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Motives for sports practice in young soccer and volleyball athletes

Motivos para prática de esportes em atletas jovens de futebol e voleibol

Lidyane Zambrin Vignadelli[1]
Enio Ricardo Vaz Ronque[1]
Maria Raquel de Oliveira Bueno[1]
Luiz Roberto Paez Dib[1]
Helio Serassuelo Junior[1]

Abstract – The reasons why athletes, especially young people, seek to adhere to sports practice has aroused the interest of research. The aim of this study was to identify the reasons for the sports practice of young soccer and volleyball athletes according to gender, age, family economic class, practice time and level of competitiveness. 188 athletes, 56 volleyball athletes and 132 soccer players aged 10-16 participated in the study. The reasons for the sport were identified through the Participation Motivation Questionnaire (PMQ). The data were analyzed through Covariance Analysis. The results indicated that, in general, the most important reason for sports practice was "Technical Competence" (4.51±0.54), followed by factors of intermediate importance: "Competition" (4.30±0.73), "Group Activity" (4.29±0.71) and "Physical Fitness" (4.25±0.64). Low-income families (C) attributed greater importance to the motivation factors related to "Social Recognition" and "Group Activity". Athletes with lower practice time conceded less relevance to "Group Activity" and "Affiliation", while those with a national competitive level demonstrated greater importance to all motivation factors, with the exception of "Competition." Young athletes have been motivated to practice sports, especially for reasons related to self-realization, improvement of technical skills and overcoming challenges. Differences were also identified between family economic class groups, practice time and competitive level in the motivation factors for sports practice.

Key words: Motivation; Psychology; Soccer; Sports; Volleyball.

Resumo – *Os motivos pelos quais atletas, especialmente jovens, buscam aderir à prática esportiva tem despertado o interesse das pesquisas. Objetivou-se identificar os motivos para a prática esportiva de atletas jovens de futebol e voleibol de acordo com o sexo, idade, classe econômica familiar, tempo de prática e nível de competitividade. Participaram do estudo 188 atletas, 56 atletas de voleibol e 132 de futebol, com idades entre 10-16 anos. Os motivos para a prática esportiva foram identificados mediante o Participation Motivation Questionnaire (PMQ). Os dados foram analisados através da Análise de Covariância. Os resultados indicaram que, de modo geral, o motivo mais importante para a prática esportiva foi "Competência Técnica" (4,51±0,54), seguido pelos fatores com importância intermediária: "Competição" (4,30±0,73), "Atividade de Grupo" (4,29±0,71) e "Aptidão Física" (4.25 ± 0.64). Atletas de classe econômica familiar inferior (C) atribuíram maior relevância aos fatores de motivação relacionados ao "Reconhecimento Social" e "Atividade de Grupo". Atletas com tempo de prática inferior concederam menor relevância para "Atividade de Grupo" e "Afiliação", enquanto aqueles com nível competitivo nacional demonstraram maior importância a todos os fatores de motivação, com exceção de "Competição". Os atletas jovens demonstraram-se motivados para a prática esportiva, especialmente, pelos motivos ligados à autorrealização, ao aperfeiçoamento das habilidades técnicas e a superação de desafios. Também foram identificadas diferenças entre os grupos de classe econômica familiar, tempo de prática e nível competitivo nos fatores de motivação para a prática esportiva.*

Palavras-chave: *Esportes; Futebol; Motivação; Psicologia do esporte; Voleibol.*

1 State University of Londrina. Londrina, PR. Brazil.

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INTRODUCTION

Questions regarding the reasons that lead athletes to start practicing in sport become of relevance within the sport psychology, since motivation has been identified as a key factor for the sporting success and well being of athletes[1-3]. Participation in organized sports during adolescence offers opportunities for personal growth and development, as well as several improvements in the main indicators of physical health (cardiovascular fitness, weight control, reduction of risk factors for diseases such as diabetes and osteoporosis) and psychological (self-esteem, happiness, satisfaction with life, positive peer relationships, leadership and skills)[4,5].

The most common motives for sports practice in young people fall into four factors: enjoyment, technical competence, affiliation and physical fitness[6]. That is, young people participate in sports because they believe them to be fun, they like to strive to achieve the desired competence, be alongside friends, meet new people and try to improve their physical fitness[7]. Both for girls and boys, in adolescence, the factor "Develop skills" was named as the most relevant for the practice of soccer[8]. Regarding female volleyball players, the most motives factors were technical development, health and affiliation[9].

Thus, the motivational aspects related to the practice of sport in young people have become a highly relevant research topic[9]. In this sense, the *Participation Motivation Questionnaire* (PMQ) has been highlighted as an important instrument[10-13]. Based on the assumption that childhood and adolescence are critical periods for the beginning of effective participation in regular sports programs or even for the abandonment of the practice with repercussion in future ages, the study of the reasons for practicing sports in young ages becomes an important research for this age group.

Motivation has been investigated in several ways by researchers from different sciences in different countries[14,15]. When considering this theme in the practice of sports, it is worth clarifying these very similar expressions, but with divergent concepts. In the etymological context, the word motivate comes from the Latin *movere*, *motum*, and means to provoke movements. Thus, motives would be the impulses, needs, reasons and purposes, which impel the individual to perform an action. While motivation would be the spontaneous interest of the individual in the execution of a certain task or activity[16].

The motivation is explained by several theories, one of the most accepted is the Self-Determination Theory proposed by Deci and Ryan[17,18] in which it establishes that individuals can motivate themselves for a certain activity in an intrinsic or extrinsic way, in addition they may have amotivation. In this way, an intrinsically motivated individual is one who initiates an activity of his own volition; while the extrinsically motivated individual is the one who performs the activity by external influences. On the other hand, amotivation - which is also a motivational state - can be found in individuals who, among other things, do not identify good reasons

for performing a particular activity[18]. Davidoff[19] equates the term motive with motivation and stresses that it is established through life experiences. Thus, it defines motive or motivation as an internal state that results from a need that activates or awakens a behavior usually directed towards the fulfillment of the activating need.

Thereby, some factors should be considered when interpreting the motivation of athletes to practice sports, such as sex, age and the socio-cultural and environmental context[20,21]. Therefore, we expected that boys tend to be more competitive; older athletes and those with more practice time attach greater importance to factors related to performance and success in the sport; those of lower economic classes seek greater social recognition; and athletes at a higher competitive level indicate the predominance of factors linked to performance and competition.

Taking into account the benefits associated with sports practice in adolescence, it is necessary to study the motivation of young people to practice sports, which could contribute to help parents, coaches and teachers to promote the individual's long-term commitment with the sports modality.

Therefore, the aim of this study was to identify the motives for sports practice in young soccer and volleyball athletes, according to sex, age, family economic class, practice time in the sport and competitive level.

METHODOLOGICAL PROCEDURES

Intentionally, 188 young athletes, 56 female volleyball athletes and 132 male soccer athletes, aged between 10 and 16 years were selected for the study, members of city teams from Cambé/PR and Londrina/PR.

Parents and guardians were informed about the study objectives and procedures and signed a Free Informed Consent Form (IC) allowing the athletes to participate in the study. The inclusion criteria were that the athletes be present on the day of data collection and deliver the IC signed by a parent or guardian. Athletes who did not return the signed informed consent were excluded from the study. The study was approved by the Ethics Committee of the State University of Londrina in accordance with the norms of the National Health Council, Resolution 466/12, on research involving human subjects (opinions CEP/UEL 007/2014; CEP/UEL 070/2012).

The family economic class was estimated using the instrument proposed by the Brazilian Association of Research Companies[22]. This form allows the categorization of subjects into the classes A1, A2, B1, B2, C, D and E; from information on the quantity of certain items that the family has in their home and the educational level of the household head. The subjects were stratified into economic classes A (A1 and A2), B (B1 and B2), C and D.

Information relating to the motives for sports practice were obtained by applying the *Participation Motivation Questionnaire* (PMQ), translated, adapted and validated for use in the young Brazilian population (Kaiser-Meyer-Olkin = 0,930 e Bartlett χ^2 = 17003,867) $p < 0,001$, pointing to

the legitimacy of the factor analysis[23]. The PMQ was originally designed in the English language[24].

The PMQ is a questionnaire comprising 30 items equivalent to a list of possible motives that may lead young athletes to practice sports, grouped into eight motives factors: (1) social recognition; (2) group activity; (3) physical fitness; (4) emotion; (5) competition; (6) technical competence; (7) affiliation; and (8) enjoyment with the respective values of internal consistency 0,827, 0,790, 0,753, 0,744, 0,722, 0,693, 0,640 and 0,543. The amplitude of variation between the highest scores (0.827) and the lowest (0.543) was lower than the original version of the PMQ (0.78 and 0.30, respectively), demonstrating a better balance between the motivation factors of the translated version for the Portuguese language. The possible justifications for these findings may be related to the differences in the scoring scale used in both versions of the PMQ and the characteristics of the samples selected in each study[23].

In the original version, a three-point scale was used, whereas in the translated version of the PMQ, a five-point scale was used (1 = "not at all important" to 5 = "very important"); therefore, with a greater discriminatory capacity in their responses. Regarding the characteristics of the samples selected in each study, the PMQ was originally applied to young people engaged in summer vacation programs involving sports in a leisure setting (Iowa Summer Sports School). In our study the athletes were in a high level of competition, participating in the final stage of the Paraná Youth Games, the main state competition for young athletes aged ≤ 18 years. Therefore, it is possible that the contexts in which both studies were performed may have defined differences regarding the profile of interest in sports practice[23].

To classify training time, training frequency, duration of training sessions and competitive level, a questionnaire with the following questions was attached to the PMQ: How long have you been practicing this modality? How many times a week do you practice these? How many hours of training per day do you practice the sport? What level of competition do you and your team participate in? For the training time the athletes were categorized in: ≤ 2 years, 3-4 years, 5-6 years and ≥7 years. Training frequency: 2 times/week, 3-4 times/week, ≥5 times/week. Duration of training sessions: 1h/session, 2-3h/session and 4h/session.

The measuring instrument was applied at a single moment pre-game, individually to each young athlete by the same researcher. The young athletes received the instrument together with instructions and recommendations for filling it out; no time limit was set for its completion. Any doubts expressed by the participants were promptly cleared up by the researcher who accompanied the data collection.

Data analysis

Initially the assumptions were tested: equality of variances of the error and angular coefficient using the *Levene's* test. As the assumption was

met, it was followed by Analysis of Covariance (ANCOVA *one-way*) followed by the multiple comparison test proposed by *Bonferroni*. The data were presented as percentage frequency, mean and standard deviation. The significance level adopted for all analyzes was P <0.05. The data were analyzed using SPSS software, version 20.0.

RESULTS

The characteristics sex, age, economic class, training history and competitive level of the young athletes included in the study are described in Table 1.

Table 1. Characteristics of the young athletes analyzed in the study.

	Volleyball Girls (n=56)	Soccer Boys (n=132)	All (n=188)
Age			
10-11 years	3 (5.4%)	12 (9.1%)	15 (8.0%)
12-14 years	35 (62.5%)	53 (40.2%)	88 (46.8%)
≥ 15 years	18 (32.1%)	67 (50.8%)	85 (45.2%)
Economic Class			
Class A	17 (30.4%)	29 (22.0%)	46 (24.4%)
Class B	34 (60.6%)	57 (43.2%)	91 (48.4%)
Class C	4 (7.2%)	39 (29.5%)	43 (22.9%)
Class D	1 (1.8%)	7 (5.3%)	8 (4.3%)
Training Time			
≤ 2 years	30 (53.5%)	10 (7.7%)	40 (21.1%)
3-4 years	17 (30.4%)	27 (20.5%)	44 (23.4%)
5-6 years	09 (16.1%)	30 (22.6%)	39 (20.7%)
≥7 years	-	65 (49.2%)	65 (34.6%)
Training Frequency			
2 times/week	31 (55.4%)	17 (12.9%)	48 (25.5%)
3-4 times/week	23 (41.1%)	62 (47.0%)	85 (45.2%)
≥5 times/week	02 (3.6%)	53 (40.1%)	55 (29.2%)
Duration of Training Sessions			
1h/session	-	16 (12.1%)	16 (8.5%)
2-3h/session	56 (100.0%)	115 (87.1%)	171 (91.0%)
4h/session	-	01 (0.8%)	01 (0.5%)
Competitive Level			
Regional	54 (96.4%)	32 (24.2%)	86 (45.7%)
National	02 (3.6%)	100 (75.8%)	102 (54.3%)

In the frequency analysis of the sample evaluated, 50.8% was aged 15 years or older; 43.2% were classified within the family class B and only 5.3% in the class D; regarding to training time in sports, 49.2% were training for 7 or more years; 47.0% had a weekly training frequency of 3-4 times; 87.1% reported that training lasting two hours per session and 75.8% of athletes participating in competitions of nationality.

Figure 1 presents the values corresponding to each motive factor for sports practice reported by the young athletes. By observing the mean

values for each motive factor, it is apparent that the most important factor was characteristic of the motivating contexts related to "Technical Competence" (4.52 ± 0.54). The least important factors were characteristic of the motivating contexts related to "Social Recognition" (3.80 ± 0.81), "Enjoyment" (3.77 ± 0.84), "Affiliation" (3.75 ± 0.90) and "Emotion" (3.62 ± 0.83). The other three motives factors were in an intermediate position: "Competition" (4.30 ± 0.73), "Group Activity" (4.29 ± 0.71) and "Physical fitness" (4.25 ± 0.64).

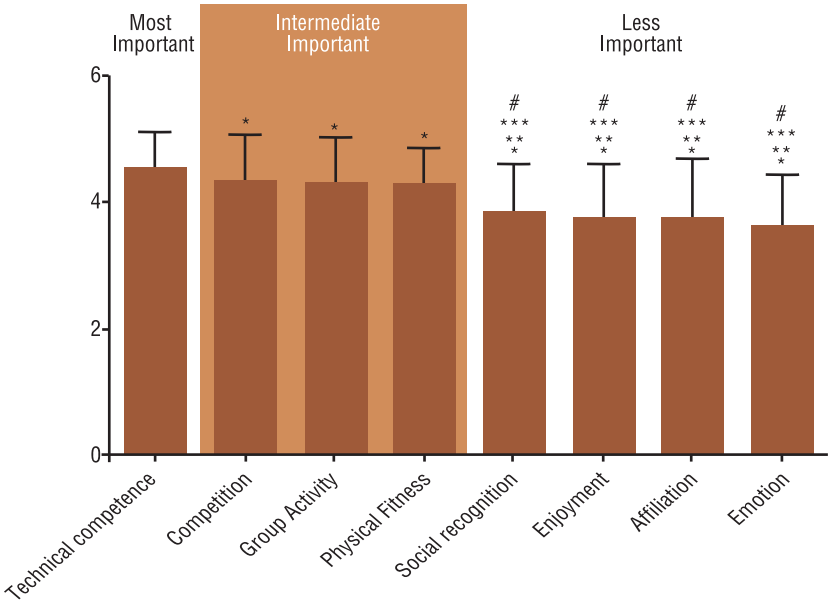

Figure 1. Motives factors for sports practice of young athletes (n=188) by applying Participation Motivation Questionnaire (PMQ).
Notes: * p < 0.05 vs Technical competence; ** p < 0.05 vs Competition; *** p < 0.05 vs Group Activity; # p < 0.05 vs Physical Fitness

The results of the covariance analysis, controlling for age (14,52 years), demonstrated statistically significant differences in all motives factors for both modalities. In this case, the soccer athletes attached greater importance for sports practice to all factors: "Social Recognition" (F = 31.162, P = <0.0001); "Group Activity" (F = 15.692, P = <0.0001); "Physical Fitness" (F = 15.957, P = <0.0001); "Emotion" (F = 18.533, P = <0.0001); "Competition" (F= 9.399, P= 0,002), "Technical Competence" (F = 15.887, P = <0.0001); "Affiliation" (F = 46.256; P = <0.0001) and "Enjoyment" (F = 14.033; P = <0.0001), compared to the volleyball athletes.

Table 2 presents statistical information on the motives factors for sports practice of young athletes according to sex. The results of the analysis of covariance demonstrated that the young volleyball and soccer athletes demonstrated a different order of importance for the motives factors for sports practice. On one hand, the boys indicated "Technical Competence" (4.62±0.47), "Competition" (4.41±0.70) and "Group Activity" (4.42±0.67) as the most important, while the girls indicated "Technical Competence" (4.29±0.65)," Competition "(4.05±0.76) and "Group Activity" (4.0±0.75).

Table 2. Motives factors for sports practice of young athletes (n=188) according to sex.

Motives Factors	Girls (n=56)		Boys (n=132)		F	P	Partial eta²
	Mean	SD	Mean	SD			
Social recognition	3,34	0,88	3,99	0,71	31,162	0,000	0,144
Group activity	4,00	0,75	4,42	0,67	15,692	0,000	0,078
Physical fitness	3,98	0,64	4,36	0,61	15,657	0,000	0,078
Emotion	3,25	0,69	3,78	0,84	18,533	0,000	0,091
Competition	4,05	0,76	4,41	0,70	9,399	0,002	0,048
Technical Competence	4,29	0,65	4,62	0,47	15,887	0,000	0,079
Affiliation	3,15	0,72	4,01	0,86	46,256	0,000	0,200
Fun	3,45	0,78	3,91	0,84	14,033	0,000	0,070

Note. SD= Standard Deviation.

Statistical information on the motives factors for sports practice of young athletes according to age is presented in Table 3. The results of the covariance analysis indicated no statistically significant differences between the motives factors for sports practice according to the age of the young athletes analyzed in the study.

Table 3. Motives factors for sports practice of young athletes (n=188) according to age.

Motives factors	AGE (years)						F	P	Partial eta²
	10-11 (n=15)		12-14 (n=88)		>15 (n=85)				
	Mean	SD	Mean	SD	Mean	SD			
Social recognition	4,22	0,61	3,81	0,84	3,71	0,81	1,156	0,317	0,012
Group activity	4,58	0,45	4,25	0,75	4,29	0,72	1,159	0,316	0,012
Physical fitness	4,57	0,41	4,20	0,69	4,24	0,61	2,171	0,117	0,023
Emotion	3,96	0,78	3,66	0,92	3,52	0,74	1,786	0,171	0,019
Competition	4,53	0,55	4,21	0,76	4,36	0,73	1,711	0,184	0,018
Technical Competence	4,69	0,39	4,52	0,52	4,49	0,59	0,304	0,738	0,003
Affiliation	4,18	0,72	3,73	0,91	3,70	0,92	1,149	0,319	0,012
Fun	4,27	0,50	3,78	0,87	3,67	0,85	1,413	0,246	0,015

Note. ANCOVA; Bonferroni multiple comparisons. SD= Standard Deviation.

Table 4 presents statistical information on the motives factors for sports practice of young athletes according to family economic class and training time. The results of the analysis of covariance demonstrated that only the motivational factors "Social Recognition" and "Group Activity" differed between classes A, B and C; whereby class C presented higher values (4.20 ± 0.52) for the "Social Recognition" factor compared to classes A (3.65 ± 0.83) and B (3.68 ± 0.88); and for the factor "Group activity", class C presented a higher value (4.60 ± 0.49) compared to class B (4.12 ± 0.79).

Regarding the training time in the sport, through the information presented in Table 5, it can be observed that athletes with training time ≤ 24 months assigned less importance to the motives factors related to "Group Activity" (F = 3.516, P = 0.016) when compared to ≥73 months and "Affiliation" (F = 3.228; 0.024) when compared to athletes with practice times between 25-48 months and ≥73 months.

Table 5 presents statistical information on the motives factors for sports

practice, according to the competitive level of young athletes. Statistically significant differences were found for seven motives factors with the exception of "Competition" between categories of competition, in which athletes with experience in regional competitions allocated less importance to factors related to "Social Recognition" (F = 12.124, p = 0.000); "Group Activity" (F = 5.980; p = 0.003); "Physical Fitness" (F = 4.571; p = 0.012); "Emotion" (F = 3.804; p = 0.024); "Technical Competence" (F = 3.062; p = 0.049); "Affiliation" (F = 7.047; p = 0.001) and "Enjoyment" (F = 9.444, p = 0.000), when compared to athletes with experience in national competitions.

Table 4. Motives factors for sports practice of young athletes according to family economic class and training time.

Family Economic Class											
Motives factors	A (n=46)		B (n=91)		C (n=43)		D (n=08)				
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F	P	Partial eta²
Social recognition	3,65 [a]	0,83	3,68 [a]	0,88	4,20 [a]	0,52	3,84	0,66	5,206	0,002	0,080
Group activity	4,33	0,71	4,12 [b]	0,79	4,60 [b]	0,49	4,44	0,53	4,800	0,003	0,074
Physical fitness	4,32	0,62	4,17	0,69	4,36	0,54	4,16	0,65	1,255	0,292	0,020
Emotion	3,74	0,82	3,58	0,83	3,58	0,89	3,71	0,79	0,465	0,707	0,008
Competition	4,30	0,72	4,26	0,79	4,41	0,61	4,25	0,85	0,378	0,769	0,006
Technical Competence	4,53	0,58	4,43	0,59	4,69	0,41	4,58	0,30	2,192	0,091	0,035
Affiliation	3,78	1,01	3,68	0,92	3,95	0,71	3,33	1,01	1,714	0,166	0,028
Enjoyment	3,80	0,90	3,65	0,88	4,03	0,68	3,53	0,80	2,227	0,087	0,036
Training Time (months)											
Motives factors	Group 1 ≤24 (n=40)		Group 2 24-48 (n=44)		Group 3 49-72 (n=39)		Group 4 ≥73 (n=65)				
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	F	P	Partial eta²
Social recognition	3,56	0,92	3,74	0,96	3,76	0,68	4,00	0,67	2,222	0,087	0,036
Group activity	4,01[c]	0,83	4,25	0,78	4,50	0,62	4,38[c]	0,61	3,516	0,016	0,055
Physical fitness	4,10	0,69	4,22	0,73	4,36	0,54	4,29	0,6	1,069	0,363	0,018
Emotion	3,29	0,78	3,67	0,88	3,68	0,8	3,75	0,83	2,568	0,056	0,041
Competition	4,10	0,83	4,32	0,63	4,55	0,59	4,27	0,79	2,466	0,064	0,039
Technical Competence	4,43	0,61	4,55	0,52	4,50	0,58	4,56	0,51	0,280	0,840	0,005
Affiliation	3,43[d]	0,85	3,69	1,05	3,79[d]	0,84	3,97[d]	0,82	3,228	0,024	0,051
Enjoyment	3,70	0,80	3,68	1,00	3,81	0,76	3,85	0,83	0,558	0,644	0,009

Note. ANCOVA; Bonferroni multiple comparisons; Adjusted for age = 14.52. a = C>A and B; b = C> B; c = Group 1 < Group 4; d = Group 1 < Group 3 and Group 4. SD= Standard Deviation.

Table 5. Motives factors for sports practice of young athletes, according to competitive level.

Motives Factors	Regional (n=86)		National (n=102)		F	P	Partial eta²
	Mean	SD	Mean	SD			
Social recognition	3,48*	0,84	4,08	0,68	12,124	0,000	0,118
Group activity	4,08*	0,74	4,49	0,65	5,980	0,003	0,062
Physical fitness	4,06*	0,63	4,41	0,62	4,571	0,012	0,048
Emotion	3,42*	0,78	3,80	0,85	3,804	0,024	0,040
Competition	4,15	0,78	4,45	0,67	2,764	0,066	0,030
Technical Competence	4,40*	0,61	4,63	0,47	3,062	0,049	0,033
Affiliation	3,44*	0,89	4,02	0,84	7,047	0,001	0,072
Enjoyment	3,45*	0,82	4,04	0,77	9,444	0,000	0,094

Note. ANCOVA; Bonferroni multiple comparisons; Adjusted for age = 14.52. SD= Standard Deviation.
* = p < 0,05. Source: Own source.

DISCUSSION

The aim of our study was to identify the motives for sports practice in young soccer and volleyball athletes, according to sex, age, family economic class, practice time in the sport and competitive level. The results demonstrated that, in general, "Technical Competence" was the primary motive factor reported by young athletes for sports practice. The adolescents indicated that when practicing sports, they were essentially seeking improvement and maintenance of their technical skills and the ability to confront the challenges required in competitions. Previous studies with young people from different social contexts presented similar results, in which the factor "Technical Competence" was the most important[13,15]. These findings should not be regarded as surprising, since it is understandable that young athletes, from the beginning of their sports practice, give preference to factors related to sports success, since the establishment of future goals has been pointed out as the most determining reason for professional athletes when compared with non-professionals[25].

As factors with intermediate significance, the athletes indicated "Competition", "Group Activity" and "Physical Fitness". The fact that the athletes reported "Group Activity" as one of the intermediate important factor may be related to the sports analyzed being practiced collectively, which entails much more group contact compared to individual sports; the choice of "Physical Fitness", in turn, could demonstrate that young people are always looking to better performance[11].

Regarding "Social Recognition", in another study it was also identified as of little importance to young people[26]. In the present study, the "Enjoyment" factor may have been understood by the young athletes only as something related to the "fun"[23] and therefore to be classified with intermediate importance. Contrary to literature, which demonstrates that "Enjoyment" as one of the main reasons for continuity in sport[27] as the lack of "Enjoyment" contributes to sports dropout[28]. In the present study, 21.1% of the total sample has a practice time equal or less than two years in the modality, which may explain the results found for the "Enjoyment" factor.

When the young athletes were stratified according to sex, the boys assigned significantly higher importance to all motivating factors. Observing the table 2, the boys selected "Technical Competence", "Group Activity" and "Competition" as the three most important factors for the practice of soccer while the girls chose "Technical Competence", "Competition" and "Group Activity". Thus, it is clear that both boys (soccer) and girls (volleyball) demonstrate similar importance regarding motivating factors, differing only in the order of importance of these factors. These findings concur with those found in the literature which report that girls identify with social motives and living in groups, as opposed to boys who value challenges and improving their technique[17]. Moreover, it has been noted that males go through a more rigorous competitive process, resulting from a highly competitive male society[20]. Moreover, the factor "Technical

Competence" is important for both volleyball and soccer athletes, as young people seek to perform as efficiently as possible in order to stand out within the sport and quickly achieve a high level.

Regarding the age of the young athletes, there were no statistically significant differences between age groups, although, in study with older athletes it was verified statistical difference between the age groups[23]. The small variation in the age range of the sample (10-16 years) may be one of the reasons why there were no significant differences between the motivation factors and the age groups of the present study. In addition, it is noted that the athletic behavior of young athletes can be influenced by socio-environmental factors, and in this study the young athletes are inserted in the same sports practice of the same city, a place of training, which may reduce the possible differences in the perception of motivation in this context the needs and desires of the group[29].

With regard to the family economic class, the young people classified in class C gave greater significance to "Social Recognition" compared to classes A and B; and greater significance to "Group Activity" compared to class B. It is assumed that lower economic classes of young people attach more importance to factors that may lead them to greater upward social mobility within the sport[23].

When considering the reasons for practicing sport with regard to the practice time in the sport, it was found that young athletes with practice time ≤ 24 months reported statistically significant less importance to the factors "Group Activity" compared to athletes with practice time ≥ 73 months; and less statistically significant importance to the factor "Afiliation" when compared to athletes with practice time between 49-72 months and ≥ 73 months. These findings may demonstrate that with longer practice in the sport, the athletes begin to attach greater importance to aspects related to social approval, the pursuit of prestige, personal growth, self-realization and intrinsic components potentially related to the impulse of their own desire[30].

Finally, regarding the motives factors according to the level of competition, it was identified that young athletes who classified that "regional" demonstrated less importance to the seven motives factors, except for "Competition", when compared to "national" level athletes. The literature presents evidence that athletes, regardless of the level of competition or sport category, attribute less importance to the competition factor[25], since it is totally consistent that this population has preference for reasons that relate to success in the sporting context[11]. These findings may demonstrate that the greater the competitive level of most athletes, the greater importance given to motives factors to practice the sport, especially the attributes related to "Technical Competence" and "Group Activity" which affirm their will to achieve greater notoriety within the sport.

It is important to point out that this study has some limitations that should be taken into account when analyzing the results: the generalization of the results is limited, since we selected only one sample of athletes from the Londrina/PR region and thus it is not clear whether the findings

of this study represent other populations of athletes. As this was a cross-sectional study, it is not appropriate to establish a causal link between the motives for sport practice, however, the results point to a possible trend in the motivational factors for practicing sport in young Brazilian athletes.

However, the study contributes with results that can be understood as exploratory and may assist future investigations directed at exploring this issue more deeply with follow-up studies, in addition to a potential contribution to sports professionals and technicians involved in the modalities in question.

Finally, it is worth mentioning the need for future longitudinal studies in order to gain a better understanding of the motivational factors for sports practice over time and the impact of age and sociodemographic characteristics during periods of training and competition. Moreover, it would be interesting to know how athlete motives might impact goal progress and attainment in training and competition, and how coaches might help facilitate optimal goal striving toward multiple goals.

CONCLUSION

The young athletes participating in the study were demonstrated to be motivated to practice sport, particularly for reasons of self-accomplishment, improvement in technical skills and overcoming challenges, as the most commonly reported motives factors by the athletes were related to "Technical Competence" and "Competition". Important relation with family economic class, practice time and competitive level were also identified in the motives factors for the practice of sports.

COMPLIANCE WITH ETHICAL STANDARDS

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Ethical approval

Ethical approval was obtained from the local Human Research Ethics Committee – State University of Londrina, and the protocol was written in accordance with the standards set by the Declaration of Helsinki.

Conflict of interest statement

The authors have no conflict of interests to declare.

Author Contributions

Conceived and designed the experiments: HSJ. Performed the experiments: MROB. Analyzed the data: LRPD. Contributed reagents/materials/analysis tools: ERVR. Wrote the paper: LZV.

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CORRESPONDING AUTHOR

Lidyane Zambrin Vignadelli
Physical Activity and Health Laboratory - Room 920
Center for Physical Education and Sports
State University of Londrina
Rod Celso Garcia Cid - PR 445 Km 380. CEP 86055-900 - Londrina - PR - Brazil
E-mail: lidyzambrin@yahoo.com.br