

MOTIVATIONAL FACTORS FOR ADULT AMATEUR VOLLEYBALL ATHLETES**FATORES MOTIVACIONAIS DE ATLETAS DE VOLEIBOL AMADOR ADULTO**

Ellen Aniszewski¹, José Henrique¹, Gabriela Simões Silva¹, Guilherme Mascimiano¹, Thaísa Alves Penna², and Aldair José Oliveira¹

¹Federal Rural University of Rio de Janeiro, Seropédica-RJ, Brazil.

²Salgado de Oliveira University, São Gonçalo-PR, Brazil.

ABSTRACT

Volleyball is one of the most popular recreational and competitive sports in the world. The aim of this study was to investigate the main factors that motivate amateur volleyball players and to determine whether they differ between sexes. The sample consisted of 200 athletes, with a mean age of 26.5 ± 5.5 years, from amateur teams of the adult category who participated in the Rio de Janeiro State Volleyball League, being 100 men ($25,8 \pm 5,4$) and 100 women ($27,1 \pm 5,6$). The Participation Motivation Questionnaire (PMQ), adapted and validated for Brazil, was used for this purpose (Barroso, 2007). The results indicated that affiliation, health, technical improvement and physical conditioning are the most important factors for practitioners. Thus, the predominance of intrinsic self-regulated motives was evident, which contribute to lasting links with sports practice.

Keywords: Motivation. Self-determination theory. Volleyball.

RESUMO

O voleibol é um dos esportes mais populares do mundo, praticado tanto de forma recreativa quanto competitiva. O objetivo desta pesquisa foi investigar os principais fatores que motivam os praticantes do voleibol amador de caráter competitivo, bem como investigar se diferem em função do sexo. A amostra foi composta por 200 atletas, com média de idade $26,5 \pm 5,5$ anos, de equipes amadoras, da categoria adulto, participantes da Liga de Voleibol do Estado do Rio de Janeiro, sendo 100 homens ($25,8 \pm 5,4$) e 100 mulheres ($27,1 \pm 5,6$). Para isso, recorreu-se à Escala de Motivos para a Prática Esportiva (EMPE), adaptada e validada no Brasil (Barroso, 2007). Os resultados indicaram que a Afiliação, Saúde, Aperfeiçoamento Técnico e Condicionamento Físico são os fatores mais relevantes para os praticantes. Assim, evidenciou-se a predominância de motivos de ordem intrínseca autorregulada, que destacam para vínculos duradouros com a prática esportiva.

Palavras-chave: Motivação. Teoria da autodeterminação. Voleibol.

Introduction

Physical activity can reduce the risk of developing different chronic non-communicable diseases such as stroke, high blood pressure, type 2 diabetes, and obesity¹, in addition to positively influencing mental health². Practicing sports helps reduce anxiety and stress and increase energy expenditure and respiratory capacity³.

Volleyball is one of the most popular sports in the world that can be performed recreationally or competitively⁴. This modality does not require direct contact between opponents and allows the participation of different age groups in the same teams, providing an opportunity for practitioners to develop collective spirit and sociability. According to Arruda and Sandoval⁵, more than 800 million people practice volleyball around the world, with approximately 15 million practicing in Brazil. A decade later, Koerbes and Rother⁶ indicate that volleyball is one of the most practiced sports in the country.

Although professional volleyball still enjoys greater popularity, a significant number of adults working in different fields practice amateur volleyball in their leisure time. This practice has different physical and psychological determinants. Among the psychological determinants, motivation should be highlighted, which is responsible for the direction, intensity and persistence of individuals in a sport and is the main source of sport and personal success; thus, motivation must be maintained permanently⁷. Among the different topics of sport psychology, motivation has been extensively investigated in different sports and populations⁸.

Motivation can be conceptualized as the cause of a behavior, an inner force, impulse or intention that leads an individual to act in a certain way or to do something, i.e., the reasons behind human action and behavior⁹. In addition, motivation comprises a set of factors capable of energizing and sustaining behavior and can arise from internal and/or external sources. When related to sport, motivation becomes important in situations in which it triggers an action or sustains an activity. Motivation is the combination of social, environmental and individual variables that determine the choice of a sport modality and its intensity and is decisive for performance. Within this context, little scientific information about the factors that motivate the participation in competitive sports is available for amateur athletes when compared to elite athletes.

There are different theoretical approaches to investigate motivation. One such approach is the Self-Determination Theory (SDT), which is the most widely used theoretical approach to assess motivational factors in sports and physical activity¹⁰, as well as in school physical education¹¹. This theory highlights the importance of individuals' self-regulatory role in their behavior, i.e., subjects are responsible for their actions, establishing a relationship between self-determined behaviors and the propensity to participate in activities of the chosen discipline and/or sport.

In sports activities, specifically competitive activities in which individuals are driven to high levels of demand, motivational factors are of paramount importance. Thus, what motivates people to start, persist in or abandon physical activity becomes the object of investigation^{12,13}. Within this context, team sport activities are particularly interesting because, although not free of criticism, they are the predominant modality in school curricula that form social individuals and undoubtedly have kinesthetic, playful, agonistic and moral attributes that influence the behavior and development of the human being^{6,14}.

With regard to competitive volleyball, some studies on motivation have reported the reasons for participation, such as the teaching approach focusing on the individuality of students¹⁵, fun-related pleasure, and participation in activities with friends, as well as enjoyment and health¹⁶. Within this context, a study conducted on elite volleyball athletes from six countries observed that autonomous motivation acts as a mediator in the relationship between the perception of an empowering climate generated by the coach and the enjoyment reported by the athletes¹⁷. Another study evaluated the motivation of 24 male and female athletes of two volleyball teams from a city in northwestern Paraná, Brazil. The results indicated a good motivation index of the two teams. The authors concluded that the coach influences motivational factors of the teams, with both teams showing extrinsic and intrinsic motivation¹⁵.

The lack of studies investigating the motivation of male and female amateur athletes from the perspective of the SDT highlights the need for research on motivation in amateur volleyball. Therefore, the aim of this study was to investigate the main factors that motivate amateur volleyball players and to determine whether these motivational factors differ between male and female athletes.

Methods

Study design and sample

This is a quantitative, descriptive, cross-sectional study involving male and female athletes from adult amateur indoor volleyball teams enrolled in the Rio de Janeiro Volleyball League (LIVERJ) in 2018. Athletes aged 18 to 39 years were included. Subjects with an incomplete questionnaire or inconsistent responses were excluded. The convenience sample consisted of 200 adult amateur athletes with a mean age of 26.5 ± 5.5 years, being 100 men ($25,8 \pm 5,4$) and 100 women ($27,1 \pm 5,6$).

The study was approved by the Ethics Committee of a public university in the State of

Rio de Janeiro (approval number 1.028/17). The athletes agreed to participate in the study by signing the free informed consent form.

Procedure

The study was conducted during LIVERJ competitions on May 20 and 27, June 24, and July 1 and 8, 2018. The questionnaire was applied by previously trained researchers after the end of each team's game as soon as all team members were gathered. The questionnaire addressed sociodemographic and motivational variables, as well as questions regarding volleyball practice. The average time to complete the questionnaire was approximately 8 minutes.

Instruments

The Participation Motivation Questionnaire (PMQ), adapted and validated for use in Brazil by Barroso¹⁸, was used to measure motivation. The EMPE is composed of 33 questions and assesses the following seven motivational domains: status, physical conditioning, energy, context, technical improvement, affiliation, and health. An interval scale of 11 points (0 to 10) was used to measure the responses. Considering that each item belongs to a single domain, the sum of points of the items of each domain were divided by the number of items belonging to the domain, thus obtaining the mean scores. The scores were classified as follows: not at all important (0 to 0.99); slightly important (1 to 3.99); important (4 to 6.99); very important (7 to 9.9), and extremely important (10). The analysis of internal consistency of these factors of the EMPE revealed a Cronbach alpha ranging from 0.74 to 0.88. A high correlation coefficient ($r > 0.80$) was obtained in the test-retest at an interval ranging from 7 to 21 days, characterizing a strong temporal stability of the instrument.

The questionnaire with demographic data, prepared by the researchers, included characteristics such as age (years) and duration of sports participation (months), considered important for analyzing the data obtained.

Data analysis

The data were analyzed using descriptive (mean, standard deviation, frequency, minimum, and maximum) and inferential statistics. After evaluating the assumptions for the parametric treatment of the data, we chose to use nonparametric statistical tests (Scheirer-Ray-Hare test). Additionally, the Bonferroni post hoc test was applied for multiple comparisons. The R 3.5.2. software was used for all calculations and a level of significance of 5% was adopted.

Results

The results indicated that all factors were classified as "very important". Table 1 shows the mean, minimum and maximum domain scores of the motivation scale, as well as the age and duration of sports participation of the athletes.

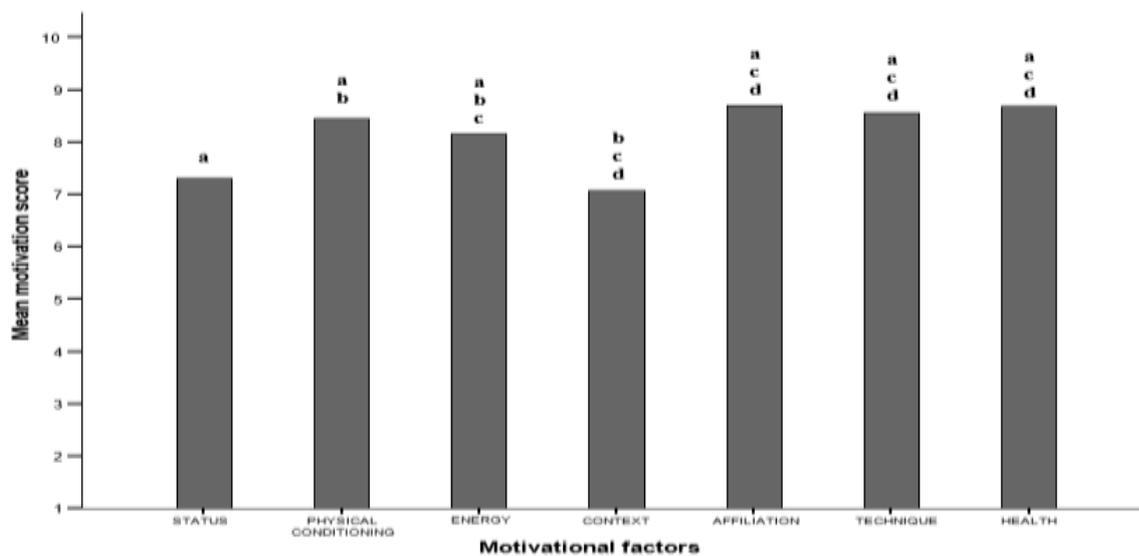
Table 1 Demographic and motivational characteristics of the sample

| Variable | Total (n=200) | | | | Men (n=100) | | | | Women (n=100) | | | |
|--|------------------|--------|---------|---------|----------------|--------|---------|---------|------------------|--------|---------|---------|
| | Mean | S D | Mi n | Ma x | Mea n | S D | Mi n | Ma x | Mea n | S D | Mi n | Ma x |
| Age (years) | 26.5 | 5.5 | 18 | 39 | 25.8 | 5.4 | 18 | 39 | 27.1 | 5.6 | 18 | 39 |
| Duration of sports participation (months) | 12.6 | 6.2 | 0.1 | 31.6 | 11.1 | 6.2 | 0.1 | 29 | 14.1 | 5.9 | 0.1 | 31 |
| Motivational factors score | | | | | | | | | | | | |
| Status | 7.3 | 1.9 | 1.7 | 10 | 7.3 | 1.9 | 1.8 | 10 | 7.3 | 2.0 | 1.7 | 10 |
| Physical conditioning | 8.4 | 1.6 | 1 | 10 | 8.3 | 1.8 | 1 | 10 | 8.5 | 1.5 | 3 | 10 |
| Energy | 8.1 | 1.4 | 3.1 | 10 | 8.0 | 1.5 | 3.3 | 10 | 8.3 | 1.3 | 3.1 | 10 |
| Context | 7.0 | 1.9 | 0.2 | 10 | 7.3 | 1.8 | 1.2 | 10 | 6.8 | 2.1 | 0.2 | 10 |
| Affiliation | 8.7 | 1.3 | 4 | 10 | 9.8 | 1.3 | 4 | 10 | 9.8 | 1.3 | 5 | 10 |
| Technical improvement | 8.5 | 1.5 | 2.2 | 10 | 8.2 | 1.8 | 2.2 | 10 | 8.8 | 1.0 | 5.5 | 10 |
| Health | 8.6 | 1.8 | 0 | 10 | 8.6 | 1.8 | 0 | 10 | 8.7 | 1.7 | 0 | 10 |

Note: number of participants; SD: standard deviation; Min: minimum; Max: maximum.

Source: the authors.

Regarding the inferential results, comparison of all motivation domains showed a significant difference ($p < 0.001$) between motivational factors but not between sexes. Additionally, Bonferroni's post hoc test identified significant differences ($p < 0.05$), which are shown in Figure 1.

**Figure 1.** Comparison of motivational factors for practice

Note: Multiple comparisons using Bonferroni's post hoc test, with a significant difference at $p < 0.05$. **a:** Significant difference between status and physical conditioning ($p < 0.001$), energy ($p < 0.05$), affiliation ($p < 0.001$), technical improvement ($p < 0.001$), and health ($p < 0.001$). **b:** Significant difference ($p < 0.001$) between physical conditioning and energy and context. **c:** Significant difference between energy and context ($p < 0.001$), affiliation ($p < 0.001$), technical improvement ($p < 0.05$), and health ($p < 0.001$). **d:** Significant difference ($p < 0.001$) between context and affiliation, technical improvement and health.

Source: the authors.

There was no significant difference between the motivational factors affiliation, health, technical improvement and physical conditioning, but their scores were significantly higher than those obtained for context, status and energy. The score for energy score was significantly higher than those obtained for context and status. Finally, the differences between the context

and status scores were not significant. No significant differences in domain scores were observed between men and women in the sample.

Discussion

The high mean scores obtained for most of the motivational domains indicate the importance of the motivational factors evaluated for the amateur volleyball players studied. Considering that all motivational factors were classified as “very important”, the most expressive factor was affiliation, followed by health, technical improvement, physical conditioning and energy. The least important domains were status and context. In general, the different motivational domains are of great importance for the practice of volleyball. Although the general result indicated the importance of all factors, affiliation, health, technical improvement and physical conditioning did not differ from each other and exhibited the highest scores, in addition to significantly differing from the other domains (energy, status, and context). Therefore, according to the hierarchy of the participants’ answers, the adherence/maintenance of amateur athletes to volleyball is the result of extrinsic and social factors – affiliation, and ego-oriented intrinsic factors – health, technical improvement and physical conditioning¹⁸. According to the taxonomy of human motivation, these factors are considered to be self-determined due to the immanence with the autonomy of the human being¹⁹.

Studies involving volleyball practitioners/athletes of age groups similar to the present study have reported similar results regarding the factors (affiliation, health, technical improvement and physical conditioning) most valued by volleyball players. In the study by Marins, Voser and Silva²⁰, master athletes aged 37 to 55 years attributed greater importance to aspects related to health, affiliation, physical conditioning and energy release, in that order. Also investigating master athletes, Fontana, Araujo, Paixao and Madrid²¹ identified health, physical conditioning, affiliation and technical improvement as very important factors. In the study by Batista, Leite, Bacelar, Teixeira and Bruzi²² with university volleyball athletes, the variable correlated with physical conditioning was a determinant factor for maintenance in the sport, while low family affiliation was one of the reasons for abandoning the modality. In the study conducted by Barcelona and Sanfelice²³ evaluating Argentine athletes aged 16 to 32 years, the former valued technical development, physical conditioning and affiliation and the latter physical conditioning, technical development and affiliation. Taken together, the reported results indicate the stable occurrence of affiliative, technical and physical factors in the different groups of practitioners, as well as the characteristic aspects of each age group, highlighting status among younger athletes and energy release among adult athletes.

In the present study, no significant difference in motivational factors was observed between sexes. Although few studies have demonstrated this difference, it can be inferred that the motivational levels of adult women to practice amateur volleyball would be higher than that of men because women generally have two important social roles, paid work and domestic work at home, a phenomenon described as double burden²⁴. Thus, it would be coherent to assume that the less leisure time of women would limit their participation in competitive activities, which require time to train and compete; however, this fact does not seem to have influenced the women of this study.

Studies applying the SDT to volleyball in Brazil are still incipient and vary widely in terms of age and level of practitioners and, according to Barroso¹⁸, the instruments used to measure motivation. The results of some of these studies have indicated differences between sexes for some but not all motivational factors^{20,25}. Regarding the comparison of motivation between sexes, the results of the present study therefore corroborate in part those reported in

other studies. The lack of significant differences between the global scores of participants of both sexes indicate that other factors such as social support may interfere with this process²⁶.

The predominant motivational factor among volleyball practitioners in this study was affiliation, which is associated with relatedness, one of the basic psychological needs conceived within the SDT. This factor is related to the individual's willingness to interact, meet new like-minded people, groups and communities, and feel accepted or liked socially. Sports activities enable social interaction; hence, factors present in the social environment that satisfy the needs of social bonds facilitate motivation and are of paramount importance for mental health². Within this context, the social factor is an important promoter of self-esteem since, in adulthood, the level of social participation decreases with advancing age. Therefore, the interaction of adults in social and sports settings can promote self-esteem and self-concept. Batista, Leite, Bacelar, Teixeira and Bruzi²² investigated 143 volleyball athletes who were students at a public university, including 61 men (mean age 21.72 ± 2.46 years) and 82 women (mean age 21.57 ± 3.44 years), and observed that the lack of family support negatively affects motivation and can even lead to the abandonment of sports practice. In the study by Campos, Vigário and Lürdorf²⁵ involving athletes of different categories, affiliation was the third most important factor for volleyball practice in the total sample. Affiliation as a motivational factor denotes stability in different sport modalities and has been shown to be one of the most important factors for indoor soccer and soccer players^{12,18,27,28}, triathlon athletes²⁹, rhythmic gymnastics athletes³⁰, American football players³¹, basketball and handball players²⁷, and judo athletes¹³.

Among the factors classified as very important by the athletes, health was the second most important. This factor is directly related to the benefits of physical activity for physical and mental health. Physical activity on a regular basis contributes to the prevention of chronic non-communicable diseases such as diabetes and high blood pressure¹. Health-related motivation can be considered an intrinsic factor³² since it indicates an integrated and internal regulatory process¹⁹ by perceiving the importance and value of sports practice for health promotion/prevention, unlike extrinsic stimuli that result from social pressures and/or external rewards. The present results corroborate other studies investigating volleyball in different age groups^{20,21,25} and modalities such as triathlon, rhythmic gymnastics, indoor soccer, basketball, handball, judo, and school physical education^{12,13,27,28,29,30}, contexts in which health was found to be the first or second reason for practicing sports.

Technical improvement was the third factor identified as very important in the group investigated. According to the literature, this domain is related to competence, i.e., to the improvement in performing a task³². Within the theory of basic psychological needs, competence refers to a personal feeling of effectiveness and of performing well what is proposed¹¹. Consequently, in this study, as expected for practitioners involved in competitions, improving and perfecting the technique represent factors for the adherence of practitioners to the sport, also indicating that the effort employed in training is linked to the level of sports performance. This fact explains why technical improvement was among the three main factors with the highest mean scores and was characterized as very important. Considering the degree of technical complexity of volleyball compared to other modalities, studies show that this is an essential factor in competitive volleyball, demonstrating that the degree of training and competition increases technical improvement^{18,23}. In the study by Campos, Vigário and Lürdorf²⁵, technical competence was the factor valued by most adolescent volleyball players (69%). It should be noted that technical improvement is frequently observed by coaches, directors and/or coordinators, especially in competitive sports. This factor also indicates consistency in modalities such as women's indoor soccer, American football, rhythmic gymnastics and triathlon^{12,18,27,28,29,30,31} by being classified as a very important factor for the sports practice.

With minimal difference to technical improvement, physical conditioning was the fourth most important reason for the practice of volleyball, which was characterized as intrinsic and ego-oriented³². Classified by the sample of this study as very important, like health, physical condition is a physical domain that lies at the base of the physiological needs of the human being¹⁸. In the majority of studies in the field of volleyball, physical conditioning appears among the three reasons for adherence to the sport^{20,21,22,23,25,27} and/or that are considered very important^{18,25}. In other modalities, physical conditioning also appears among the three main reasons for adherence to the sport such as indoor soccer and soccer^{12,28}. In the study by Maccari²⁷, physical conditioning was the first factor in basketball, handball and indoor soccer, as well as the first factor among amateur practitioners of rhythmic gymnastics³⁰, triathlon²⁹ and American football³¹. The results suggest that participants in more dynamic sports activities that require better physical conditions tend to value physical conditioning to a greater extent. Studies that compared the importance of this factor between sexes are not conclusive; however, it must be taken into account that there are few Brazilian studies on volleyball and these studies are very diverse in terms of duration of sports practice, level of competitiveness and age group. Like the present study, Marins, Voser and Silva²⁰ found physical conditioning to be very important, with no significant differences between sexes. Although Barroso¹⁸ did not report the significance of differences between sex, the values obtained for men and women do not indicate significant differences. In the same study, college volleyball players significantly valued physical conditioning more than handball athletes, while indoor soccer players had significantly higher scores than volleyball players. In contrast, Maccari²⁷ did not find significant differences between the basketball, handball, indoor soccer and volleyball modalities, although university players of the first two modalities exhibited very high scores. In summary, it is plausible to assume that the importance attributed to physical conditioning for adherence to sports practice is related both to the need for competitive performance and to the base support necessary for training, which require persistence for long periods of time in order to acquire the technical skills and tactical behaviors necessary for the game.

Energy release was the fifth most important factor among the athletes investigated, whose score was classified as very important. Energy release is an intrinsic factor related to the subject. It represents the potential for performance and accomplishment of the human being. Within the sport context, this factor is also a manifestation of the activation of psychophysical energy associated with the sports practice as a means of releasing energy in a socially acceptable way. The comparison of studies investigating different types of volleyball practitioners and the hierarchy of factors suggests a greater importance of this factor for master athletes^{20,21} than for infants and young people for whom energy release was of low importance and was among the last reasons for adherence to volleyball^{23,25,27}. Studies that used inferential procedures for comparison between sexes found significant differences in the overall group of young people investigated, as well as in the child category (\cong 16 years), with girls attributing greater value to this factor²⁵, similar to the adults investigated in the study by Marins, Voser and Silva²⁰ in which women also valued energy release more than men. Consistent with reports on motivation in volleyball, studies on other sports seem to confirm that energy release gains greater relevance among adults due to the hierarchy of relevance or the degree of importance attributed to the factor. This factor was the fourth most important among the triathletes investigated by Nazário, Besen, Nobre and Mizoguchi²⁹ (mean age of 32.4 ± 8.9 years), with athletes with more than 5 years of sports practice valuing this factor to a greater extent.

The motivational domain "status" is considered to be an extrinsic factor since it is related to winning prizes, prestige and rewards, indicating that extrinsic reasons are more important than intrinsic reasons in this factor. In the present study, the mean score for the status factor corresponded to the very important classification but differed significantly from the affiliation, health, technical improvement and physical conditioning factors, which were found to be more

consistent because they did not differ. Status and context were the least important variables, in agreement with studies involving different volleyball categories (junior, adult, and master) in which this factor was among the hierarchically least valued^{20,21,23,25,27}. Investigating master athletes, Marins, Voser and Silva²⁰ did not find significant differences between sexes or according to the duration of sports practice. Campos, Vigário and Lürdorf²⁵ also observed no significant differences between sexes or competitive levels in the total sample of athletes. Specifically in the child category, girls significantly valued status to a greater extent than their male peers. Investigating Argentine athletes comprising the age group studied here, Barcelona and Sanfelice²³ found that Status was more important for amateur athletes when compared to those who participated in formal competitions. Maccari²⁷ studied female athletes of different sport modalities. Although volleyball was the modality with the highest scores in status, the author did not find significant differences between modalities or age groups nor according to the duration of sports practice. Barroso¹⁸ investigated 100 male and female athletes from different sport modalities and identified significant differences between them; however, the authors did not explain the magnitude, although men systematically exhibited higher values in the different modalities. The status factor was associated with affiliation, context and influence of family/friends, indicating the need to recognize these athletes in the family and socio-sports environment since they comprise members of the family and sports environment. Complementing the analysis, although status is among the least important motivational factors in other sports, young adult men participating in triathlon, indoor soccer and soccer (observation of a significant difference), as well as in American football, classified it as very important^{29,28,31}. The greater importance attributed by male athletes to status may be related to the prevalence of ego orientation among these individuals. Within this context, with advancing age and the increasing value of physical activity for older individuals, it can be assumed that master athletes are less concerned about this domain because of the greater focus on health^{8,20}.

The context factor, although classified as very important, was the least valued by amateur volleyball players in this study. Context is characterized as an extrinsic factor that refers to the home and training environment, enabling interaction with others, symbols and personal desires¹⁸. Regarding human needs, this factor affects personal safety and is associated with social factors. Thus, in the present study, we interpreted context as a factor linked to the influence of parents and friends, to the relationship with the coach, to enjoying environments, and to the sports equipment available. Barroso¹⁸, Campos, Vigário and Lürdorf²⁵, Marins, Voser and Silva²⁰, and Fontana, Araujo, Paixao and Madrid²¹ identified context as one of the least influential factors in volleyball. The differences between sports are not conclusive. While Maccari²⁷ did not find significant differences between the handball, basketball, indoor soccer and volleyball modalities, between age groups or according to duration of sports participation (the last confirmed by Marins, Voser and Silva²⁰), Barroso¹⁸ observed a significant difference, with most volleyball athletes attributing greater importance to context than basketball athletes. As observed for volleyball athletes, context was the least important reason for triathlon, basketball, male and female indoor soccer and soccer, handball, and American football athletes to adhere to sports practice^{12,27,28,29,31}. This result does not mean that this factor does not influence adherence to sports practice; however, considering the prevalence of the value attributed to intrinsic factors by the athletes, it is plausible that extrinsic reasons have a disadvantage in the hierarchy of the listed factors. Considering the concept of this factor and in line with the results of the present study, these finding may also be due to the individualistic or mature profile of the participants, with the opinion of technicians, parents and friends interfering little with the motivation for the sports practice, as reported by Maccari²⁷.

It should be noted that this study was conducted during a competition and after a team game, a fact that may have influenced the results since individual performance and the team's result in the competition were not controlled in the field research. However, the competitive

period is also important for the study of motivation since it represents the apex of the participation of athletes in a team. Another limitation is the use of a convenience sample, which limits the external validity of the findings.

Conclusion

The factors found to be the most important reasons for volleyball players were affiliation, health, technical improvement and physical conditioning, in this order. That way, the amateur's volleyball athletes showed the predominance of intrinsic, self-regulated reasons that contribute to lasting bonds with the sports practice. Affiliation as the only extrinsic factor demonstrates the importance of social bonds for maintenance of the sports practice at an amateur level, a situation in which volition overlaps financial rewards.

The factors mentioned above differed significantly from the energy release, status and context factors. With the exception of energy release, which is cited occasionally in some studies as an important factor, the present study confirms the lower level of importance attributed by volleyball players and other sports practitioners to reasons related to status and context. This does not allow us to state that these factors do not influence practitioners; however, the literature discussed indicates these factors to be less important.

The present study did not identify significant differences in motivational factors between sexes.

In summary, the present study shows that intrinsic reasons overlap extrinsic reasons, favoring the adherence to and maintenance of amateur volleyball given the stability of self-regulated factors found among the practitioners investigated. The paucity of studies in the field of volleyball to justify the present study from the theoretical perspective of the SDT in the Brazilian context was confirmed. Sports researchers need to deepen their knowledge about the motivational variables that affect the involvement of practitioners in the sport considering mediators such as sex, age group, nature of the bond (professional, amateur, leisure), and the modalities practiced. The incipient evidence and lack of methodological rigor of studies need to be overcome in order to gain knowledge that allows physical education teachers and sport coaches to understand the causes that underlie the adherence to and maintenance of a sport activity, either professional or amateur, among young people and adults.

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ORCID

Ellen Aniszewski: <https://orcid.org/0000-0002-9327-3969>

José Henrique: <https://orcid.org/0000-0002-2159-6611>

Gabriela S Silva: <https://orcid.org/0000-0003-1041-340X>

Guilherme Mascimiano: <https://orcid.org/0000-0003-2403-2464>

Tháisa Alves Penna: <https://orcid.org/0000-0002-9087-5761>

Aldair J Oliveira: <https://orcid.org/0000-0002-2714-0615>

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Corresponding author: Ellen Aniszewski. E-mail: ellanisbr@yahoo.com.br.