaches the best result and, therefore, the win. In this way, it was possible to determine the maximum number of points that a team can reach in the championship.

4.3.2. Independent variables

Independent variables of the model are represented by the talent management strategies, that is make or buy strategies and by the hybrid form, given by a combination of the two strategies.

The make strategy is based on the internal development of talents (Chris Debner, 2016). To this end, not only internally developed players who joined the first team in the 2018/2019 season, but also those who grew up in the youth teams of the clubs and already present in the first team were taken into consideration. Although clubs adopt this strategy, it is not said that internally developed talents are always used in the league's matches. For this reason, the independent variable is represented by the percentage of the total number of matches played by internally developed players in the league, and the total number of matches played by the whole team in the 2018/2019 season. For example, the value of the make strategy for Barcelona team is 35.70%, since the internally developed players played a total of 169 league games out of a total of 473, which are those played by the whole team.

The buy strategy, on the other hand, is based on purchasing the talents, that a club needs, on the market (Chris Debner, 2016). For the purposes of the analysis, the players purchased on the market in the summer before the start of the 2018/2019 season were taken into consideration. The choice to consider only the players purchased in the summer before the start of the season is due to the fact that transfers of players in this period take on a key role. Two are, in fact, the transfer windows, which are allowed to clubs: a summer and a winter windows⁴. Initially, European clubs had limits on the purchase of foreign players: only a limited number of them could be purchased and used on the field. Since 1995, following the Bosman ruling, these limits have been eliminated, leading not only to an increase in transfers of foreign players but also to a more competitive international market⁵.

⁴ <https://www.bbc.com/worklife/article/20170829-how-does-a-football-transfer-work>

⁵ <https://www.calcioefinanza.it/2015/12/15/cosa-dice-la-sentenza-bosman/>

Clubs tend to invest mainly in the summer window, before the start of the new sports season, as the teams are still in the preparation phase. For this reason, they invest all their resources in the research and purchase of the best talents. The winter market, on the other hand, is seen as a repair market where clubs decide to buy new players based on the results obtained in the first part of the championship. Usually, at this stage, the transfer of players is on loan and not outright. Also in the case of buy strategy, although the organizations prefer to resort externally to new talents, they do not guarantee these players a continuous use during the league. The independent variable is, therefore, given by the percentage of the total number of matches played by externally developed players in the league, in the 2018/2019 season, and the total number of matches played by the whole team. The value of the buy strategy for the Barcelona team is 20.7%, as the players purchased on the market played 98 games out of a total of 473 games played by the whole team.

The raw data was taken from the Transfermarkt.com website. After identifying, in the squad tables, the players who were developed internally (make strategy) and those who were purchased in the summer before the start of the 2018/2019 season (buy strategy), the number of matches played respectively by these players in their team, in the 2018/2019 season, was taken from the stats by competition tables. Furthermore, from the stats by competition tables, the number of matches played by the other players (players who were not purchased in the 2018/2019 season and who were not developed internally but who are part of the team in this season) was taken. Before transferring this data into our dataset, the number of matches played by all three types of players considered was added up. In this way, it was possible to determine the total number of matches played by the whole team. Even the number of matches played by internally developed players and those purchased on the market was added up, before being included in our dataset, in order to determine respectively the total number of matches played by externally developed players and the total number of matches played by internally developed players in a team, in the 2018/2019 season.

The hybrid form, instead, represented by the variable make and buy strategy, is based on a combination of players purchased on the market and players developed internally. Since there are different methods to measure make and buy strategies, to measure this variable it was decided to consider the market value of the players and not the games played by the latter, as previously done. The hybrid form is, therefore, given by the percentage of the total market value of players purchased on the market and internally developed, and the market value of the team in the 2018/2019 season. The value of this variable for Barcelona team is equal to 44.8%, given by the market value of the players purchased on the market and developed internally equal to 520 thousand euros on the market value of the team equal to 1.16 billion euros.

The raw data, used to calculate this variable, was taken from the Transfermarkt.com website. From the squad tables of each team in the 2018/2019 season, the individual market values of the players developed internally and those purchased on the market were taken; while the market value of each team in the 2018/2019 season was taken from the clubs' tables. The raw data was translated into our dataset, adding up the market values of the individual players in order to measure the total market value of players purchased on the market and developed internally for each team.

4.4. Moderator variables

Within the model, three variables, which play a moderator role in the relationship between talent management strategies and sports performance, have been included. These variables are called moderator variables. They are:

- ❖ **Career experience:** Humphrey et al. (2009) argue that teams choose and place players in the team with high international experience, as they are able to perform their tasks effectively, thus increasing the quality and, consequently, the performance of the whole team. For the purposes of the analysis, players with international experience, i.e. those who have played matches at European level, in the UEFA Champions League, UEFA Europa League and in the UEFA Super Cup (played between the Champions League and Europa League finalists), will be taken into consideration. To this end, the moderator career experience variable is given by the average of the total number of matches played by the players at European level throughout their career, and the total number of players that make up the team in the 2018/2019 season. In the Ajax team, for example, the total number of games played at European level by the players is equal to 729, while the total number of players making up the team is equal to 27. An average between these two values allows the club to have a career experience of 44.5.

The raw data was taken from the Transfermarkt.com website. From the stats by competition tables, in the 2018/2019 season, the number of matches played by each player in the UEFA Champions League, UEFA Europa League and in the UEFA Super Cup competition in his career was taken, while from the squad tables the number of players who make up the team in the 2018/2019 season was taken. The raw data was included in our dataset, adding up the number of matches played at European level by the individual players. In this way, it was possible to determine the total number of matches played by all the players of a team at European level.

- ❖ **Change of coach:** according to Ames (1992) and Duda & Balaguer (2007), the creation of a motivational climate by the new coach leads the team to an improvement in performance. For this reason, the change of a coach at the start of the season was considered as a moderator variable. It is represented by a dummy variable, with a value of 0 if no change has occurred and with a value of 1 if the team has changed its coach before the start of the season 2018/2019.

The data was obtained from the teams' websites and from the Transfermarkt.com website. On the Transfermarkt.com website, in the coach tables, the start and end of a coach's contract were observed. This data was translated into our dataset, measuring the final variable as a dummy variable.

- ❖ **Group cohesion:** Brady et al. (2008) argue that a cohesive team environment allows players to best express their qualities, thus obtaining better performance. Often, new players fail to integrate with the culture and ethics of the team, obtaining negative performances and, consequently, increasing their desire for turnover (Rachel, 2008). The group cohesion is, therefore, determined by the percentage of the number of players who are part of the team from the 2016/2017 season and the total number of players making up the team in the 2018/2019 season. For example, the group cohesion for the Manchester City team is equal

to 56.5%, as the number of players who are part of the team from the 2016/2017 season is 13 out of a total of 23 players who make up the team in the season 2018/2019.

The Transfermarkt.com website was used for the collection of the raw data. By comparing the squad tables for each team, from the 2016/2017 to the 2018/2019 season, it was possible to determine the total number of players who are part of the team starting from the 2016/2017 season. Furthermore, from the squad tables, the number of players who are part of the team, in the 2018/2019 season, was obtained.

4.5. Control variables

The control variables used in the model are represented by the geographic location and the age of the coach. The geographic location affects sports performance (Di Domizio, 2008). The presence of clubs with a higher reputation in the city of the club in question implies that the club with a lower reputation will have less access to the available talents, with a consequent reduction in sports performance (Di Domizio, 2008). Age of coach is also considered to be an important determinant of sports performance. Since the importance of the coach within a team in influencing the training and the performance of players is recognized (Koning, 2003; Duda & Balaguer, 2007), a coach with older age and, therefore, with higher experience, will have a greater influence on sports performance.

The Transfermarkt.com website was used for the collection of the data. To verify the presence of two football clubs in the same city, the "club portrait" page was observed. Subsequently, the "geographic location" variable was measured in our dataset as a dummy variable, attributing a value of 0 if, in the same city, there is no football club with a higher reputation than the club taken into consideration, and a value of 1 if the club is present. As regards, instead, the variable "age of coach", from the staff tables of each team, the age of each coach was taken. The values obtained were then reported to our dataset.

4.6. Data analysis

Quantitative analysis consists of several phases. In the first phase, a correlation analysis was carried out, to highlight the significance of the association between the variables taken into consideration. After the correlation analysis, it was possible to determine the influence of the independent variables on the dependent variable and, therefore, the relationship between the talent management strategies and sports performances of the football clubs, through the construction of a multiple hierarchical regression model. In fact, multiple regression analysis is a statistical technique that is used to analyze the relationship between a dependent variable and one or more independent variables (Black et al., 2014). Within the models, other factors, like moderators and control variables, were considered. Once the main multiple regression model has been realized, five other multiple regression models were created, each for the five championships taken into consideration. The six regression models were then compared with each other.

After getting the results, using SPSS 25.0 for Windows, it was possible to proceed with their interpretation. To this end, some values and coefficients were analyzed, such as the regression coefficient (b), which represents the amount of change in the dependent variable due to the independent variable, and the determination coefficient (R^2), which measures the proportion of the variance of the dependent variable explained by independent variables (Black et al., 2014). R^2 also allows checking the validity of the results. The higher the R^2 value, the greater the power of the regression model and the greater the prediction of the dependent variable (Black et al., 2014).

5. Results

In this section, the results obtained from the statistical analysis will be illustrated. After the results of the correlation analysis, the results obtained in the main multiple regression model will be presented. Finally, the latter will be compared with the results of the multiple regression models realized for each of the five different championships, taken into consideration in this study.

5.1. Correlations

To measure the significance of the association between the variables, a correlation analysis was carried out. The results are presented in Table 1.

Table 1. Means, standard deviations, and correlations.

Variables	Mean	SD.	1	2	3	4	5	6	7	8	9
1.Age of coach	50,38	7,17	1								
2.Geographic location	,23	,43	,038	1							
3.Number of players developed internally	,12	,12	-,059	,004	1						
4. Number of players developed externally	,23	,10	-,074	-,125	-,281**	1					
5.Combination of make and buy strategy	,41	,21	,021	-,020	,463**	,355**	1				
6.Career experience	14,22	13,30	-,034	,346**	,127	-,232*	-,139	1			
7.Change of coach	,33	,47	-,192	,076	,144	,079	,072	,022	1		
8.Group cohesion	,32	,13	,121	,103	,185	-,291**	-,135	,522**	-,004	1	
9. Sport performance	,44	,16	,058	,242*	,108	-,170	,081	,651**	-,049	,379***	1

N=98

** . Correlation is significant at the 0.01 level (2-tailed)

* . Correlation is significant at the 0.05 level (2-tailed)

The correlation analysis showed that not all main variables from our research model are significantly correlated with one another. Of the talent management strategies, in fact, the number of players developed internally ($r = .108$, $p < 0,29$), the number of players developed externally ($r = -.170$, $p < 0,09$) and the combination of make and buy strategies ($r = .081$, $p < 0,43$) are not significantly correlated with sport performance. Instead, there is a significant and negative correlation between the number of externally developed players and group cohesion ($r = -.291$, $p < 0.01$) and the number of externally developed players and career experience ($r = -.232$, $p < 0.05$). Group cohesion ($r = .379$, $p < 0.01$) and career experience ($r = .651$, $p < 0.01$), in turn, have a significant positive correlation with sport performance. As for the two control variables, the results highlight that the variable "age of coach" is not significantly correlated with all the other variables, unlike the variable "geographic location" that has a significant positive correlation with sports performance ($r = .242$, $p < 0.05$).

5.2. Regression analysis

To test the impact of talent management strategies on sports performance and the influence of moderator factors within this relationship, a regression analysis was performed. Four different hypotheses are to be test. The first is based on the positive impact that talent management strategies, measured by "the number of players developed internally", "the number of players developed externally" and "the combination of the make and buy strategy" variables, have on sports performance (Hypothesis 1). The other three, however, support the positive effect of the moderator factors, i.e. "career experience" (Hypothesis 2), "change of coach" (Hypothesis 3) and "group cohesion" (Hypothesis 4), in the relationship between talent management strategies and sports performance.

To this end, a hierachical multiple regression analysis, based on 3 steps, was performed. The first step included the control variables (Model 1), while the second (Model 2) the impact of talent management strategies on sport performance. The last step, represented by the Models 3, was designed to test the interaction effects of moderator variables. Furthermore, taking into account all the variables, it allows to analyze the results of the multiple regression model as a whole. The results of the regression analysis are described in Table 2.

Table 2. Result of regression analysis with sport performance as the dependent variable

Variables	Model 1	Model 2	Model 3
Step 1: Control variables			
Age of coach	,049	,029	,015
Geographic location	,241**	,219**	,172*
Step 2: Independent variables			
Number of players developed internally		-,032	-,033
Number of players developed externally		-,211	-,275**
Combination of make and buy strategy		,174	,270*
Step 3: Interaction effects			
Number of players developed internally X Career experience			-,010
Number of players developed externally X Career experience			-,076
Combination of make and buy strategy X Career experience			-,288*
Number of players developed internally X Change of coach			-,101
Number of players developed externally X Change of coach			-,233**
Combination of make and buy strategy X Change of coach			,065
Number of players developed internally X Group cohesion			-,177*
Number of players developed externally X Group cohesion			-,187
Combination of make and buy strategy X Group cohesion			,322**
R ²	,061	,101	,266
ΔR ²	,061	,040	,164
Adjusted R ²	0,41	,052	,172
F	3,095	2,073	2,826

* $p < .1$; ** $p < .05$; *** $p < .01$.

Table 2 shows that, among the control variables, only the "geographic location" variable influences sport performance significantly and positively ($\beta = .241^{**}$, $p < .05$). As for talent management strategies, instead, the results of model 2 show that they do not have a significant impact on sport performance, thus not supporting Hypothesis 1. Instead, observing the model 3, it is possible to notice this impact, due to the presence of the moderator variables. For this reason, Hypothesis 1 is partially supported. Model 3 represents the best model to be considered for the analysis, as it includes all variables. It not only offers a more complete view but also has the highest R^2 value ($R^2 = .266$; $\Delta R^2 = .164$). In fact, the higher the R^2 value the greater the power of the regression model (Black et al., 2014).

As for the moderator variables, the interaction effect between talent management strategies and career experience on sport performance is significant only if the combination of make and buy strategies is considered. This effect, however, is negative ($\beta = -.288^*$, $p < .1$). The same results were obtained for Hypothesis 3. Only the interaction effect between the number of players developed externally and the change of coach on sport performance is significant but negative ($\beta = -.233^{**}$, $p < .05$). By analyzing, however, the interaction effects between talent management strategies and group cohesion, a significant effect can be seen only when the number of players developed internally and the combination of make and buy strategies are taken into consideration. If in the first case there is a negative effect ($\beta = -.117$, $p < .1$), in the second, instead, there is a positive effect ($\beta = .322^{**}$, $p < .05$).

To help to interpret the interaction effects, a simple slope analysis was performed. Figure 2a describes the interaction effect between career experience and the combination of the make and buy strategies on sports performance; Figure 2b, instead, represents the interaction plot for the moderating role of the change of coach in the relationship between the number of players developed externally and sport performance. The last two interaction plot show the moderating role of group cohesion in the relationship between the combination of the make and buy strategies and sports performance (figure 2c) and the number of players developed internally and the sport performance (figure 2d).

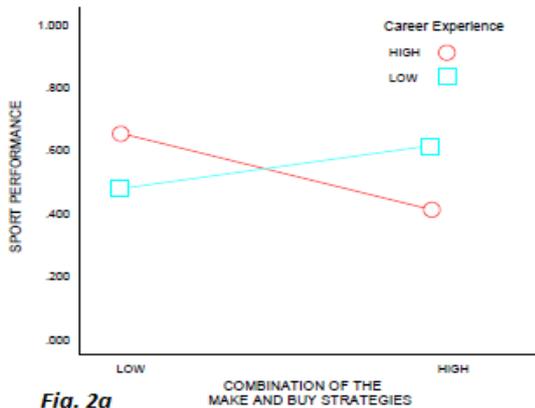


Fig. 2a

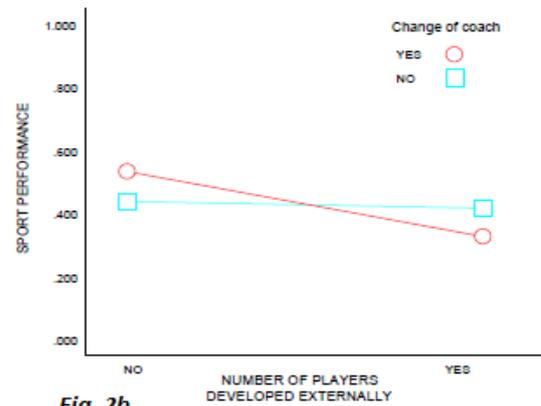


Fig. 2b

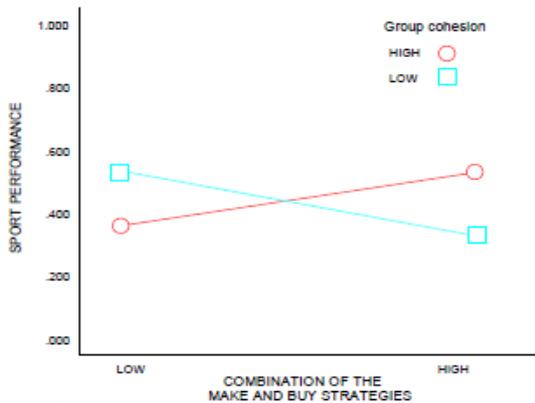


Fig. 2c

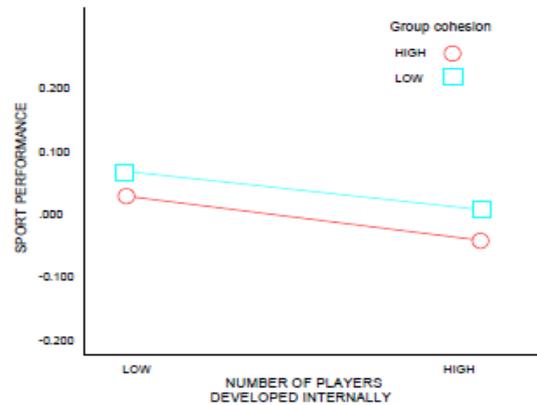


Fig. 2d

Fig. 2. Interaction plot of the moderation effects on the relationship between talent management strategies and sport performance.

The first plot (Figure 2a) highlights how, in a high level of career experience, the relationship between the combination of the make and buy strategies and sports performance is negative; while, in a low level of career experience, this relationship is positive. Therefore, Hypothesis 2 is rejected. Figure 2b, on the other hand, shows how, when a change of coach occurs the relationship between the number of players developed externally and sport performance is negative, while when there is no a change of coach, this relationship is not significant. For this reason, Hypothesis 3 is not confirmed. Finally, Figure 2c shows how, in a high group cohesion, the hypothesized positive relationship between the combination of the make and buy strategy and sport performance is present, while in a low group cohesion this relationship is negative. Always considering the moderation effect of group cohesion, in the last plot (Figure 2d), it is highlighted how, in a high and in a low group cohesion, the relationship between the number of players developed internally and the sport performance is negative. Hypothesis 4 is, therefore, partially supported.

The results of the regression analysis, previously described, are summarized in Figure 3.

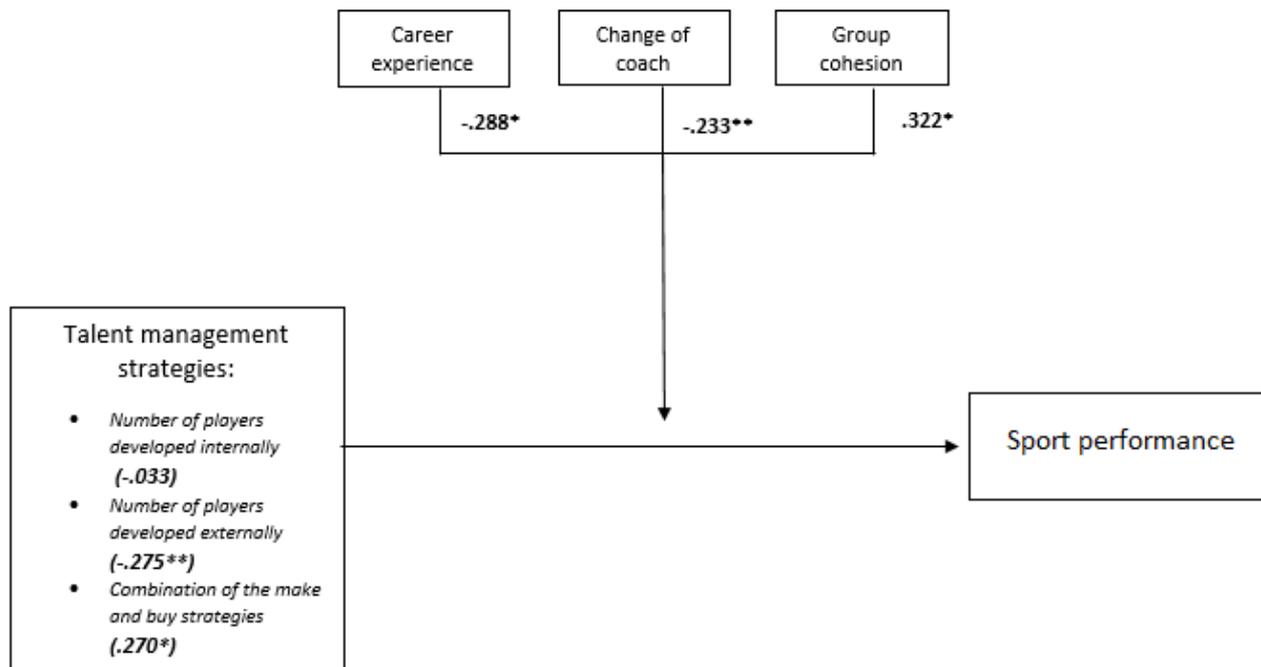


Fig. 3. Results of the main multiple regression model

After testing the hypotheses, the results of the main multiple regression model were compared with those of the regression models, realized for each of the five championships. The aim was to highlight not only how the talent management strategies, adopted by football clubs, affect sport performance at the national level but also how strategic choices vary in the leagues taken into consideration. The results of the individual regression models are summarized in Appendix C.

Table C1 shows how none of the regression results turned out to be significant. This insignificance is mainly due to the size of the samples. Each model, in fact, is made up of a sample of 20 teams, with the exception of the regression model of the Dutch championship, made up of a total of 18 teams. Samples so small, represent a limit for analysis purposes, as they do not allow to obtain valid and significant results. For this reason, it was not possible to make a comparison between the five European leagues and the main regression model.

6. Discussion

The main purposes of this research were to explore to what extent the talent management strategies, adopted by organizations, influenced their performance and to examine the role and ability of some moderator factors, such as the career experience, the change of coach and the group cohesion, to influence this relationship. To this end, this study was performed in the football sector, considered as one of the main arenas in the war of talents (Brady et al., 2008). The 98 clubs that make up five of the most important European football leagues (Italian, Spanish, Dutch, English and French championships) were taken into consideration. Starting from the findings of Youndt et al. (1996) and Paauwe and Richardson (1997), which tested a direct relationship between HRM practices and strategies and the performance of organizations, it was demonstrated that talent management strategies do not directly influence the sports performance of football clubs. It was

possible to highlight the impact of talent management strategies on sport performance only when other contextual factors, such as career experience, change of coach and group cohesion, were taken into consideration. The talent management strategies affect sport performance when clubs adopt a hybrid strategy, based on a combination of make and buy strategy. This relationship is stronger when football clubs are able to create a strong and cohesive team environment, which allows talents, both those developed internally and those purchased on the market, to better express their qualities and potential, thus enabling clubs to achieve better results and performances.

6.1. Theoretical implications

This research provides two different implications for academic literature. The first is that it has allowed to fill the gap present in the existing literature, demonstrating to what extent talent management strategies influence the sport performance of football clubs. The second implication, on the other hand, concerns the identification of some factors, called moderator factors, that play an important role within this relationship. The results highlighted that talent management strategies do not have a direct effect on sports performance, unlike the existing literature, which has always recognized a direct link between HRM practices and strategies and the performance of organizations (Youndt, 1996; Pauwee and Richardson, 1997). To observe the impact of these strategies, it is necessary to consider some contextual factors, such as group cohesion, change of coach and career experience. Although it has been hypothesized that talent management strategies have a positive impact on sports performance, the results showed that only the choice of a hybrid solution allows football clubs to achieve better results and performance. This result supports the work of Davis-Blake and Uzzi (1993), according to which clubs should aim for a simultaneous use of the make and buy strategies, choosing the best possible combination of the two, in order to obtain better results and higher performance. The best choice for clubs, therefore, is to adopt a hybrid strategy, focusing on the growth of the talent they have available and using the market to purchase the resources they need. The positive effect of the hybrid strategy occurs when clubs are able to create a strong and cohesive team environment. This result confirms the findings of Brady et al. (2008) and Rachel (2008), who found that a team environment that allows new players to integrate easily and adapt to a team's culture, enables clubs to perform better. Football organizations, therefore, should focus their attention on creating a strong and cohesive work environment, which allows talents, both to those developed internally and purchased on the market, to best express their qualities, thus achieving superior performance and greater competitiveness in the long term. Always considering the team environment, it has been demonstrated how the choice of football clubs to focus exclusively on a make strategy, through the construction of youth academies or the use of second teams, is ineffective as it does not allow them to obtain positive results. This result differs from the work of Brady et al. (2008), which highlights the importance for clubs to focus on a make strategy, since it allows to create value not only on an individual level but also on a team level. A possible explanation for this negative effect is that the choice of a make strategy can lead to a less strong team environment in the long term, characterized by an excessive stability of human capital, and consequently less stimulating. In this way, the players are unable to express their qualities at their best, leading the entire team to achieve negative performances. Furthermore, the results show that the choice of football organizations to focus exclusively on a buy strategy has negative consequences on the performance of a team. The negative effect occurs when clubs decide to change coaches, following bad results. A possible explanation is that the new talents acquired on the market fail to express their qualities, as they are unable to establish a close relationship with

the new coach and to perceive an adequate motivational climate (Duda & Balaguer, 2007; Olympiou et al., 2008). This leads to a reduction in the motivation of the players, with a consequent decrease in team performance. Finally, in our analysis, it was assumed that talent management strategies positively influence performance in clubs with high levels of international experience. These clubs choose and add talents with significant experience in the team, as they not only perform their tasks effectively but are also able to transfer their knowledge to players with a lower level of experience, increasing the quality and, consequently, the performance of the whole team (Humprey et al., 2009). The results obtained showed, however, a negative interaction effect. A possible explanation is due to the fact that a team with high levels of international experience does not need to add new players, as the level of experience and the team's quality are already high. Football clubs, on the other hand, characterized by a low level of international experience, will tend to modify their strategies, buying and adding from youth academies new players with a higher level of experience, in order to improve the quality of the team and increase their sports performance.

6.2. Practical implications

In addition to the contributions provided for academic literature, this research also provides two significant implications for practice. Identifying the best talent management strategy is the first practical implication. In fact, the results showed that the best choice for football organizations is to adopt a hybrid strategy for managing talents, based on a combination of make and buy strategies. This strategic choice allows football clubs to improve and obtain better sports performances. Resorting exclusively to the market for the purchase of the best talents is an ineffective choice, as it not only entails significant economic costs for clubs but also does not allow them to achieve better results. Football organizations should, therefore, focus their attention on the internal development of the talents they have available, through the creation of training schools, such as youth academies. The latter allow to develop talents at 360°, guiding them in their personal and professional growth. Another option for football clubs is to resort to the use of second teams, thanks to which it is possible to fully develop the potential of the talents and bring them back, once trained, to the first team. In this way, clubs can deal with the growth of their talents, purchasing at the same time the missing talents they need on the market. Moreover, to improve their performance, football organizations should create a strong and cohesive team environment, which allows new players, both those purchased on the market and those developed internally, to integrate easily. In this way, the talents will be able to express their qualities and potential in the best way, thus allowing the team to achieve superior results and performances. The second contribution offered to the practice is the lesson that this study provides for other organizations in the business world. Since football clubs make talent management their core business, they can be an example to follow for other organizations. The latter, in fact, can observe the football clubs that use a hybrid strategy for the management of talents, imitating and replicating this strategy. This will allow organizations to improve their results and to differentiate themselves in their sector, achieving a competitive advantage not only in the short term but also in the long term.

6.3. Methodological implications

The last contribution offered by this research is the contribution for the methodology. Existing literature has always explored the world of sport, focusing mainly on sports such as basketball or baseball (Wang and Cotton, 2018). The football sector has also been studied by researchers, although the latter have offered a limited perspective, taking into consideration only a single league

or a small number of teams belonging to the same league. For this reason, an innovative approach has been adopted to analyze the impact of talent management strategies on the performance of organizations. In fact, it was decided to provide a broader perspective, considering five of the most important European football leagues (Italian, French, Dutch, Spanish and English leagues), for a total of 98 teams, with the aim of exploring the analogies and the differences between the strategic choices made by the clubs in the different leagues. Despite the use of this innovative approach, it has presented some limitations, which will be illustrated in the next paragraph.

6.4. Limitations and future researches

Despite the different contributions provided to literature, practice and methodology, this research presents five limitations. The first limitation is the sample size. Just the small sample size did not allow for a more in-depth analysis between each championship, comparing the similarities and differences that characterize them. Furthermore, even in the main regression model, the 98 teams considered represent a small sample that can influence the precision of the results. Future researches, considering other leagues, such as the Bundesliga (German championship), could increase the sample size and obtain more reliable results. The second limitation is linked to the fact that this research takes into consideration only the teams of the main European leagues, excluding other championships, such as the American, Asian, Australian leagues. A broader analysis, at international level, would allow future researches to show not only the different strategies of talent management adopted by clubs, but also how the cultural differences, which characterize the countries of the teams taken into consideration, can affect strategic choices. Another limitation is represented by the time frame taken into consideration for data collection. This study only takes into consideration the 2018/2019 sports season, as the purpose is to consider the impact that talent management strategies have nowadays on sports performance. Future researches could focus on a wider time frame, for example considering a period of ten years. This would allow to show if and how, over the years, the football clubs have changed their strategies and the different ways in which the latter have influenced their results. The fourth limitation is due to the fact that this research is concerned with analyzing the results obtained by football clubs through sports performance. Since the results of organizations are determined not only by the results obtained in the field but also by the financial results (Montanari & Silvestri, 2007; Deloitte, 2020), future researches could provide a different perspective, focusing their attention on other factors, such as the growth in the clubs' turnover or broadcast revenues. Finally, the last limitation is linked to the results obtained by this study, according to which the hybrid talent management strategy has some positive effects on sport performance. In this study, this strategy is seen as a combination of make and buy strategies, without analyzing the different possible combinations of the two strategies. In fact, some clubs, although choosing the hybrid strategy, can adopt a high percentage of the buy strategy compared to that of make, or the other way around. For this reason, future researches could focus their attention on the different possible combinations of make and buy strategies which football clubs decide to adopt, and examine which combination has the greatest effect on sport performance.

7. Conclusion

By exploring the research question “*To what extent do talent management strategies, adopted by football clubs, affect their performance?*”, this study demonstrates to what extent the strategic choices, made by clubs, for talent management influence the performance of football organizations. Only clubs that focus on a hybrid talent management strategy, by internally developing the talents they have available (make strategy) and buying on the market those they need (buy strategy), are able to obtain better results in terms of sports performance. This positive effect occurs when clubs are able to create a cohesive team environment, which allows new players to integrate easily within the group. High levels of group cohesion, in fact, make the relationship between talent management strategies and the performance of football organizations stronger. On the contrary, teams with high levels of career experience or teams in which a change of coach occurs, following bad performances, make this relationship weaker. In conclusion, it can be stated that the talent management strategies, adopted by football clubs, do not directly influence sport performance. It is necessary to consider other contextual factors, such as group cohesion and career experience, to analyze and explain the impact that these strategies have on sport performance.

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Appendix

Appendix A- Variables outcomes for each League

CLUBS	Change of coach	Group cohesion	Career experience	Sport Performance	N. players developed internally	N. players developed externally	Combination of make and buy strategies	Age of coach	Geographic location
Manchester City	0	0,565	43,83	0,86	0	0,051	0,06	47	1
FC Liverpool	0	0,571	45,67	0,851	0,057	0,225	0,328	51	0
Chelsea	1	0,375	40,46	0,632	0,047	0,144	0,148	59	1
Tottenham	0	0,5	39,00	0,623	0,138	0	0,224	46	1
FC Arsenal	1	0,48	47,96	0,614	0,097	0,263	0,301	46	1
Manchester U.	0	0,536	34,93	0,579	0,158	0,066	0,228	55	1
Wolverhampton	0	0,25	17,40	0,5	0,05	0,367	0,673	44	0
Everton	1	0,4	20,85	0,474	0,055	0,248	0,338	40	1
Leicester City	0	0,5	12,36	0,456	0,105	0,199	0,444	56	0
West Ham U.	1	0,522	13,69	0,456	0,156	0,352	0,615	64	1
Watford	0	0,478	10,26	0,439	0,053	0,224	0,267	48	0
Crystal Palace	0	0,652	13,61	0,43	0,073	0,166	0,248	70	1
Newcastle U.	0	0,37	8,08	0,395	0,055	0,247	0,213	58	0
Bournemouth	0	0,483	5,48	0,395	0,012	0,14	0,38	40	0
FC Burnley	0	0,409	16,32	0,351	0,042	0,066	0,21	47	0
FC Southampton	0	0,524	10,19	0,342	0,106	0,166	0,299	54	0
Brighton	0	0,318	9,68	0,316	0,143	0,221	0,443	59	0
Cardiff	0	0,25	1,25	0,298	0,06	0,136	0,414	69	0
FC Fulham	0	0,48	11,92	0,228	0,087	0,335	0,48	49	0
Huddersfield	0	0,5	6,46	0,14	0	0,305	0,362	46	0

Fig. A1- Variables outcomes for Premier League

CLUBS	Change of coach	Group cohesion	Career experience	Sport Performance	N. players developed internally	N. players developed externally	Combination of make and buy strategies	Age of coach	Geographic location
Ajax	0	0,445	27,00	0,843	0,312	0,174	0,976	48	0
PSV Eindhoven	1	0,429	13,25	0,814	0,336	0,274	0,854	41	0
Feyenoord	0	0,407	13,37	0,637	0,382	0,053	0,354	43	0
AZ Alkmaar	0	0,281	8,19	0,569	0,5	0,067	0,575	51	0
Vitesse	1	0,25	13,67	0,52	0,039	0,255	0,24	47	0
FC Utrecht	0	0,223	9,18	0,52	0,063	0,278	0,31	47	0
Heracles Almelo	1	0,296	1,78	0,471	0	0,507	0,606	57	0
FC Groningen	1	0,223	1,85	0,441	0,111	0,159	0,657	36	1
ADO Den Haag	0	0,36	4,88	0,441	0,197	0,127	0,229	54	0
Willem II	1	0,2	2,96	0,431	0,0002	0,251	0,21	63	0
Heerenveen	1	0,346	5,31	0,402	0,287	0,13	0,589	55	1
VVV-Venlo	0	0,37	2,33	0,402	0,085	0,209	0,349	44	0
PEC Zwolle	0	0,23	2,15	0,382	0,106	0,392	0,467	54	0
FC Emmen	0	0,219	0,53	0,372	0,104	0,205	0,367	46	0
Fortuna Sittard	1	0,219	0,03	0,334	0,032	0,326	0,418	55	0
Excelsior	1	0,269	1,65	0,324	0,306	0,327	0,866	47	1
De Graafschap	0	0,276	1,28	0,284	0,234	0,367	0,593	53	0
NAC Breda	1	0,2	1,30	0,225	0,126	0,209	0,2	46	0

Fig. A2- Variables outcomes for Eredivisie

CLUBS	Change of coach	Group cohesion	Career experience	Sport Performance	N. players developed internally	N. players developed externally	Combination of make and buy strategies	Age of coach	Geographic location
FC Barcellona	0	0,455	52,5	0,684	0,357	0,207	0,448	54	0
Atlético Madrid	0	0,545	42,86	0,579	0,185	0,213	0,435	48	1
Real Madrid	1	0,542	42,88	0,553	0,213	0,137	0,298	51	1
Valencia CF	0	0,318	27,59	0,395	0,134	0,232	0,56	52	0
Getafe CF	0	0,091	7,82	0,395	0,023	0,379	0,928	54	0
Siviglia FC	1	0,2	33,44	0,447	0,069	0,314	0,281	43	0
Espanyol	1	0,136	13,64	0,368	0,344	0,144	0,983	48	1
Athletic Bilbao	1	0,458	31,38	0,342	0,444	0,172	0,553	48	0
Real Sociedad	1	0,304	8,48	0,342	0,454	0,06	0,478	48	0
Real Betis	0	0,136	22,59	0,368	0,136	0,277	0,665	59	1
Alavés	0	0,227	7,14	0,342	0,06	0,218	0,252	48	0
SD Eibar	0	0,35	3,85	0,29	0	0,147	0,13	57	0
CD Leganés	1	0,115	6,88	0,29	0	0,214	0,293	46	0
Villarreal CF	0	0,36	25,8	0,263	0,182	0,34	0,597	40	0
Levante UD	0	0,185	4,22	0,29	0	0,273	0,283	50	1
Real Valladolid	0	0,08	2,36	0,263	0,113	0,095	0,53	41	0
Celta de Vigo	1	0,273	6,23	0,263	0,286	0,252	0,616	48	0
Girona FC	1	0,421	21,95	0,236	0,124	0,252	0,268	54	0
SD Huesca	1	0,185	3,07	0,184	0	0,12	0,158	41	0
Rayo Vallecano	0	0,148	5,3	0,211	0	0,364	0,323	42	0

Fig. A3-Variables outcomes for La Liga

CLUBS	Change of coach	Group cohesion	Career experience	Sport Performance	N. players developed internally	N. players developed externally	Combination of make and buy strategies	Age of coach	Geographic location
Juventus	0	0,4	40,50	0,789	0	0,289	0,302	50	0
Napoli	1	0,584	34,92	0,693	0	0,172	0,313	59	0
Atalanta	0	0,138	9,52	0,605	0	0,049	0,042	60	0
Inter	0	0,24	27,16	0,605	0	0,227	0,207	59	1
Milan	0	0,241	30,41	0,596	0,228	0,148	0,316	40	1
Roma	0	0,265	26,44	0,579	0,144	0,383	0,455	48	1
Torino	0	0,2	9,20	0,553	0	0,343	0,323	56	1
Lazio	0	0,286	20,80	0,518	0	0,226	0,151	42	1
Sampdoria	0	0,226	6,39	0,518	0	0,155	0,113	50	1
Bologna	1	0,345	7,69	0,385	0	0,294	0,243	44	0
Sassuolo	1	0,407	5,30	0,377	0,084	0,403	0,3	39	0
Udinese	1	0,134	5,67	0,377	0	0,363	0,303	36	0
SPAL	0	0,219	4,94	0,368	0	0,218	0,18	50	0
Parma	0	0,147	5,00	0,36	0	0,344	0,295	42	0
Cagliari	1	0,334	9,08	0,36	0,068	0,101	0,363	54	0
Fiorentina	0	0,067	6,00	0,36	0,077	0,258	0,47	52	0
Genoa	0	0,121	7,39	0,334	0	0,387	0,778	54	1
Empoli	0	0,167	3,83	0,334	0	0,151	0,178	64	0
Frosinone	0	0,263	2,53	0,219	0	0,383	0,164	42	0
Chievo	0	0,294	4,59	0,149	0,228	0,262	0,213	45	0

Fig. A4-Variables outcomes for Serie A

CLUBS	Change of coach	Group cohesion	Career experience	Sport Performance	N. players developed internally	N. players developed externally	Combination of make and buy strategies	Age of coach	Geographic location
Paris SG	1	0,48	43,48	0,798	0,086	0,23	0,445	44	0
Lilla	0	0,143	3,86	0,658	0,042	0,438	0,838	59	0
Olympique Lione	0	0,417	24,00	0,632	0,154	0,257	0,546	51	0
Saint-Étienne	0	0,364	16,36	0,579	0,184	0,15	0,489	64	0
Marsiglia	0	0,435	30,65	0,535	0,124	0,183	0,295	54	0
Montpellier	0	0,36	6,60	0,518	0,107	0,321	0,757	55	0
OGC Nizza	1	0,348	9,80	0,491	0,153	0,198	0,557	42	0
Reims	0	0,25	5,46	0,482	0,074	0,368	0,668	50	0
Nîmes Olympique	0	0,423	2,19	0,465	0,321	0,189	0,804	60	0
Rennais	0	0,321	10,50	0,456	0,131	0,259	0,348	46	0
Strasburgo	0	0,148	6,19	0,43	0,138	0,381	0,869	54	0
FC Nantes	1	0,296	8,81	0,421	0,288	0,178	0,503	46	0
SCO Angers	0	0,44	2,20	0,404	0,064	0,221	0,48	50	0
G. Bordeaux	0	0,346	14,54	0,36	0,118	0,163	0,311	64	0
SC Amiens	0	0,316	7,95	0,334	0,1	0,147	0,231	52	0
Tolosa	1	0,375	6,88	0,334	0,137	0,371	0,418	56	0
Monaco	0	0,25	20,39	0,316	0,109	0,199	0,252	43	0
Digione	0	0,429	4,96	0,298	0,072	0,24	0,522	54	0
SM Caen	1	0,16	4,32	0,289	0,119	0,393	0,452	46	0
Guingamp	0	0,321	7,36	0,237	0,148	0,108	0,205	54	0

Fig. A5-Variables outcomes for Ligue1

Appendix B- Scatter plot

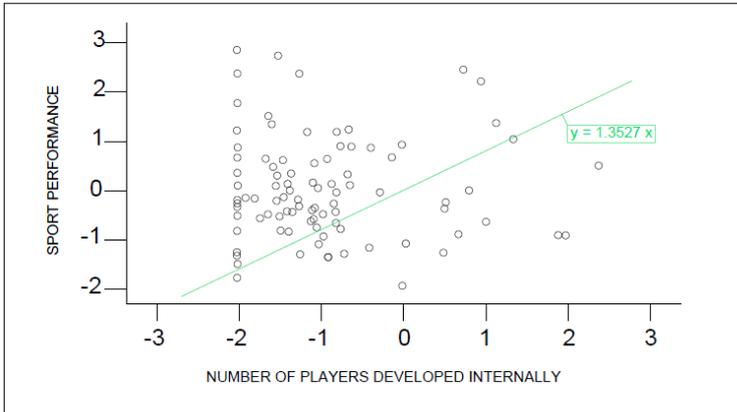


Fig. B1- Scatter plot of number of players developed internally and sport performance

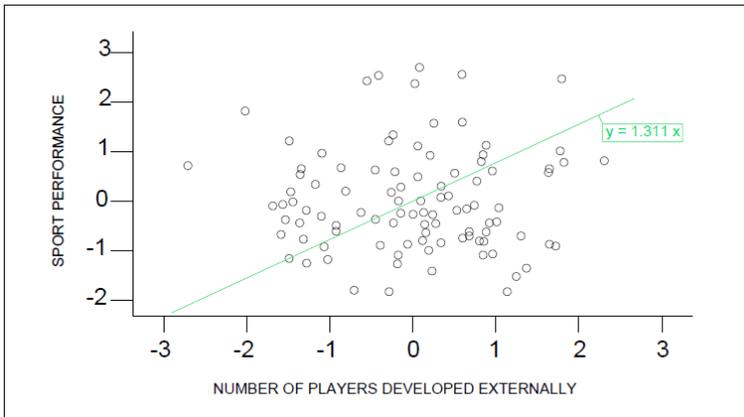


Fig. B2- Scatter plot of number of players developed externally and sport performance



Fig. B3- Scatter plot of combination of make and buy strategies and sport performance

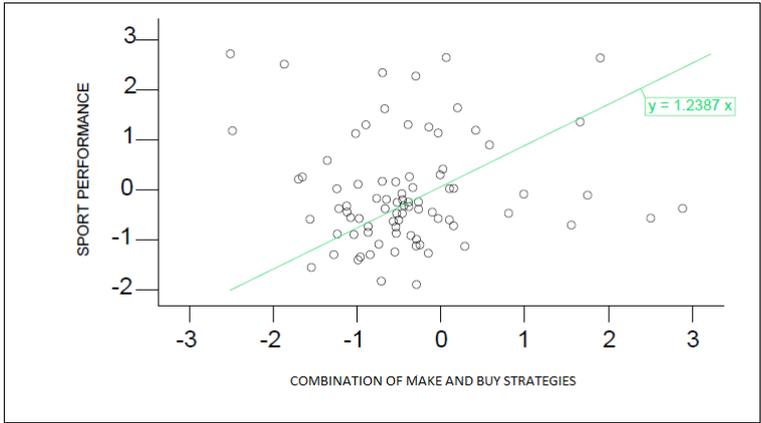


Fig. B4- Interaction plot of the moderation effect of group cohesion on the relationship between combination of make and buy strategies and sport performance

Appendix C- Results of the multiple regression models of the Spanish, English, Italian, Dutch and French leagues.

Table C1- Results of the main multiple regression models

Variables	La Liga	Premier League	Serie A	Eredivisie	Ligue 1
Step 1: Control variables					
Age of coach	,214	-,506	-,275	-,025	-,129
Geografic location	,291	,570	,629**	-,731	
Step 2: Independent variables					
Number of player developed internally	,245	,433	-,279	-1,209	-,268
Number of players developed externally	-,299	-,298	-,487	-1,478	-,364
Combination of make and buy strategy	,338	-,343	,848	1,218	,691
Step 3: Interaction effects					
Number of player developed internally X Career experience	,929	-,313	-,351	-,307	-,046
Number of player developed externally X Career experience	,454	,673	-,037	-,285	-,878
Combination of make and buy strategy X Career experience	-,928	-,461	-,040	-,972	1,610
Number of player developed internally X Change of coach	-,284	,307	,134	-1,244	,319
Number of players developed externally X Change of coach	,081	-,973	,223	-,487	-,666
Combination of make and buy strategy X Change of coach	,002	,615	-,602	1,755	,287
Number of player developed internally X Group cohesion	-,696	,200	-,513	-,828	2,097
Number of players developed externally X Group cohesion	-,874	-,245	,119	-,864	-,427
Combination of make and buy strategy X Group cohesion	,920	,017	1,43	2,517	-,200
R ²	,855	,659	,897	,957	,920
ΔR ²	,504	,296	,628	,291	,683

*p<.1; **p<.05; ***p<.01.