Analysis of competitive behavior
in young and adult handball athletes

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Abstract

This study aims to analyze the competitive behavior of young and adult handball athletes. Evaluated 143 young athletes (16.1 ± 0.7 years) of both sexes, participants of the Youth School Games, and 69 athletes (24.0 ± 4.3 years), all male participants of the Pan American club championship in the year 2009. To assess the competitive behavior we used the Sport Orientation Questionnaire instrument with subscales: compete (TQ1), win (TQ2) and set goals (TQ3). For data analysis descriptive statistics and the Mann-Whitney test were used, considering 5% of significance. Both young and adult athletes reported greater importance to the TQ3 domain. Comparing the groups, only the TQ3 domain did not show statistically significant difference with higher values for adult athletes. Thus, we can conclude that school and performance athletes showed similar competitive behavior, that is, there is a high tendency in the perception of victory in the competitive process, regardless differences of age and practice time. However, in both groups it was observed a greater emphasis on setting goals, and the performance athletes reported greater importance to the TQ3 compared to the young ones – 8.0 and 9.0, respectively.

KEY WORDS: Sports psychology; Sport; Youth; Adults; Sporting orientation.

Introduction

The most common reasons that young people point to as being the reasons for participating in sports are listed in four categories: fun, competence, affiliation and physical fitness[1]. The same reasons are also mentioned by adults[2]. That is, young people and adults participate in sports because they believe to be fun, because they like to strive to achieve the desired competence, besides being next to friends, meet new people and improve physical fitness[3].

In this sense, training and sports preparation of young athletes should be guided in matters relating to education, recreation and friendship[4]. However, against the great social phenomenon that has become the sport, linked with the increased number of competitions and the pursuit for positive results, the children's participation received new requirements[5] determining the demand for victory and overcoming opponents increasingly present during competitions. The emphasis of youth sports training is based on the development of the necessary skills to achieve high competitive level[6-7].

In this light the youth sports becomes to be an extension of the ideals adults, where the search for the best result, victory, regardless of the improvement in physical, social, becomes a relentless pursuit. The sport of discussion for this category, its objectives and purposes, it is important in that it enables professionals involved an overview of how young athletes analyze this process, that is, at this time the young search at sports, only the victory without the concern of building a career in the long term, or combined with this sporting wish can also enter the fun as the basis in pursuit of their goals[8].

Thereby, young athletes have approached gradually from adults who need immediate results to support themselves in the sport. However, the relentless pursuit of victory must be viewed with

caution, especially for the population of young athletes, since this may be the cause of abandonment of participation in sport, because the lack of results is presented as one of the main reasons waiver[9].

Facing the exposed above, there is the study of the psychological aspects in the sporting environment, increasing the number of research in this area of knowledge in order to understand the athlete within a psychosocial perspective[10]. In addition, the sport in general exceeds barriers when taken into account their rewards, be they intrinsic or extrinsic, and often with different objectives, goals to be achieved and different ways of understanding the competitive process[11-12].

Thus, sport can be understood in a multidimensional way, when we explore the competitive guidelines of athletes and can be classified in relation to subscales of competitive trends: compete, win and set goals, developed by GILL and DEETER[13]. In which the momentum launching into the unknown characterizes the tendency to compete; the search for a result arming is positive psychological arguments is attributed to the trend win, and goal setting is given as a longitudinal trace well defined between what we have and what we want to have[14].

Specifically in the case of the young athlete, sports guidelines aimed at victory should not overlap the trend to establish future goals, such as achieving high performance or even the pleasure to compete, since this process should be a constant in sports history. Therefore, the importance of victory in the context of youth sports should be analyzed carefully, because the way in which it is understood by its young actors can cause early exodus from the sport[15].

Unlike the young athlete, credited to the professional athlete to search for the best result because depends on his doing their own financial and contractual ambitions related to his sporting career. Compare young athletes, with about a year of training with adult athletes, with several years of experience, it would be illogical because exhibit different environments and realities, however, what can be seen today, is a contradiction, where young people are involved in sport with the same prospects adult, where the social, contractual issues and even status seem to rule this early sporting environment.

Thereby, the literature states that trends in compete, winning and setting goals are not just physical preparation, technique and tactics, but also factors related to psychosocial preparation[14]. Since the sports training aimed at high performance is increasingly present in the younger categories of athletes, it is important to investigate the motivational behavioral tendencies of sports performance in this population and verify that these trends are close to the behavior of adult athletes. The evaluation of the motivational behavior of young athletes according to the perception of each athlete can assist in improving sports training and reducing the abandonment of sports number. Therefore, the main objective of this study was to analyze the trend of motivational behavior to sports performance of young athletes handball and analyzes it in the trends of adult athletes.

Method

Design

The information presented in this study are part of the collection of data from a research project entitled "Behavior study of behavioral motivational trends of sports performance athletes belonging to terms sport collective and individual" approved by the Research Ethics Committee of the State University of Londrina process CEP / UEL n. 116/08.

Considering the objectives set for this study, we used the descriptive-exploratory method, quantitative, through which we obtained information from specific inventories that would enable reporting facts and features of the competitive behavior of handball athletes.

Sample

They were evaluated 143 young athletes handball participants of Youth School Games, held in the city of Londrina, in 2009, with an average age of 16.1 ± 0.7 (n = 69 boys and 74 girls); and 69 adult male athletes participating in the Pan-American Handball Clubs; with a mean age of 24.0 ± 4.3 years from three national and three international teams, selected intentionally.

All athletes signed the Informed Consent (IC), according to the research recommendations involving humans. For athletes below the chronological age of 18 the IC was signed by parents or guardians of each athlete. As inclusion criteria for the participation of the subjects in the study took into account the signature of IC and the correct completion of the instrument used.

Instrument

For information about the perception of motivational behavioral tendencies of the sport performance of each athlete, it was used the instrument called ACS-2 Evaluation System adapted by Simões[16] that is based on the Sport Orientation Questionnaire (SOQ) proposed by Gill and Deeter[13]. This instrument was adapted according to scientific criteria and subjected to validation procedures employed by the Institute of Statistics and Mathematical Sciences of Rio de Janeiro in 2000, validating it for use throughout the national territory, which showed satisfactory psychometric values for the following analysis of items: Trust (r > 0.7), Objectivity (r > 0.9) and validity (r > 0.8). From then on, the instrument became part of one of the modules, a set of five instruments that make up the evaluation system called ACS Social Psychology of Sport Lab - EEFEUSP.

The ACS-2 contains 25 descriptive and objective questions about the athletes behavior with the task of working with competitiveness in the performance sports context and proposes the respondent the possibility of framing opinion on the subject explored in three Motivational Behavioral Trends Performance Sports: Racing (TQ1), Winning (TQ2) and set goals (TQ3).

The instrument provides a preview of the final results in absolute terms or relative (percentage) of one scale ranging 25-125 (absolute score) or 0-100 (inverse relative scores). The interpretation of the results obtained by each athlete should be seen in reverse, where the lower values attributed to the behavior of personal tendencies are his greatest attributes and / or aspirations.

Statistical analysis

The Kolmogorov-Smirnov test was used to assess the normality of the data. To characterize the sample was used descriptive statistics of mean and standard deviation, median and interquartile range according to data distribution. For the analysis of the differences between sex and groups (young x adults) the variables that met the normal distribution assumption (age and practice time) were compared using independent t test. The variables of motivational behavioral trends of sport performance were compared using the Mann-Whitney test, as it did not meet the assumptions of normality. For all analyzes, the significance level was set at $p < 0.05$.

Results

Sample characteristics are presented in TABLE 1.

In general, school ID athletes had an average of 16.1 ± 0.7 years and average TP 3.7 ± 1.8 years. While boys had a mean of 15.9 ± ID 0.8 years and average TP of 3.5 ± 1.7 years and the girls had a mean ID 16.2 ± 0.7 years and average TP 3.8 ± 1.9 years. The results presented in TABLE 1 demonstrate that the division by sex, sample school athletes, only the variable ID was statistically different. The results of the evaluation of variables related to competitive behavior are distributed in TABLE 2.

The results presented in TABLE 2 shows that the students athletes identify TQ3 as a trend of greater then the importance followed by TQ2, very close values, and, finally, the TQ1 and the smaller magnitude. There were no statistically significant differences in any analysis performed.

It is observed that when separately analyzes the values of trends TQ1, TQ2 and TQ3 against the practice time of athletes and regardless of sex, there is an increasing importance of TQ3 trend for athletes who practice the sport for a period of time greater.

TABLE 1 - Age range and practice time sample school athletes stratified by sex.

Variable	Athletes			t	d-Cohen	p	Statiscal power
	All (n = 143)	Male (n = 69)	Female (n = 74)				
Age	16.1 ± 0.7	15.9 ± 0.8*	16.2 ± 0.7	-2.34	0.399	p = 0.02	0.877
Practice Time	3.7 ± 1.8	3.5 ± 1.7	3.8 ± 1.9	-0.85	0.166	p = 0.39	0.689

Data presented as mean ± standard deviation*; p < 0.05 *; t: t test independent.

Zambrin LF, et al.

TABLE 2 - motivational behavioral trends of the sport performance of the sample school athletes stratified by sex.

Variable	Athletes			U	r	p	Statiscal power
	All (n = 143)	Male (n = 69)	Female (n = 74)				
TQ1	19 (7)	19 (8)	19 (6.0)	2.54	-0.03	0.968	0.53
TQ2	10 (5)	10 (5)	10 (4.0)	2.57	-0.009	0.914	0.51
TQ3	9 (4)	9 (4)	9 (4.0)	2.70	-0.05	0.535	0.55

In FIGURE 1 the results revealed that the extent to which young people advance in practice mode, ie, those who practice handball for six or more years tend to increase the importance for the perception to setting goals compared to practicing handball there less time. Moreover, tend to compete and practice handball, as a means for social and cultural insertion, remains constant.

The distribution and analysis of quantitative and qualitative variables of all school athletes, regardless of sex, compared to performance athletes are shown in TABLE 3.

It is observed that the statistical analysis of data on school athletes and performance athletes, variable ID (U = 9.867; r = -0.82; power = 0.99), TP (U = 600.0; r = - 0.71, power = 0.99) and TQ3 (U = 3.811; r = -0.18; power = 0.52) were statistically different. The results revealed the existence of a close relative to the magnitude of median values (lower values show greater importance) found in the qualitative variables for school and performance athletes, exhibiting a steady trend for the establishment of goals (TQ3) and win (TQ2).
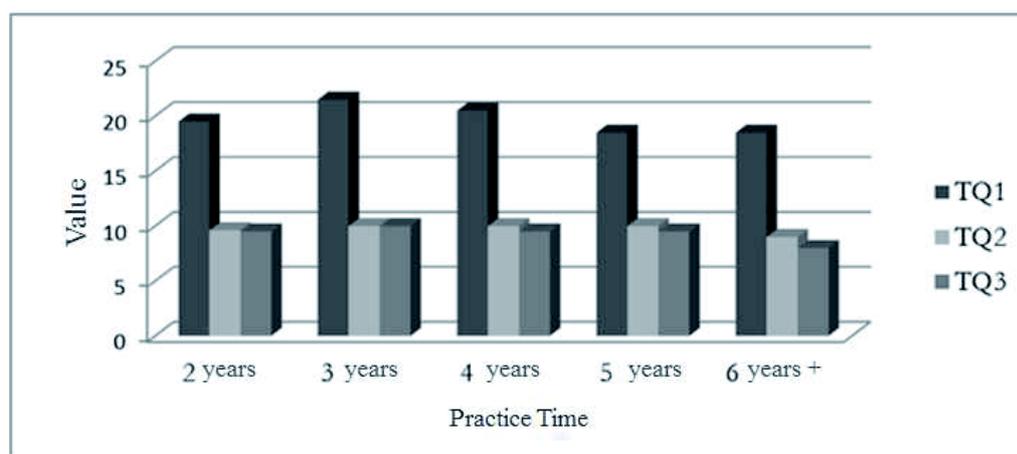

FIGURE 1 - Distribution of values for the variables TQ1 (compete), TQ2 (win) and TQ3 (set goals) over time practice of school athletes.

TABLE 3 - Comparison of age, practice time and motivational behavioral trends among school sports performance athletes and yield.

	School (n = 143)	Performance (n = 69)	U	r	p	Statistical power
Age group	16 (1)*	24 (7)	9.867	-0.82	0.000	0.99
Practice time	4 (36)*	11 (5)	600.0	-0.71	0.000	0.99
TQ1	19 (7)	20 (5)	5.416	-0.07	0.248	0.50
TQ2	10 (5)	9 (4)	4.853	-0.001	0.847	0.50
TQ3	9 (4)*	8 (3)	3.811	-0.18	0.007	0.52

Discussion

One of the sports psychology guidelines is scientifically analyze the interference of psychological factors on the sports field. Therefore, it is paramount description, explanation and prognosis of the behavior of athletes, in order to apply and develop programs to improve their performance and well-being[11, 17]. Thus, the motivational behavioral tendencies of sports performance and its variables are relevant factors and able to contribute to the development of scientific knowledge and sport society as a whole, which has a vast field to be explored[17].

The classification of the trend turned to sports competitiveness to compete, win and set goals favors the analysis of the athlete facing three dimensions closely linked as to be confused with each other. The competition is a desire, a will, a rush of launching, body and soul, to a challenging situation and sometimes unknown without worrying about the result; the win is a logical process of competitiveness, but that affects the individual, separating the relevant challenging position and / or challenging, at the same time, may be the ultimate goal of a confrontation, the win sets up from overcoming an object and / or external adversary. Setting goals is the individual's ability to move towards a certain point in the future which aims, above all, overcome the internal limitations (internal object) and thus provide alternatives that lead to a personal evolution[18].

School athletes had a mean of 16.1 ± 0.7 years and TP average of 3.7 ± 1.8 years. The results show that the evaluated group, excepting the age at which girls had the boys over the age (16.2 ± 0.7 vs. 15.9 ± 0.8). Regarding the motivational behavioral tendencies of sports performance school showed greater attention to TQ3 component, however, with the magnitude of median values very close to TQ2 component.

Thereby, it is clear that young athletes evaluated, regardless of gender, have a perception of the competitive process directly linked to the moment in which the competition becomes a much friendlier to momentary personal interests than necessarily as a future sports practice process.

Adult athletes of judo showed similar results to those found in this study[19]. This fact reveal that young athletes participating school championships have a tendency to focused awareness to high victory, considering the age and the very expectations that these tournaments provide.

Regarding the differences between the sexes, men generally go through a tougher competitive process in relation to their female counterparts, which can be explained due to increased competition in male society[11]. In this study the results showed similarity between all the behavioral trends when compared in relation to sex. Therefore, the sports practice when initiated earlier allows greater opportunities to develop skills and confidence, and can enable a differentiated view of the competitive process[20].

The results reveal the age as an important variable for the competitive process, which SANTANA[21] points out that young people who have an early sports practice with great competitive training, present obvious risks of early withdrawal of the sport. The variables that affect the performance of athletes are numerous, e.g. levels of dispositional attributes to the behavioral trends of personal competitiveness, win and compete that can be determining factors in the process of harnessing excellence and sporting performance.

The literature establishes that performance athletes have to establish more decisive goals than those who are not professionals[22]. The other variables (compete and win) separately, also had different values. However this result is somewhat predictable, it is expected that performance athletes will be more effective motivationally other individuals.

Differences between individuals who participate in sports and no sports activities were found and revealed qualitative superiority in performance compared to the individuals that participate in sports activities[23]. In this study, in particular the variable which represents the competition was less important in the analysis of the results that all athletes, regardless of age.

On the other hand, both groups are composed of athletes, but the gap between age and practice time between them could be the difference in this analysis. However, there was a statistically significant difference only for TQ3 trend where adults gave more importance to the establishment of goals (9.0 vs. 8.0). It is believed that school sports stage is a basis for subsequent training "high performance", but the results presented in this study are very similar, showing no statistical differences, i.e. irrespective of adult athletes having approximately 10 years more in practice mode (selection of athletes), the young athletes vision is similar, both in behavior returned to victory as the race.

The current system for talent selection in sports is an ongoing target of criticism to the extent that values short-term performance over the development of young people. This has direct consequences on the values in sport, the pursuit of sporting excellence

should be analyzed with discretion and patience. The immediacy in children's sport should not exist, coaches, parents, and the athlete himself should understand that values and rewards inherent in competitive sport should be sought sparingly[24].

In the current study the main objective was to analyze the perception of beginners athletes and athletes "professional" about the behavior of Motivational Behavioral Trends of Sports Performance and results obtained allow us to state that there is a need for specific approaches to school sports performance, being essential to create an appropriate psychosocial environment for this age group and their goals. In this way, the technical, physical and tactical aspects should be adequately developed for each gender and age group to allow an adequate and comprehensive development of the young in sports[14].

Therefore the school sport, children's, should be understood in a three-dimensional perspective, where agents such as family (parents), coaches (teachers) and athletes (students) they do influence one. In this view the author points out that the influence of parents and teachers in this period of development is of fundamental importance for the understanding of the young as their sports practice, directing them to the benefits that this activity can provide and avoiding the harmful aspects inherent to the process competitive, as the win at all cost[8].

Additionally, a victory or a defeat, which are inherent to the involvement with the competition, should lead the young athlete experiences that enrich their own development. The expectation then trying even when the way seems extremely arduous can be an important aspect in the competitive process. Thus, the sport experience may on the one hand present an oppressive appearance, but then, when well managed, can help build an individual "strong" as the amounts associated to the determination, discipline and dedication[24].

Facing the concepts exposed, we must consider that there are some limitations to consider on evaluation in the context of job that fleeing the control of researchers, such as frequency, intensity and type of training that each athlete is submitted, which directly interfere in the training process and in the competitive behavior trend, are added to these the inability to guarantee the honesty of the answers provided by athletes.

The results of this study demonstrate that, both young athletes as the assessed adults have a competitive trend toward the establishment of more expressive goals, however, the values of the trend to victory are very close which features an outstanding desire for the sport immediate success. This should be seen as an important variable, but complex, because it shows that athletes, especially young people, understand the competitive process in a much more timely manner without the worry to reach future goals, or even with a worrying precocity that It can lead to a sharp frustration after the defeat and hence the sport's own abandonment.

Resumo

Análise do comportamento competitivo de atletas jovens e adultos de handebol

O presente estudo tem como objetivo analisar o comportamento competitivo de atletas jovens e adultos da modalidade de handebol. Foram avaliados 143 atletas jovens (16,1 ± 0,7 anos) de ambos os sexos participantes dos Jogos Escolares da Juventude e 69 atletas adultos (24,0 ± 4,3 anos) do sexo masculino, participantes do campeonato Pan-Americano de clubes no ano de 2009. Para avaliação do comportamento competitivo utilizou-se o instrumento Sport Orientation Questionnaire com as subescalas: competir (TQ1), vencer (TQ2) e estabelecer metas (TQ3). Para análise dos dados utilizou-se estatística descritiva e o teste de Mann-Whitney, considerando 5% de significância. Tanto os atletas jovens quanto os adultos relataram maior importância para o domínio TQ3, havendo diferença estatisticamente significante para este domínio (9 ± 4 vs. 8 ± 3) em que os adultos relataram maior importância para o TQ3 quando comparados aos jovens. Sendo assim, podemos concluir que os atletas escolares e atletas de rendimento apresentaram comportamento competitivo semelhante, ou seja, existe uma tendência elevada na percepção da vitória dentro do processo competitivo, independente das diferenças existentes na idade e no tempo de prática, porém observa-se em ambos os grupos uma maior ênfase para o estabelecimento de metas, sendo que os atletas de rendimento relataram maior importância para o TQ3 em comparação aos jovens, respectivamente 8,0 e 9,0.

PALAVRAS-CHAVE: Psicologia do esporte; Esporte; Jovens; Adultos; Orientação esportiva.

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