
SUCCESSFUL PERFORMANCE OF BASKETBALL TEAMS DEPENDING ON PERCEPTION OF COACH LEADERSHIP QUALITIES

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Abstract: The subject of the study is the leadership qualities of basketball coaches. The purpose of this study is to determine whether there is a link between the leadership qualities of basketball coaches and the team rankings.

The study included 12 women's basketball teams - 6 Italian and 6 Bulgarian. The Italian basketball clubs participate in the Unione Italiana Sport for all (UISP) Championship and the Bulgarian in the National University Championship (NUS). 172 people were examined and were divided into competitors (n = 160) and coaches (n = 12). The final ranking of the teams is the ranking in the respective championships (Lombardy in Italy and Sofia in Bulgaria). The possible successes of the teams after the regional championship phase (for example, participation in a national championship or playoffs) have not been observed.

The empirical study was conducted with a specially transformed and modified version of the Multivariate Leadership Questionnaire (MLQ) developed by Bass (Bass & Avolio, 1989). The questionnaire contains a total of 15 questions and five of the questions focus on three types of leadership. The rating includes a scale from 0 to 4 for each item. The questionnaire was translated into Italian and Bulgarian. The tool consists of two parts. The first component is the leader's (coach's) self-esteem with regarding his leadership style, and the second is the assessment made by the followers (players) regarding their perceptions of the leader's (coach's) behavior. The questionnaires were distributed to some teams via the Internet and to others directly at the training site for short-handed completion and returned directly to the researcher. The collection was made simultaneously in Italy and Bulgaria. Correlation analysis and multiple linear regression analysis were used to process the obtained data.

The analysis of the results shows that the ranking is aggravated by the growing differences in perceptions of the leader (coach) and followers (players) of the leadership style practiced mainly by the leader. It is observed that participants who receive low values of deviation in perceptions are more efficient. Taking into account external factors, we note that 43% of team rankings are explained by differences in perceptions, age, team years, number of teams changed, and training hours per week. Age factors, team years and the number of teams changed per player have a minor effect on the ranking. The factor that showed more importance for presentation was the weekly training hours.

Keywords: ranking, basketball, athletes, self-assessment, leadership

INTRODUCTION

The fundamental figures in sport are the athlete and the coach. The personal impact of coaches and their professional behavior outline the basic parameters of the model for future professional development of athletes [11].

Basketball is an emotional and dynamic sport. The game represents constant combat between the contestants of the two teams. Apart from the game dynamics, there are many specific "combats" in the teams themselves. The basketball team is led by a senior coach and, in most cases, has one or more assistant coaches, which further complicates relationships within the team. "The modern competitive sport is characterized by elevated performance expectations of athletes" [3]. The expectation of all participants is that the coach will have the necessary leadership skills to achieve high results. At the same time, the high performance measured with team's ranking in the championship, is also linked to the leadership skills of the players.

"Sports communication as part of cultural communication is a relatively sustainable process that has a certain structure and is subject to certain patterns. At the same time, its diversity is extremely large and depends on many social and individual factors. The social factors are related to the characteristics of the groups in which a certain kind of sports communication takes place." [9].

It has been found that a team cannot be considered as one group only. Several small groups are formed within the team. "The micro-groups formed within the main group complement and change their composition depending on the specific situation in life. There is more than one group leader who is changing, again, depending on the situation." [5].

The study of leadership has been going on for centuries. About 35,000 research articles published in journals and books are related to the topic. The Bass Leadership Handbook (1990) contains approximately 7,500 leadership quotes.

The story is full of examples of people who are responsible for a group of individuals and direct them to security, victory or prosperity. Anthropological evidence shows that there are no human societies without some form of leadership. Psychological and social studies reveal that the leader-follower structure emerges spontaneously, even when groups try to avoid having a leader (Bass, 1985). Each time a group of people meets, the leader-follower relationship develops naturally. This leads several experts to conclude that leadership is a universal human behavior [1, 2].

It is well known that relationships in different team sports are identical. "The sports team, and in particular the volleyball team, is a small social group. Small, because of its small size, and social, because of the fact that it brings people together on a common social basis. The accomplishment of the assigned tasks requires members of the team to interact, to coordinate their efforts, to seek and establish contact with each other, which are the first and basic conditions for the emergence of some type of a relationship. In the course of this communication process, the relationships between the participants are established, maintained and modified" [5].

Coaching is also viewed as teaching. Because coaches are responsible for the overall development of the competitors. "A good teacher is not just a collection of subject matter knowledge plus didactic skills. They combine the wisdom of the time in which they live, the kindness and the mind of the mother and the father, the charisma of the leader who inspires and motivates, the sensitivity of the artist, the beauty of the ideal that goes beyond the curriculum content of the study program" [4]. Coaches are responsible for both the training of their athletes and their education. "In order to achieve concrete results, the role of the sports educator (coach) is crucial in achieving the goals of the educational process" [6].

"The educator's role in bringing the athlete into the pedagogical activity, actively helping him or her to cope with the level of insecurity and other negative manifestations of his or her personality trait is crucial" [10].

"The personality of the teacher is as important as the principles and methods with which he/she teaches" [8]. At the same time, "the relationships between the participants in the learning process, the conditions under which they take place, as well as the teaching and learning style are the main prerequisites for effective pedagogical communication and interaction" [7].

Gathering players into one team cannot guarantee success. Players in sport teams must have the same goals and expectations for their personal performance and for the team's performance. The most effective teams are equally interested in doing a high quality job, achieving their goals with strong moral, developing and maintaining positive teammates relationships. Teamwork does not happen by accident. People are not born to be team players - many are trained to be competitive, not cooperative. Organizations that accept teamwork as a strategy for success must develop plans to address the challenges at different levels within the organization.

Coaching is a management style aimed at enhancing the abilities of responsible and purposeful people in highly interdependent organizational environments. This style requires leaders to be first and foremost experts in people, able to bring them together, to analyze, to motivate them in order to face the competition in the best possible way.

In various organizations, as well as in sports, successful coaches are qualified experts. They know how to get the best out of others and want to be actively involved in each individual player's development. As good as a dedicated leader is, they will not be successful if the follower is not receptive. The best results are obtained if people are aware that they can improve only by investing in their own will to learn, in their own abilities, if they are ready to perceive knowledge and are open to change.

Leadership requires constant dialogue, which has a positive effect on followers because it demonstrates their importance in achieving the common goal. This is a style that requires flexibility and a desire for refinement. When the follower is aware that his leader is interested in what they are doing, they feel free to experiment. At any moment, they are assured to receive prompt and constructive feedback.

Likewise, continuous dialogue ensures that followers know what is expected of them and how their work fits into the broader strategic vision. As a result, their responsibility over the tasks increases. In terms of motivation, the message of leadership is: "I believe in you, invest in you and expect your best efforts" and followers are motivated by this challenge.

"Basketball players value their coaches' leadership skills high in relation to the quality of the training process and the quality of the feedback. These are skills that significantly influence the success of sports activities" [12].

The basis of success in basketball is not focused on the skills of the 'star player', nor on the individual physical qualities or talent. Leadership is a set of principles that can be applied by any group or organization trying to be a "champion" in their field. Basketball can easily be seen as a metaphor for modern society. It is characterized by

constant movement; roles and responsibilities change every second and winning requires teamwork. Good performance is the result of the collaboration of a group of people working in an interdependent process towards a shared vision and mission. This work is done within a well-defined system that manages planning, communication, decision-making and action on a daily basis. A shared understanding of how the system works and why it works in this way is the key to continued success.

METHODOLOGY

The **subject** of the study is the relationships in basketball teams.

The **purpose** of this study is to determine whether there is a relationship between the leadership qualities of basketball coaches and the rankings of teams.

Study sample: 172 people were participated including players (n = 160) and coaches (n = 12). The playerstake part of 12 women basketball teams - 6 Italian and 6 Bulgarian. The Italian basketball clubs participate in the Unione Italiana Sport for All (UISP) championship and the Bulgarian clubs in the National University Championship (NUS). The final ranking of the teams is the ranking in the respective championships (Lombardy in Italy and Sofia in Bulgaria). The potential successes of the teams after the regional championship phase (for example, participation in a national championship or playoff category) have not been observed. The two championships are at a very similar level and it is assumed that the data obtained is reasonably comparable. All teams are amateur and none of the players is paid to participate in the championship. The coaches who participated in the study are six men (five in Italy and one in Bulgaria), and the same number are women (five in Bulgaria and one in Italy).

A questionnaire often used to measure the effectiveness of the leadership style is the "Multi-Factor Leadership Questionnaire" (MLQ) developed by Bass (Bass & Avolio, 1989).

The survey contains a total of 15 questions. The possible answer includes a scale from 0 to 4 for each item. Participants' opinions are anonymous and collected through the completion of questionnaires. The questionnaire consists of two parts. The first component is the leader's (coach's) self-evaluation regarding his leadership style, and the second is the assessment made by the followers regarding their perceptions of the leader's style.

The questionnaires were distributed to some teams via the Internet and to others directly at the training site for completion and returned directly to the researcher. The study was conducted simultaneously in Italy and Bulgaria.

Correlation analysis and multiple linear regression analysis were used to process the obtained data.

RESULTS ANALYSIS

Half (50%) of the athletes play basketball in Italy and the other half in Bulgaria.

The athletes who participated in the study ranged in age from 16 to 33 years (average age: 21.25 years).

The leaders coach their teams between 1 and 20 years (average duration: 8.27 years).

The results presented in **Table 1** are considered in absolute value to avoid compensation between the different lots in order to have significant values.

Table 1. Mean values and variance for each control variable of all teams

Squadra	\bar{E}	VAR(E)	\bar{T}	VAR(T)	\bar{E}_x	VAR(E_x)	\bar{A}	VAR(A)
1	19.385	6.237	1	0	2.846	2.130	6.692	1.905
2	21.077	1.609	1.923	0.592	3.077	2.071	5.769	5.562
3	21.462	2.556	2	0.923	3.308	2.213	8.538	8.249
4	20.857	1.551	5.143	11.061	2.500	1.536	5.571	1.531
5	22.538	8.249	2.385	0.852	4.077	2.379	5.308	1.290
6	27.308	10.521	2.385	0.686	5.077	1.609	4.308	0.438
7	18.231	0.947	2.846	1.254	1.231	0.331	5.769	1.609
8	18.357	0.372	6.786	3.883	1.500	0.393	6.571	1.245
9	21.154	1.976	2.308	0.982	2.846	2.592	5.923	4.840
10	21.143	2.551	2.071	1.066	2	1.286	5.071	1.776
11	22.231	3.101	2.615	0.793	3.231	2.024	5.154	1.444
12	21.286	2.061	2.5	1.250	2.643	1.372	5.429	2.245
TOT	21.252	3.478	2.830	1.945	2.861	1.661	5.842	2.678

The control variables included in the player's questionnaire are the following:

- Age (E): the relationship between the age of the followers and their performance
- How long have you been training in this team? (T): consider the relationship between the players in the team. In basketball, as an area where members are highly interdependent, it is important to know how teamwork and collaboration affect performance.
- How many teams have you changed in the past? (Ex): Measures the experience of each individual player. It is a limitation as the change of team can be due not only the growth of the player, but also to external factors such as relocation, launching new sports clubs, preference of one coach over another, etc.
- How many hours of training do you do per week? (A): Measures the frequency of athletic training. Individual training and basketball activities are both included.

The main purpose of the MLQ questionnaire is to be able to measure the differences between the responses of the leader and those of the followers to identify the differences between the self-perceived leadership style of the coach and the perceived one of the players. After collecting all the data from the MLQ, including the questionnaires completed by hand, a single database was created comprised of the dependent variable and the control variables. Subsequently the data was divided by team and processed with Excel.

The results are considered in absolute value to avoid compensation between the different lots in order to have significant values. The accumulation of individual deviations within a team leads to the total deviation of the team itself. In the calculation of the deviations, only includes items from the MLQ.

Table 2. values of the mean, the variance and the total deviations per team.

Squadra	\bar{S}	VAR(S)	Scostamenti
1	9.769	13.254	127
2	5.154	5.822	67
3	11.923	66.225	155
4	8.071	19.066	113
5	11.077	4.533	144
6	16.538	15.787	215
7	15.615	12.698	203
8	9.357	17.087	131
9	8.385	30.852	109
10	11.500	19.393	161
11	15.462	11.018	201
12	7.857	6.837	110
\overline{TOT}	10.892	18.548	144.667

Although the absolute value is crucial to avoid the compensations between positive and negative values, it does not allow to identify the direction in which the responses of the followers differ from those of the leader. Therefore, through the calculation of the deviations, the self-perceived leadership style by the coach and that perceived by the followers are not identified individually, but only the differences between these perceptions are considered.

Before starting the multiple linear regression analysis, correlation analysis was performed for control purposes. The correlation coefficients are contained in **Table 3**.

The statistical report can be described by the following equation:

$P = F(S, E, T, Ex, A) + \varepsilon$. Formula 4.4: Multiple linear regression model equation, where $f(S, E, T, Ex, A)$ is a regression function that expresses the contribution of deviations of factor variables deviation (S), age (E), years in the team (T), number of teams switched (Ex) and training hours (A) to the value of the variable expressing performance (P), while ε represents the contribution of all other factors that are not observed and may affect performance.

Table 3.–Correlation matrix

CORR	P	S	E	T	Ex	A
P	1	0.524	0.214	-0.234	0.011	-0.375
S	0.524	1	0.153	-0.082	-0.002	-0.024
E	0.214	0.153	1	-0.102	0.649	-0.223
T	-0.234	-0.082	-0.102	1	-0.109	-0.069
EX	0.011	-0.002	0.649	-0.109	1	0.057
A	-0.375	-0.024	-0.223	-0.069	0.057	1

It should be noted with respect to the performance variable (P) that the highest performance is related to a value of 1 and that the performance worsens by increasing this value. Therefore, a positive correlation with one of the other variables implies a deterioration in performance, and conversely, a negative correlation suggests an improvement. The correlation coefficient between performance (P) and deviation in perceived leadership style (S), equal to 0.524, shows a strong positive correlation between the two variables: as deviations increase, performance results deteriorate. This means that based on the data extracted, a small deviation implies higher performance. There is a slight positive correlation between age (E) and performance (P): with increasing age, performance worsens, but to a small extent. The only control variable not related to performance, with a correlation coefficient of 0.011, is the number of teams switched (Ex). This result can be justified given that the change of team (Ex) may be driven not only by the player's growth but also by various external factors. A slight negative correlation coefficient was shown between the years spent in the players' team (T) and the performance (P). As the player spends time in their team, the performance increases, but to a small extent. As a result, the team working together longer will have slightly higher performance. In addition, there is a moderate negative correlation of 0.375 between training hours (A) and performance: as training hours per week increase, performance increases.

The correlation coefficients between the pairs of factor variables (E, T, Ex, A) show values close to 0. This means that the variables taken into account are almost uncorrelated, there is no linear relationship between them. These results indicate that variables can be used in multiple linear regression models without creating distortions in the results. The only high coefficient of 0.659 between age (E) and number of teams changed (Ex) shows a strong positive relationship between the two variables. They vary in the same direction: as the age progresses, the number of teams the player plays increases. However, it is considered appropriate to include both variables in the regression model as they represent a necessary control over performance.

In summary, the deviations variable (S) strongly influences performance (P); the factor variable that most influences performance is the number of training sessions (A); the variable age (E) and years spent on the team (T) have little effect on the performance, while the variable number of teams changed (Ex) is not correlated with the performance.

CONCLUSION

Starting from the extended concept of leadership and followership, the leader's behaviors and their effects on followers were explored in detail, as well as the relationships within a group and the figure of the coach. A questionnaire was created at the theoretical basis of the "Multi-Factor Leadership Questionnaire" (MLQ) developed by Bass, which made it possible to collect the data needed to answer the research question. The data are considered reliable as it is investigated with statistically reliable tests that have seen satisfactory results. In conclusion, the results obtained confirm that, taking into account all the factors that influence performance, as the differences in perception of the leadership style, of the leader themselves and the followers increase, the performance worsens.

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