

Leadership style in the context swimming coaches in the state of Paraná

Estilo de liderança no contexto de treinadores de natação do Paraná

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Abstract – This descriptive cross-sectional study aimed to investigate the leadership style of swimming coaches from the state of Paraná, Brazil. The trial subjects were 33 male athletes (67.3%), 16 female athletes (32.7%), and six coaches. Data collection occurred during the final phase of the Parana 2010 Open Games. The measuring instrument used was the Leadership Scale for Sports (LSS). For data analysis we used the Shapiro Wilk test, Mann-Whitney, the Manova, and Post Hoc of Scheffe ($p < 0.05$). The results showed that comparing between the perception and preference of athletes there were significant differences in dimension of training instruction ($p = 0.001$), reinforcement ($p = 0.008$), and democratic style ($p = 0.020$), male athletes have a greater preference for autocratic behavior than female athletes ($p = 0.031$), there was no significant difference between the dimensions: perception of athletes and self-perception of coaches. We reached the conclusion that the swimming coaches from the state of Paraná have the democratic style, using reinforcement and training-instruction as tactical and technical resources for their coaching; the champion team coach had a profile similar to what is currently preferred by athletes which, according to literature, would be the ideal one to achieve success in sports.

Key words: Coaches; Leadership; Sports; Swimming

Resumo – Este estudo de cunho descritivo com caráter transversal teve como objetivo investigar o estilo de liderança dos treinadores de natação do Paraná. Os sujeitos da pesquisa foram 33 atletas (67,3%) do gênero masculino, 16 atletas (32,7%) do gênero feminino e 6 técnicos. A coleta de dados ocorreu durante a realização da fase final dos Jogos Abertos do Paraná 2010. O instrumento de medida utilizado foi a Escala de Liderança no Desporto (ELD). Para análise dos dados, utilizaram-se o teste de Shapiro Wilk, Mann-Whitney, a Manova e Post Hoc de Scheffe ($p < 0,05$). Os resultados evidenciaram que na comparação entre a percepção e a preferência dos atletas houve diferença significativa nas dimensões treino-instrução ($p=0,001$), reforço ($p=0,008$) e estilo democrática ($p=0,020$); atletas do gênero masculino têm maior preferência pelo comportamento autocrático do que atletas do gênero feminino ($p=0,031$); não houve diferença significativa entre as dimensões: percepção dos atletas e a autopercepção dos treinadores. Conclui-se: os treinadores paranaenses da modalidade de natação apresentam o estilo democrático, utilizando-se do reforço e do treino instrução como recursos técnico-táticos para os seus treinamentos; na equipe campeã, o treinador apresentou perfil semelhante entre o atual e o preferido dos atletas que, segundo a literatura, seria o ideal para alcançar o sucesso esportivo.

Palavras-chave: Esportes; Liderança; Natação; Técnicos.

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INTRODUCTION

The existence of a good relationship between people is of fundamental value in the daily life of modern man. In sports, this aspect is no different, so that, in the case of team sports, one of the main factors which can influence the effectiveness of success may be the interaction between athletes of the same group, and within the environment of competition it may specially influence the way in which coaches relate to athletes.

Studies show that a good sports leader can offer good support to their athletes by providing strategies and resources to achieve their objectives¹⁻³. The relationship process between coach/athlete has been the focus of investigation⁴⁻⁷, especially in high level competition, because of the need for improved efficiency and to overcome the athletes' limits, causing trainers to seek improvement in the quality of their training.

Identification of leadership style of the coaches in the sporting context represents an important aspect influencing satisfaction and performance of athletes¹. In this issue some approaches are used. The multidimensional model of leadership in sport⁸ has been highlighted, which postulates that the effectiveness of the sports leader may vary depending on the characteristics of the athletes and the limits of each situation. This model was developed specifically for sports, the athlete's performance and satisfaction depends on three types of leadership behavior related to sports: required, preferred, and real⁹.

Studies have shown aspects related to the behavior of leadership coaching in different sports, highlighting the complexity of the task and the leadership of football coaches⁶, the ideal profile of volleyball coaches¹⁰ or the impact of leadership on the cohesion of indoor soccer and football sports teams¹¹, decision making and leadership in basketball¹² and the perception of sports leadership of athletes and coaches in the competition context¹³.

In this context, it becomes important to investigate the behavior of the leadership of coaches, considering their situational characteristics, as well as of the athletes, because decisions taken by the leaders seem to affect the results achieved by other group members. Thus, knowing the behavior adopted by the coach and the preference of the athletes, their actions may be optimized by increasing their opportunities for more effective results.

Investigations in the context of leadership have focused on team sports. In individual sports, such as swimming, recent study⁵ noted young, competitive athlete swimmers who had a preference for coaches who use less social support and more strategies to correct sports techniques, compared to athletes practicing team sports. The authors found that the difference is explained by the fact that swimming coaches are responsible for fewer athletes, which could facilitate instruction and feedback to individual athletes, optimizing their skills. Thus, the gap of the study is to identify the leadership style of the coach of the winning team and the difference between the genders. Given the considerations mentioned, this study aimed to investigate the leadership style of swimming coaches. We specifically

sought to identify the style of the leader according to gender and compare the leadership perception and preference of the athletes from the JAP'S champion team.

METHODOLOGY

This study was characterized as descriptive and transversal. The target population consisted of adult athletes and coaches registered in the finals of the Open Games of the state of Paraná (Jogos Abertos do Paraná, JAPs), totaling 79 subjects. The sample consisted of 49 athletes (16 female and 33 male) and 06 swimming coaches being all male, totaling 55 subjects.

The originally developed version of the *Leadership Scale for Sports* (LSS) by Chelladurai and Saleh¹⁴, adapted and validated for the Portuguese language¹⁵ as the *Escala de Liderança no Desporto* (ELD), was used as a measuring tool for assessing the leadership of the coaches. The purpose is to evaluate the leadership behavior of the sports coach using three versions: the managers' perception of their behavior (self-perception version), the perception that athletes have of the coach's behavior (perception version), and the athletes' preference of the coach's behavior (preference version).

The questionnaire comprises 40 items related to the behavior of the sports leader. Only one question must be checked by the study participant, which is presented on a *Likert* scale (5 = Always; 4 = Often; 3 = Sometimes; 2 = Rarely; 1 = Never), grouping into these items five dimensions: "behavior training-instruction" (the coach is aimed at improvement of performance, focused on hard demanding training, highly directs the skills and tactics of the sport), "social support" (the coach is concerned about the athletes and their welfare, tries to provide good team environment, and promotes interpersonal relationships among the athletes), "reinforcement" (the coach positively reinforces athletes by recognizing and rewarding their good performance); "democratic behavior" (the coach encourages greater participation of the athletes in decisions concerning the objectives of the group, the working methods, strategies, and tactics), and "autocratic behavior" (the coach makes independent decisions and emphasizes his personal authority, and the athletes are not usually requested in decision making). The estimate of internal consistency of the instrument was held in relation to the subjects evaluated, obtaining *Cronbach's* $\alpha = 0.51$, indicating an acceptable moderate reliability according to the psychometric recommendations¹⁶. Besides this instrument, the socio-demographic questionnaire was used, for the purposes of identification data.

This research is integrated with the institutional project (Universidade Estadual de Maringá), approved by the Ethics Committee in Human Research n. 175/2007. For the purpose of collecting data, the researchers requested permission from a representative of the general organization of the event. The informed consent term was given to athletes and coaches; the questionnaire was collectively handed out, individually answered during competition and within their quarters.

Data analysis was performed using the statistical package SPSS 15.0. For verification of normality, we used the Kolmogorov-Smirnov test. The Median (Md), as a measure of central tendency, and Quartiles (Q1; Q3), as regulatory measure, were used in the presentation of results since the data did not present normal distribution. The Mann-Whitney “U” Test was used to compare the preference of leadership between genders (male and female) and for comparison between perception and preference of leading athletes of the JAPs champion team. Comparing the perception of athletes, self-perception of coaches, and preference of athletes, after checking the homogeneity of variances, we opted for Manova, followed by Post Hoc Scheffe. The significance adopted was $p < 0.05$.

RESULTS

In the perception of athletes, as in the self-perception of coaches and preference of athletes, the dimension training- instruction presented the highest median, followed by the dimensions of positive reinforcement and of democratic decision, which had better results in both preference and perception of athletes as self-perception of coaches (Table 1).

The results also revealed that when compared, the athletes’ perception and preference (current and preferred behaviors) there were significant differences in the following dimensions: training-instruction ($p=0.001$), reinforcement ($p=0.008$), and democratic decision ($p=0.020$). However, comparing the perception of athletes (current behavior), with the self-perception of coaches, the data indicated no significant differences in any dimension.

Table 1. Comparison of the perception of athletes, self-perception of the coaches, and the preference of the swimmers in relation to leadership style.

| DIMENSION | Perception of Athletes | Self-perception of Coaches | Preference of Athletes | P |
|----------------------|------------------------|----------------------------|------------------------|-------|
| | Md (Q1; Q3) | Md (Q1; Q3) | Md (Q1; Q3) | |
| Training-Instruction | 3.86 (3.29; 4.14)* | 3.96 (3.62; 4.43) | 4.29 (4.00; 4.50)* | 0.001 |
| Social Support | 3.33 (3.00; 3.61) | 3.16 (2.86; 3.86) | 3.44 (3.00; 3.67) | 0.446 |
| Reinforcement | 3.67 (3.17; 4.00)* | 3.50 (3.29; 4.04) | 4.00 (3.67; 4.17)* | 0.008 |
| Democratic | 3.00 (2.50; 3.25)* | 2.85 (2.47; 3.40) | 3.20 (2.65; 3.70)* | 0.020 |
| Autocratic | 1.83 (1.41; 2.17) | 1.66 (1.08; 1.99) | 1.67 (1.17; 2.17) | 0.664 |

*Significant difference – $p < 0.05$.

The results (Table 2), indicate statistically significant differences with regard to the autocratic behavior among athletes of the swimming modality when genders were compared, indicating the preference of male subjects by autocratic behavior ($p=0.031$).

The leadership style of the champion team (Table 3), showed that when compared to perception (current behavior), and preference (preferred behavior), of the athletes there were no statistical difference in any dimension, indicating that the results of the athletes did not differ from the actual behavior of the coach.

Table 2. Comparison of preferred leadership behavior of swimmers according to gender.

| DIMENSIONS | Male | Female | P |
|----------------------|-------------------|-------------------|--------|
| | Md (Q1; Q3) | Md (Q1; Q3) | |
| Training-Instruction | 4.21 (3.96; 4.36) | 4.39 (4.05; 4.57) | 0.149 |
| Social Support | 3.44 (3.00; 3.67) | 3.50 (3.00; 3.86) | 0.614 |
| Reinforcement | 4.00 (3.58; 4.17) | 4.08 (3.71; 4.17) | 0.375 |
| Democratic | 3.20 (2.60; 3.55) | 3.25 (2.90; 3.80) | 0.266 |
| Autocratic | 1.83 (1.33; 2.17) | 1.33 (1.00; 1.67) | 0.031* |

*Significant Difference – $p < 0.05$.

Table 3. Comparison of perception and preference of the athlete swimmers of the JAP's 2010 championship team - in relation to leadership style.

| Dimensions | Perception of Athletes | Preference of Athletes | P |
|----------------------|------------------------|------------------------|-------|
| | Md (Q1; Q3) | Md (Q1; Q3) | |
| Training-Instruction | 3.97 (3.55; 4.15) | 4.18 (3.82; 4.59) | 0.261 |
| Social Support | 3.33 (3.28; 3.50) | 3.61 (3.28; 3.89) | 0.219 |
| Reinforcement | 3.50 (3.17; 3.88) | 3.84 (3.59; 4.17) | 0.144 |
| Democratic | 3.35 (3.02; 3.53) | 3.50 (3.28; 4.03) | 0.192 |
| Autocratic | 1.50 (1.09; 1.71) | 1.09 (0.96; 1.21) | 0.089 |

*Significant Difference – $p < 0.05$.

DISCUSSION

In the sporting context, one of the major challenges to be faced is the harmonious relationship between coaches and athletes, for sometimes the interaction of personal and situational factors is not properly considered and may interfere in daily sports. Chelladurai¹⁴ when devising a theoretical proposal addressing the multidimensional style of leadership postulated that the sports leader's effectiveness depends on the characteristics of the athletes and on the situational demands.

The role of an effective leader has been investigated from the model of emotional intelligence showing the characteristics of successful leaders in the world today¹⁷. Those who have emotional intelligence in any context also have better performance in participative management, presenting self-knowledge, balance between work and personal life, simplicity and serenity in their actions; these are the important features in the role of being a leader. About the effectiveness of the leader, recent investigations^{2,3} point out that coaches should try to adapt their actual behavior, to the preferences of athletes and to the requirements of the situation and context¹⁸.

An important aspect of the data indicated in this investigation is that the leadership style of the champion team (Table 3), showed no difference between the preferred and actual behavior of the coach in any dimension, making it evident that the athletes are satisfied with the behavior of their coach. In this sense, literature^{7,14} points out that a successful manager should have the concern to meet the needs of athletes and it is ideal that a difference in behavior of the leadership dimensions does not occur. Also

emphasizing that this consistency is important for the satisfaction of team members¹⁷ and for better performance from swimmers¹⁹.

Comparing the three types of leadership behavior (Table 1), no significant difference was observed in comparison to the perceptions and preferences of athletes with the self perception of coaches, in any dimension evaluated. However when analyzing the perception and preference of athletes, some dimensions showed differences such as “training-instruction”, “reinforcement”, and “democratic behavior”, the results indicated that athletes prefer coaches focused more on improving performance, with prevalence in the leadership style “training-instruction”, which shows that swimmers accept the arduous and tiresome training offered by their coaches. This result is supported in a recent study⁶ which reinforces that in some specific sports, providing clear instructions and positive reinforcement are key elements for good team performance.

The preference for “reinforcement” is indicated in literature²⁰ as the most preferred dimension, showing that as skill and level of competition increases, coaches tend to reduce humanitarian actions with the athletes reducing the focus on the dimension of social support. These results suggest that athletes have preference for a coach who is a bit more demanding in instruction techniques and tactics of the sport, encouraging their athletes through positive reinforcement.

In the context of team sports, coaches with an autocratic style prevail, however, in individual sports, the democratic style is preferred by athletes²¹. This discovery is consistent with the results of this study (Table 1), as well as with research²² conducted with athletes from team sports, in which it was found that athletes prefer a more autocratic style of leadership when compared to sports like swimming and bowling. However, in research¹⁸ with futsal athletes, the democratic leadership style was preferred and adopted by the coaches. These contradictory findings highlight the importance of context analysis.

From the results (Table 2), it was found that male athletes have greater preference for autocratic behavior than female athletes. Similar to this discovery, studies^{9,23} have found that female athletes prefer a coach with democratic behavior. In studies by Gomes et al.¹¹, it was observed that men and women of the same type of football and futsal, evaluate and prefer different behavior styles from their coaches. In another study, Sonoo et al.³ found a significant difference in the dimension of autocratic behavior, highlighting the preference of male athletes for coach centered decision-making.

The importance of leadership and satisfaction in sports has been the target of investigations in different ways, highlighting the importance of a team in identifying their leaders directed to the task, to the social context and external environment²⁴, reinforcing the importance of investigating the leadership style and thus provide athletes with a more interactive environment.

CONCLUSION

In summary, the results of the study reinforce the importance for coaches to know the needs of their athletes, considering both the characteristics of the sport and the situation so that strategies are adopted and adjusted by the coach. A very important variable to be emphasized is that the best results (winning team), showed satisfaction with the coach's leadership style, reinforcing the importance of awareness of the coaches and their behavioral conduct before a sports team.

One may concluded that the swimming coaches of the state of Paraná need to readjust some dimensions to their leadership profile, since it is a big challenge to adapt the leadership style to specific situations, however with the champion team the coach presented a similar profile between the current type preferred by athletes, an essential consequence it for achieving success in sports.

It is important to note that the results are limited and cannot be generalized to the whole Brazilian context, because they were assessed only by athletes and coaches in the state of Parana. However, for being the main athletes and coaches of the state who participate in state and national competitions, the sample was significant.

It is therefore suggested that future studies be conducted on this topic trying to compare different levels of performance between individual and collective modes, as well as investigations that establish the relationships between leadership and the satisfaction of athletes.

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