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# THE INFLUENCE OF COACHING EXPERIENCE LENGTH AND THE CONTINUOUS MANAGEMENT OF THE COACHING STAFF ON SUCCESS IN THE EUROLEAGUE

# David Nikolić, Aleksandar Rajković, Marko Šmrkić, Branislav Božović, Radivoj Mandić

Faculty of sport and physical education, University in Belgrade, Serbia

#### Abstract

The aim of this study is to determine the impact of selected attributes, such as the length of coaching experience and the continuity of leading a single club in the Euroleague (EL), on achieved results, specifically on placement in the EL finals (Top 8). For the purposes of this non-experimental observation, selected parameters of 23 coaches ( $53.2 \pm 7.5$  years old) who led teams in the Euroleague during the 2017/2018 and 2018/2019 seasons were analyzed. The participation of coaches in leading clubs was analyzed up to the start of the 2017/2018 season (for the 2017/2018 season) and the 2018/2019 season (for the 2018/2019 season), and it is presented as their "unique professional experience" related to the competition in question. The observed variables pertain to the length of coaching experience with previous clubs and the current club, as well as the success in leading those clubs. The obtained results show that the length of experience alone does not play a significant role in success in this competition, but the continuity of leading a particular club is highly correlated with the same success. Both variables related to the length of experience with the current club, the number of seasons, and the number of matches with the current club, indicated significant differences between the two groups of coaches (p =0.004 for the 2017/18 season and p = 0.011 for the 2018/19 season). Regarding success, it has been shown that significant influence on the placement of teams in the Top 8 phase of the EL in the observed seasons is the success in variables related to the current club (number of wins in the EL with the current club, number of losses in the EL with the current club, win-loss ratio in the EL with the current club), all showing high statistical significance in both the 2017/18 and 2018/19 seasons. The conclusion is that the length of coaching experience is important, but the continuity of leading a single club is an even more important factor in the success of clubs in the EL. The results of this research can assist in the selection of coaches for clubs competing in the EL.

### Key words: COACH / COACHING EXPERIENCE / CONTINUITY / BASKETBALL

Correspondence with the authors: David Nikolic, e - mail: <u>davidnikolic33rdk@gmail.com</u>

David Nikolić https://orcid.org/0000-0001-5638-3408 Aleksandar Rajković https://orcid.org/0009-0008-9132-2211 Marko Šmrkić https://orcid.org/0009-0000-2084-3783 Branislav Božović https://orcid.org/0000-0001-9021-8959/ Radivoj Mandić https://orcid.org/0000-0001-9545-3712

## **INTRODUCTION**

Basketball is one of the most popular and widely followed sports in the world. It has gained global popularity, fascination with its players, and success with audiences due to its dynamic characteristics related to team sports (McKeag, 2003). The results of national teams show that the highest quality basketball is played in the United States (USA) and Europe. This quality is partly drawn from strong national championships, as well as the organization of prestigious club competitions, namely the National Basketball Association (NBA) and the Euroleague (EL). The NBA represents the strongest club competition in the USA, while the EL represents the strongest club competition in Europe. The original name of the NBA was the Basketball Association of America (BAA), and in 1949, it changed its name to the NBA. The EL has existed under this name and competition system since 2000, as the successor of the Champions Cup. Although the NBA is certainly the strongest club competition in the world, most experts agree that the differences between NBA teams and the best European teams, most of which play in the EL, are decreasing (Mandić et al., 2019).

When it comes to the factors that influence the achievement of success in sports, most of the papers refer to the research of technical skills, tactics, psychological aspects and motor skills of the athletes. In addition to them, there are also studies that deal with the influence of parameters that can be seen in a limited way, such as the length of experience, of athletes and coaches, on the achieved results in sports (Leontijević, 2022). The results of individual studies have shown that athletes with longer experience in competition perform specific motor tasks more efficiently (Gabbett et al., 2011; García-González et al., 2012; Gil et al., 2013; Lex et al., 2015; Vänttinen et al. al., 2010; Vaz et al., 2012), as well as having a broader, more organized, structured and complete understanding of the game (Del Villar et al., 2007; García-González et al., 2012).

When it comes to coaches, the coach's experience and observations are primary sources of knowledge and coaching engagement (Cushion et al., 2003; Gilbert & Trudel, 2001; Gould et al., 1990; Salmela, 1996). Coaching experience is also primary data when selecting coaches by club management, whose primary goal is to achieve the best possible result. The experience of a coach can be observed through years of life, the number of seasons spent in a certain competition, as well as the number of seasons spent in the same team. Namely, coaches in every sport, including basketball, represent one of the most important figures in the realization of the club's interests or the interests of the sports society. Choosing a coach can be of great importance for sports success.

Basketball coaches, like business managers, perform several functions that are critical to the performance of their organizations (Fizel & D'itri, 1996). Their role is very complex, from training preparation (psychological, physical, tactical, intellectual, motivational, situational, tactical...), to models of behavior and learning that should present the players with all that is good in their sport. How successful the coaches will be depends primarily on their knowledge and on the coach's character, on the relationship with the players, co-workers, on the desire for improvement and further learning. In this sense, mutual trust, respect and support are considered among the main aspects that contribute to a satisfactory and successful coach-athlete relationship (Jowett, 2001; Jowett & Cockerill, 2003; Poczwardowski et al., 2002). The conditions that are required for someone to become a coach in basketball are the acquisition of a license, but specifically in EL, according to the author's knowledge, the acquisition of a license is not required. The results of research on the relationship between coaching experience and team success are not consistent, regardless of the sport. Hadley et al. (Hadley et al., 2000) showed that the attributes of the coach's length of experience, observed through the number of seasons in

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the (National Football League) NFL league, have a significant impact when it comes to team efficiency, while Roach (Roach, 2016) believes that the length of the coach's experience in the NFL league can also have a negative impact on the results in the new team. Research in football has shown that some attributes of a coach's length of experience in terms of years of service and rating have a positive impact on the results they achieve with the current team (Maderer et al., 2014), while recent research by Leontijević (2022) shows that the length of a coach's experience in the League champions, there is no significance for the placement of their team in the TOP16. When it comes to basketball, the results are also inconsistent, but it can be concluded that there are not enough of these or similar studies to reach a consistent result. It has been found that length of experience can have a positive effect on performance in the NBA, while no significant association was found in (National Collegiate Athletic Association) NCAA basketball (Fizel & D'Itri, 1997; Pfeffer & Davis-Blake, 1986). Therefore, the question remains, what is the real impact of the length of the coach's experience on the team's result, and whether hiring an experienced coach can guarantee the club's planned success. Coach's experience, in terms of the subject of this paper, means practice, a set of knowledge, habits, skills acquired in training and competition practice.

The aim of this non-experimental observation is to determine the influence of selected parameters that can be brought under the work experience of the coach in EL on the achieved placement. The informed assumption is that coaches with a longer experience of leading clubs in EL, as well as coaches who have continuity in leading the same club, will have a better final success, seen through the ranking. This does not mean that a worse placement in EL does not represent the club's success. Success in the full sense is determined by the vision of the club's leadership for a given competitive season. In this regard, this work can "open the door" to new areas of research in basketball. It can also serve as a recommendation to clubs when hiring a coach, in relation to the goal they, as a club, want to achieve.

## METHODS

## Subject samples

For this study, the descriptive indicators of 23 coaches  $(53.2 \pm 7.5 \text{ years})$  who managed their teams in the basketball EL in the 2017/2018 and 2018/2019 seasons were analyzed.

## The sample of variables and the method of data collection

The length of coaching experience was analyzed up to the start of the competition in the 2017/2018 season (for the 2017/2018 season) and in the 2018/2019 season (for the 2018/2019 season) in order to more precisely determine its impact on the results achieved in the upcoming competition. Based on the aim, the variables were divided into those related to the length of professional experience and the leading teams in the EL.

The length of coaching experience in the EL was shaped based on the following variables:

- Age (A)
- The number of seasons in the EL (NS)
- The number of seasons in previous clubs in the EL (NSpk)
- The number of season in the current club in the EL (NScc)
- Total number of matches in the EL (TNm)
- Number of matches in the EL in the current club (NMcc)
- Number of matches in the EL in previous clubs (NMpk)

Leading the team was evaluated based on the following variables:

- Total number of wins in the EL (TNw)
- Number of wins in the EL in the current club (NWcc)
- Number of wins in the EL in previous clubs (NWpk)
- Total number of losses in the EL (TNl)
- Number of losses in the EL in the current club (NLck)
- Number of losses in the EL in previous clubs (NLpk)
- Win-loss ratio in the EL overall (WLo)
- Win-loss ratio in the EL in the current club (WLck)
- Win-loss ratio in the EL in previous clubs (WLpk)

The collection of data related to the monitored variables was carried out through the website "Euroleague Basketball" (<u>https://www.euroleaguebasketball.net/euroleague/</u>), where the database for further statistical processing was defined. In addition to the already mentioned dependent variables, the data related to the experience of coaches were classified into two independent variables, coaches whose teams made it to the TOP 8 phase of the competition, and coaches whose teams finished the competition in the group phase.

## The processing of data

Each variable was processed with standard descriptive statistics (mean value and standard deviation). Examination of differences between two independent variables was performed with the non-parametric Mann-Whitney U test for independent samples. The level of statistical significance was at p<0.05. All statistical tests were processed using the SPSS 20.0 program (SPSS INC Chicago, IL). The results are presented tabularly and graphically.

## RESULTS

Table 1 shows the results in relation to the correlation between selected attributes of the length of coaching experience and the ranking achieved in the 2017/18 and 2018/19 seasons. It has been shown that the continuity of the coach's work at the current club has a significant influence on the ranking of the teams in the TOP 8 phase of the EL in the seasons observed. Both variables related to the length of work experience at the current club, namely the number of seasons and the number of matches at the current club, showed significant differences between the two groups of coaches (r=0.004 for the 2017/18 season and r=0.011 for the 2018/19 season). It is also interesting to note that the coaches who made it into the TOP 8 of the competition have a greater number of seasons in absolute terms and a greater number of games in the EL, but this difference is not statistically significant. Age does not seem to have any influence on the success of the coach in the EL, nor does the number of games in the EL.

Table 1Part	Table 1 Participation of coaches in EL in the 2017/18 and 2018/19 seasons         2017/2019										
	TODA	2017/2018		TOPO	2018/2019						
	TOP 8	Group Phase	р	TOP 8	Group Phase	р					
Α	50.75	52.25	0.494	55.88	54.25	0.752					
NS	5.63	3.75	0.489	7	5.12	0.489					
NSpk	3.25	3.75	0.7	4.37	5	0.63					
NScc	2.38	0.00	0.004	3	0.12	0.011					
TNm	141.13	75.13	0.206	159.25	108.25	0.372					
NMcc	67.38	0.00	0.004	73.87	3.75	0.015					
NMpk	73.75	74.13	1.00	84.37	104.5	0.522					

Note: \*A - age, NS – number of season, NSpk – number of season in previous clubs, NScc – number of season in current club, TNm – total number of matches, NMcc – number of matches in current club, NMpk - number of matches in previous clubs \*p<0.05

Table 1 shows the results that can be used to draw a conclusion about the effectiveness of the coach in relation to the ranking achieved in the 2017/18 and 2018/19 seasons. It was found that a significant influence on the placement of teams in the TOP 8 phase of the EL in the observed seasons lies in the variables that relate to the current club. All variables relating to efficiency at the current club show statistically significant differences in both the 2017/18 and 2018/19 seasons. There are no statistically significant differences in the variables relating to efficiency at other clubs.

	2017/2018			2018/2019		
	TOP 8	Group Phase	р	TOP 8	Group Phase	р
TNw	96.88	36.38	0.051	96.87	59.62	0.372
NWcc	45.75	0.00	0.004	49.87	1.25	0.015
NWpk	51.13	36.38	0.913	47	58.37	0.394
TNI	42.25	37.75	0.598	61.37	48.62	0.495
NLck	21.63	0.00	0.004	24	2.5	0.015
NLpk	22.63	37.75	0.661	37.37	46.12	0.557
WLo	66.26	30.95	0.004	51.38	47.36	0.636
WLck	47.64	0.00	0.004	42.52	4.166	0.011
WLpk	34.90	31.17	0.511	27.06	48.10	0.201

**Table 2** Attributes of the effects of leading teams in EL in evaluating the effectiveness of coaches in the seasons 2017/18 and 2018/19

Note: \*TNw – total number of wins, NWcc – number of wins in current club, NWpk – number of wins in previous clubs, TNI – total number of losses, NLck – number of losses in current club, NLpk – number pf losses in previous clubs, WLo – win-loss ratio overall, WLck – win-loss ratio in the current club, WLpk – win-loss ratio in previous clubs

#### Discussion

The aim of this study was to determine whether the length of coaching experience and the effectiveness of coaches are significant factors when it comes to the success of teams in EL. Investigation conducted during the last two decades indicates that the primary sources of knowledge for coaches are experience and observations during coaching engagement (job, work experience) (Cushion et al., 2003). The results obtained in this research show that the length of coaching experience itself does not play a significant role in success in this competition, but that the continuity of leading a certain club is highly related to the same success, which indicates that the experience gained in specialized professional work led to the advancement of practice, skill and knowledge that describes the coach, and therefore the assumptions of the author of this work are partially confirmed.

The average age of the coaches who played in the EL in the 2017/18 season was between 51 and 52 years, and in the 2018/19 season 54 and 56, which indicates that the coach's age is not a significant factor when it comes to the passage of teams to the TOP 8 the competition phase. On the other hand, although no debatable statistical significance was shown, TOP 8 coaches have more games in total in EL, both for the 2017/18 season (Table 1. TNm= 141.13 vs. 75.13, p = 0.206), and for 2018/19 (Table 1 .TNm = 159.25 vs. 108.25, p = 0.372). This information shows that the specific experience gained in this competition is more important than the coach's age. This is also confirmed by the research conducted by Leontijević (2022), where it refers to football coaches in the Champions League competition. Some of the most important characteristics that coaches of successful teams possess are the ability to adequately provide feedback (Solomon et al., 1998), as well as the ability to make better decisions, as well as apply

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appropriate behavior, in order to psychologically influence the players (Jones et al., 1997), as well as the development of mutual trust, respect and support between players and coaches (Jowett, 2001; Jowett & Cockerill, 2003; Poczwardowski et al., 2002). In addition, it is known that in modern sports there is an increasing influx of money into sports organizations, which creates environments in which the influence of large investments creates great pressures in terms of achieving results. Accordingly, clubs often offer players and coaches large cash bonuses for achieving certain results, but in some cases this can have a counterproductive effect when it comes to the result (Roach, 2016).

There are some facts that suggest that in addition to coaching experience, the sports career of a coach represents an important source of knowledge in the development of coaching skills (Côté, 2006), but that aspect was not taken into consideration in this paper, so it can be a guideline for future research. What is the total and what represents the most significant result of this work is that in all variables related to the continuity of leading teams in the EL competition (number of seasons in the current club in the EL, number of games in the EL in the current club, number of wins in the EL in the current club, the number of EL defeats in the current club, and the EL win-loss ratio in the current club), both in the 2017/18 season and in the 2018/19 season, there is a significant difference between the coaches who managed TOP 8 teams, and those who led the other teams (Tables 1 and 2). Based on that, it can be concluded that the continuity of leading teams in a competition is more important than the total length of a coach's tenure. These results coincide with the research conducted by Leontijević (2022), although his research refers to football. Of course, there are many factors that go into this issue. First, the clubs choose the coaches that best suit them, in terms of basketball game tactics, but also the club's long-term strategy, thus creating a system that allows the team to have continuous results, even if there is an eventual change of coach, after a certain period. So, some clubs choose coaches with "sounder names", that is, coaches who have certain reputations, in order to influence the achievement of better team results in the shortest possible time with their knowledge and authority. On the other hand, some clubs take coaches who are still unconfirmed, but with the aim of achieving better results in the long term, strengthening their position in a certain competition, developing young players, etc. This system has proven to be more effective for several reasons. Namely, unestablished coaches do not have the pressure of preserving their reputation, and are therefore more willing to take risks and more often develop a closer relationship with the players (Barnett et al., 1992). However, giving a chance to younger, inexperienced players cannot be considered related to the age and length of the coach's tenure, but it certainly goes beyond the goals of this paper. Experience, and then how much influence it has on the effectiveness of the coach, is still an unexplored topic. Based on this work, certain conclusions can be drawn, but in order to confirm them, it is necessary to conduct additional research in this area.

There are some facts that suggest that in addition to coaching experience, the sports career of a coach represents an important source of knowledge in the development of coaching skills (Côté, 2006), but that aspect was not taken into consideration in this paper, so it can be a guideline for future research. What is the overall experience, and subsequently how much influence it has on the effectiveness of the coach, is still an unexplored topic. Based on this study, certain conclusions can be drawn, but in order to confirm them, it is necessary to conduct additional research in this area.

#### CONCLUSION

Basketball, like any other sport, is not a simple competition between two teams. There are numerous factors on which success in basketball depends. One of those factors is the positive atmosphere

in the team. She has been building for a long period of time, and it can be said that she is the most deserving coach for her. In order for the coach to gain authority and manage to create a positive atmosphere, a long period of time needs to pass. This is exactly what the results of this research testify to, which clearly show that, regardless of the length of a coach's tenure, the continuity of leading a club plays a bigger role when looking at success in EL. A longer length of coaching experience in leading clubs in EL does not necessarily mean better success, but it confirms that the continuity of leading a club is of crucial importance for success in the same competition.

# Литература

- 1. Barnett, N. P., Smoll, F. L., & Smith, R. E. (1992). Effects of Enhancing Coach-Athlete Relationships on Youth Sport Attrition. *The Sport Psychologist*, 6(2), 111–127. https://doi.org/10.1123/tsp.6.2.111
- 2. Côté, J. (2006). The Development of Coaching Knowledge. International Journal of Sports Science & Coaching, 1(3), 217–222. https://doi.org/10.1260/174795406778604609
- 3. Cushion, C. J., Armour, K. M., & Jones, R. L. (2003). Coach Education and Continuing Professional Development: Experience and Learning to Coach. *Quest*, 55(3), 215–230. https://doi.org/10.1080/00336297.2003.10491800
- Del Villar, F., González, L. G., Iglesias, D., Moreno, M. P., & Cervelló, E. M. (2007). Expert-Novice Differences in Cognitive and Execution Skills during Tennis Competition. *Perceptual and Motor Skills*, 104(2), 355–365. https://doi.org/10.2466/pms.104.2.355-365
- 5. Fizel, J. L., & D'itri, M. (1996). Estimating Managerial Efficiency: The Case of College Basketball Coaches. *Journal of Sport Management*, 10(4), 435–445. https://doi.org/10.1123/jsm.10.4.435
- 6. Fizel, J. L., & D'Itri, M. P. (1997). Managerial Efficiency, Managerial Succession and Organizational Performance. *Managerial and Decision Economics*, *18*, 295–308.
- Gabbett, T. J., Jenkins, D. G., & Abernethy, B. (2011). Relationships between physiological, anthropometric, and skill qualities and playing performance in professional rugby league players. *Journal* of Sports Sciences, 29(15), 1655–1664. https://doi.org/10.1080/02640414.2011.610346
- García-González, L., Iglesias, D., Moreno, A., Moreno, M. P., & Del Villar, F. (2012). Tactical Knowledge in Tennis: A Comparison of Two Groups with Different Levels of Expertise. *Perceptual and Motor Skills*, 115(2), 567–580. https://doi.org/10.2466/30.10.25.PMS.115.5.567-580
- Gil, A., Moreno, M. P., Moreno, A., García-González, L., Claver, F., & Del Villar, F. (2013). Analysis of the Relationship Between the Amount of Training and Cognitive Expertise. A Study of Young Volleyball Players. *Journal of Strength and Conditioning Research*, 27(3), 698–702. https://doi.org/10.1519/JSC.0b013e31825d99c9
- 10. Gilbert, W. D., & Trudel, P. (2001). Learning to Coach Through Experience: Reflection in Model Youth Sport Coaches. *Journal of Teaching in Physical Education*, 21, 16–34.
- 11. Gould, D., Giannini, J., Krane, V., & Hodge, K. (1990). Educational Needs of Elite U.S. National Team, Pan American, and Olympic Coaches. *Journal of Teaching in Physical Education*, 9(4), 332–344. https://doi.org/10.1123/jtpe.9.4.332
- 12. Hadley, L., Poitras, M., Ruggiero, J., & Knowles, S. (2000). Performance evaluation of National Football League teams. *Managerial and Decision Economics*, 21, 63–70.
- 13. Jones, D. F., Housner, L. D., & Kornspan, A. S. (1997). Interactive Decision Making and Behavior of Experienced and Inexperienced Basketball Coaches during Practice. *Journal of Teaching in Physical Education*, *16*(4), 454–468. https://doi.org/10.1123/jtpe.16.4.454
- 14. Jowett, S. (2001). Interdependence Analysis and the 3+1Cs in the Coach-Athlete Relationship. In *Social Psychology in Sport* (pp. 15–27). Human Kinetics.
- 15. Jowett, S., & Cockerill, I. M. (2003). Olympic medallists' perspective of the althlete–coach relationship. *Psychology of Sport and Exercise*, 4(4), 313–331. https://doi.org/10.1016/S1469-0292(02)00011-0
- Lex, H., Essig, K., Knoblauch, A., & Schack, T. (2015). Cognitive Representations and Cognitive Processing of Team-Specific Tactics in Soccer. *PLOS ONE*, 10(2), e0118219. https://doi.org/10.1371/journal.pone.0118219
- 17. Leontijevic, B. (2022). The influence of the experience of the playing and professional staff on the achieved result in football. Physical Culture.

[Type text]

- Maderer, D., Holtbrügge, D., & Schuster, T. (2014). Professional football squads as multicultural teams: Cultural diversity, intercultural experience, and team performance. *International Journal of Cross Cultural Management*, 14(2), 215–238. https://doi.org/10.1177/1470595813510710
- 19. Mandić, R., Jakovljević, S., Erčulj, F., & Štrumbelj, E. (2019). Trends in NBA and Euroleague basketball: Analysis and comparison of statistical data from 2000 to 2017. *PLOS ONE*, *14*(10), e0223524. https://doi.org/10.1371/journal.pone.0223524
- 20. McKeag, D. B. (2003). Handbook of Sports Medicine and Science in Basketball. Blackwell Science.
- Pfeffer, J., & Davis-Blake, A. (1986). ADMINISTRATIVE SUCCESSION AND ORGANIZATIONAL PERFORMANCE: HOW ADMINISTRATOR EXPERIENCE MEDIATES THE SUCCESSION EFFECT. *Academy of Management Journal*, 29(1), 72–83. https://doi.org/10.2307/255860
- 22. Poczwardowski, A., Barott, J. E., & Peregoy, J. J. (2002). The athlete and coach: Their relationship and its meaning. Methodological concerns and research progress. *International Journal of Sport Psychology*, 33(1), 98–115.
- 23. Roach, M. (2016). Does Prior NFL Head Coaching Experience Improve Team Performance? *Journal of Sport Management*, *30*(3), 298–311. https://doi.org/10.1123/jsm.2015-0008
- Salmela, J. H. (1996). Expert Coaches' Strategies for the Development of Expert Athletes. In V. A. Rogozkin & R. Maughan (Eds.), *Current Research in Sports Sciences* (pp. 5–19). Springer US. https://doi.org/10.1007/978-1-4757-2510-0\_2
- 25. Solomon, G., DiMarcio, A., Ohlson, C., & Reece. (1998). Expectations and Coaching Experience: Is More Better? *Journal of Sport Behavior*, 21(4), 444–455.
- Vänttinen, T., Blomqvist, M., Luhtanen, P., & Häkkinen, K. (2010). Effects of Age and Soccer Expertise on General Tests of Perceptual and Motor Performance among Adolescent Soccer Players. *Perceptual and Motor Skills*, 110(3), 675–692. https://doi.org/10.2466/pms.110.3.675-692
- Vaz, L., Leite, N., João, P. V., Gonçalves, B., & Sampaio, J. (2012). Differences between Experienced and Novice Rugby Union Players during Small-Sided Games. *Perceptual and Motor Skills*, 115(2), 594–604. https://doi.org/10.2466/30.10.25.PMS.115.5.594-604