

102 - INFLUENCE OF MUSIC ON THE AMATEUR TRAINING OF PRACTITIONERS OF SPINNING

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1. INTRODUCTION

The sedentary lifestyle is one of the factors that affect the health of the general population. The discovery of new forms of physical activities differentiated is arousing the interest of young people and adults. So, in actuality, the Spinning, which is an activity that has brought a large number of supporters. In this sense, it is understood that the Association of music to that sport contributes to providing more pleasure in the execution of the exercise, as well as allows greater interaction between the teacher and the student.

The Spinning is a workout on a stationary bike, held indoors, as gyms and clubs. The activity is characterized by be relaxed from the existing interaction among physical activity, music and teacher incentives. The Spinning room presents several bikes and the teacher at the center of the room, facing the students. Also, a different boarding some up with games of light and smoke resembling the training room to the track of a nightclub, thus making the differentiated activity.

The song is considered by different authors (DOMINGUES FILHO, 2005; SANTOS, 2008; SILVA; OLIVEIRA; FERNANDES FILHO, 2004) as a differentiator for this activity. In addition, the use of music as a marker of time for physical exercise promotes maintenance of effort within the target area for a longer time, and this leads to a better result at the end of the training period.

Domingues Filho (2005) classifies the Spinning as "Indoor cycling" and says that the use of music in the classroom turns engaging in physical exercise in a magical moment that brings pleasure in its realization. Santos (2008) shares the same idea that the music makes the workout more enjoyable.

Given the above, this study intends to descriptive, bibliographical, and conceptualizing the Spinning, describe the different types of training and investigate how music influences the training of practitioners of the sport, physical aspects and socioafetivos.

2. THE HISTORICITY OF SPINNING

According to Silva e Oliveira (2002), the forerunner of the Spinning was Jonathan Goldberg⁶, known as Johnny G. HE initially provided cycling athlete (to maintain the level of training) and also as a teacher of cycling in rainy days, Johnny g. pedaled in the garage of his home. In this way, from the intensification of training and of the positive results obtained, he expanded the activity for your students, training them for this mode, being born so the Indoor cycling (IC). The authors report that the idea of Indoor cycling was propagated, reaching even the Fitness area, which began producing bicycles adapted to the sport. In 1995, the American company Mad Dogs Athletics decided to patent this method of training under the name of "Jonny g. Spinning Program in partnership with the bicycle factory, Schiwin, also American.

The aforementioned authors point out that the success of this new modality, where the Spinning, spread to several countries and came to Brazil around 1997 in an informal way, without a concrete methodology. In 2000 Brazil came to the program "Johnny g. Spinning Program" which featured a training methodology through the Mad Dogs Athletics in partnership with Vip Athletics company, aiming to publicize the program and certify professionals to work with the Indoor cycling, which until then was performed only in the United States of America.

The author of the method protects your effectiveness, mainly because it considers that the lesson of Spinning is democratic, because it makes it possible, in the same classroom, people with different levels of physical performance to make the classes simultaneously. (JOHNNY g., 2000; BARRY 2000, apud SCOTT; OLIVEIRA, 2002).

According to Jonny g. (2000, apud SCOTT; OLIVEIRA 2002), another observation that optimizes and relaxes the applicability of the method to a diversified group, is that the student can manage his effort during the Spinning class, reaching from 55% to 92% of the maximum heart rate (MHR). In this way, the classroom suffers alternating moments of active recovery, with the goal of physical fitness, physical fitness and well being of the student. The whole lesson of Spinning is governed by music and, in some places, are also used games. These features make the class more enjoyable, as reports of practitioners presented by Deschamps and Domingues Filho (2005), in addition, the use of music allows you to create a link to the Office, where the rhythm and tempo of music determine the Cadence of the movements on the bike.

Deschamps and Domingues Filho (2005) argue that the reasons that lead people to conduct the lessons is the Union of physical activity with the pleasure of listening to music, which makes the timing of the activity "magical". These authors point out that in studies developed in the city of Santos with people of both sexes, practitioners of Spinning, emerge as major factors of adhesion to school: pleasure in physical activity, improving aesthetics, improved physical fitness and quality of life. There is still differentiation into two reasons, according to the classification by gender socialization for men and personal fulfillment for women. In the same study, Spinning students showed the top five psychological benefits derived from this practice, being these: self-esteem increased as a function of weight and appetite changes; physical well-being; available for daily activities; stress relief and relaxation.

Starting from Johnny's training method. G., other Spinning workouts have emerged, bringing the biomechanical and physiological components very similar. Among them we can quote "Spinning Program", the "company" Les Mills RPM Aerobcis, the "Cycle Reebok" and even Brazilian adaptations such as "Power Bike", and the "Power" of Bike Keiser (SILVA OLIVEIRA, 2002).

From the evolution gained mainly by the increase in the number of practitioners of Cycling "Indoor" in Brazil, the practice gained more credibility and, consequently, has been improving the health and quality of life of practitioners of the sport.

3. SPINNING AND THE DIVERSITY OF TRAINING

The Spinning, even though a steady exercise, presents various forms of training. Currently, the diversity of types of class causes the activity do not fall into monotony.

Silva Oliveira Fernandes Filho (2004) explain that the teacher should always guide their students, before you start the lesson. Thus, he must inform the type and basic characteristics of the training that will be given as well, the intensity of the lesson.

Among the most used practice, one can point to recovery-Recovery Training; Training; Resistance training-Endurance Training; Resistance training, Strength-Endurance Power Training; Interval-Interval Training Workout; Workout of day of racing-Race Day Training. Each of this type of training has its own characteristics and are suitable for a training proposal intended by the individual.

3.1 Spinning practice: definitions and characteristics

Recovery training, called Recovery Training, is set from its own denomination. Thus, the main objective is to recover the physical performance of the individual after a week of practice. This training consists of cycles of cycling relaxed and laid back, with an emphasis on breathing and concentration. The maximum heart rate ($F_{cm\acute{a}x}$)⁷ will target zone around 50% to 65%.

The Endurance Training-resistance training-constant requirement is to maintain the level of practice, therefore, does not show variation in intensity. In summary, maintains a constant for long periods, with the aim of improving aerobic capacity. In this way, the pace of the lesson is stable, and may vary in uphill, establishing a target zone around 65% to 75% of the $F_{cm\acute{a}x}$.

A variation of resistance training that uses higher loadings and more advanced techniques is called as resistance training, Strength-Endurance Power Training. This training aims to develop the muscular endurance in and, consequently, promote improved cardiovascular condition to withstand the high intensity. For high intensity between 75% to 85% of $F_{cm\acute{a}x}$, this kind of training is anaerobic aerobic.

Interval training, Interval Training, is a joint training, which developed the speed (RPM)⁸, power⁹ and Cadence¹⁰. The focus of this lesson is on creating resilience after training with high intensity. The classroom has moments of peaks of 80% and 92% of $F_{cm\acute{a}x}$, interspersed with 65% of the $F_{cm\acute{a}x}$ recovery, and for the implementation of this training, the student needs to present a more consistent aerobic base.

And finally, one of the most widely used training types, you will find the training day of racing-Race Day Training. This training consists of classes, whose intensity is very high and continuous, in which the teacher will simulate cycling, using evidence from 80% to 92% of $F_{cm\acute{a}x}$, with an active recovery, at the end, equivalent to the level of requirement. This training is not recommended for students characterized as beginners in physical activity or who have little experience in the practice of Spinning.

All this diversity of training emphasizes the production of body movement associated with musicality. In this sense, it is necessary to be successful in teaching practice of this modality, the physical education teacher learn to associate the music while spinning.

4.COMBINED SPINNING AND MUSIC

In the search for a music concept that can explain and engage with the body movement in a general way, various voices appear to point to this or that set of words seeking to set out and make sense of that feeling that invades the body and soul. In the present work we opted by the concept of Fão (2010, p. 7) presented in the book "music theory", where he writes that "music is the art of expressing feelings or impressions through sounds."

Thus, it is understood that the sounds that make up a song, there are random, are built to express various feelings with which the man lives.

The song has a basic structure composed of melody, harmony and rhythm. Melody is the combination of beeps in a horizontal design; harmony is the combination of simultaneous sounds in a vertical design of the music and rhythm that is combination of time values. In addition, each song has its own tempo is the speed at which its rhythms are executed, this will determine the speed at which she (music) should be played.

Another component that may or may not exist in the song is the lyrics. The letter carries a varied sense message (sad, happy, motivating, relaxing etc) that has a bulge on its cultural sense, because it is linked to the time and the context in which it was produced.

The melodic and harmonic structure of the music itself is able to convey feelings varied as suspense, resolution, strength, softness etc. The music takes forever with a message. For all this, we can say that music influences directly on the pace of implementation of exercise induced "viscerally" practitioner in speed (or rate) of that.

Domingues Filho (2005) reports that the song is regarded as a "magical moment" for carrying out the practice of regular physical activity. Thus, it is understandable that:

To begin a training session with music, creates a climate that transcends the sound limits, in which we could call it a MAGICAL MOMENT. And are these magical moments that many students seek, because a good part of them combines physical exercise with the pleasure of listening to a song or of factors of the past. (DOMINGUES FILHO, 2005, p. 1)

This assertive on the musical theme associated with the practice of indoor cycling shows that training can become an enjoyable activity, bringing benefits, physical aspects and sócioafetivos. In this sense, the idea put forward by the author above corroborates with the basics covered in this study because it is considered that the training with music is more pleasant for the student, because from the moment that aggregates to physical activity motivational values that interfere, even in an individual's performance.

Santos (2008) argues that the music plays a key role: provide the increased pleasure in physical activity time. Thus, the author considers the:

[...] mechanical repetition as principal element, it is in them that the perception of pain is sharper, since the individual's attention is focused on their own feelings of tiredness and pain, so need an element to unlink the person's attention to another stimulus that is more enjoyable, and at this point that the music during physical exercise gains significance and contour (p. 3).

In support of his work Santos (2008) by other authors as Valin (2007) & Todres (2007). The first advocates the use of music as a pedagogical resource that goes beyond the psychological dimension, reaching even the physical performance.

[...] music can affect the muscular energy, increase or decrease the heartbeat, influence on the digestion.[...]. The music in the activities is used to motivate the continuity of physical exercises or to distract the practitioner not pleasurable stimuli such as tiredness, pain or psychological tension. (VALIN, 2007 apud SALEM, 2008, p. 3).

Thus, the music at the Spinning has the function to direct the focus of the practitioner to patterns that are related to a State of animosity that distances itself from feelings like anxiety and boredom. Todres (2007), in turn, explains the correlation of music with the pain and stress reduction.

The effects of music on pain reduction are explained by the theory of pain control. The music acts as a stimulus in competition with pain distracts the patient and diverts your attention from the pain by

modulating the painful stimulus. Brain imaging studies have shown activity in the auditory cortex in auditory contours and limbic system in response to music. It has been proven that music is capable of downloading high levels of stress and that certain types of music, such as classical or slow, meditative music reduce neuro-hormonal markers of stress. (TODRES, 2007 apud SALEM, 2008, p. 3).

However, it should be noted that the music, besides serving as motivation for the practice of this modality, it also serves to determine the rhythm used in the activity. This alternation is also present in the dance, in which the music determines the degree of tangible and choreographic movements. Martins (1996) expressed here this idea:

Once again the presence of music during exercise could be considered relevant, making the practice of this is facilitated by the rhythms of that music provides, since the body itself works on your specific rhythms. That is, the body is familiar with the rhythm, in order that he even has his own. Consequently, if the exercise is "guided" by a musical rhythm, the organism will understand is information, letting yourself go for music, thus facilitating the exercise. (MARTINS, 1996, p. 19 apud SALEM, 2008, p. 4).

It appears, therefore, that the music, is a great ally of physical activity. So, one can infer that increments the accession of practitioners to classes, in addition to ensuring the adherence of new students, mostly for the pleasure it provides during physical activity.

5.FINAL CONSIDERATIONS

By analyzing the historical trajectory of the insertion of Spinning in Brazil, which took place at the beginning of this century, there was a rapid increase in the number of fans of this sport, dividing in several types of training: recovery (Recovery), stamina (Endurance), strength Endurance, Intermittent, Race Day (day of the competition).

In this sense, while researching the factors that caused this increase in the number of participants of this activity, it was observed that the modality, mainly for being associated with music, enhances the performance, favoring the amateur training of practitioners of Spinning.

Thus, among the benefits pertaining to music and Spinning Association, identified the occurrence, with respect to the physical aspects: improving aesthetics, physical conditioning and decreased pain sensation. Those aspects socioafetivos, have been found, mainly, the occurrence of stress reduction, increased self-esteem and sociability in groups.

As the Spinning is still a relatively new mode has a enormous lack in references that were directly linked to the subject addressed. Therefore, it is expected that this article encourages researchers to investigate, through exploratory field studies, how to measure the influence of music on the performance of practitioners.

6.REFERENCES

- CERVO, Amado Luiz; BREVIAN, Pedro Alcino. Metodologia científica. 5. ed. São Paulo: Pearson Prentice Hall, 2002.
- DESCHAMPS, S.R.; DOMINGUES FILHO, L. A. Motivos e benefícios psicológicos que levam os indivíduos dos sexos masculino e feminino a praticarem o ciclismo indoor. Revista Brasileira de Ciência e Movimento, São Caetano do Sul, v.13, n.2, p.27-32, 2005.
- DOMINGUES FILHO, L. A. et al.. Música e o ciclismo indoor: guia teórico prático. 1. ed. Jundiaí: Fontoura Ltda, 2005. Disponível em: http://www.informaluz.com.br/por/download/musica_ciclismo_indoor.pdf. Acesso em: 27/08/2010.
- FÃO, Artur. Teoria musical: 1ª e 2ª Partes – Obra oficialmente adaptada. Portugal, Lisboa: Editora CNM, 2010.
- GARDNER, Howard. Estruturas da mente: a teoria das inteligências múltiplas. Sandra Costa (trad.); Porto Alegre: ArtesMédicas do Sul, 1994.
- SANTOS, M. O. S. Exercício físico e música: uma relação expressiva. Lecturas Educación Física y Deportes, v. 122, p. efd122, 2008. Disponível em: http://www.efdeportes.com/efd122/exercicio-fisico-e-musica-uma-relacao_expressiva.htm. Acesso em: 10/09/2010.
- SILVA, R. A. S.; OLIVEIRA, H. B. Prevenção de lesões no ciclismo indoor: uma proposta metodológica. Revista Brasileira de Ciência e Movimento, Brasília, v. 10, p. 07-18, 2002. Disponível em: http://www.academiapique.com.br/arquivos/diversos/artigoNyskleiprevencao_de_lesoes_no_ciclismo_indoor_uma_proposta.PDF. Acesso: 19/04/2011.
- SILVA, R. A. S. ; OLIVEIRA, H. B. ; FERNANDES FILHO, J. . Glossário de termos técnicos aplicados ao ciclismo indoor. Lecturas Educación Física y Deportes, Buenos Aires, v. 76, p. 01-13, 2004. Disponível em: <http://www.efdeportes.com/efd76/indoor.htm>. Acesso em: 13/05/2011.
- TAGG, P. Análise musical para "não-musos": a percepção popular como base para a compreensão de estruturas e significados musicais Per Musi, Belo Horizonte, n.23, 2011, p.7-18. Disponível em www.scielo.br/pdf/pm/n23/n23a02.pdf. Acesso em 12 de novembro de 2012.
- VALIM-ROGATTO, P. C.; BERGAMASCHI, E.; VOLT, Cátia Mary; DEUTSCH, Silvia. Redução de estresse pelo alongamento: a preferência musical pode influenciar? . Motriz (Rio Claro), Rio Claro, v. 8, n. 2, p. 51-56, 2003. Disponível em: <http://www.rc.unesp.br/ib/efisica/motriz/08n2/Valim.pdf>. Acesso em: 27/08/2010.

⁶Anative of South Africa, a physical education teacher and former road cyclist

⁷Number of heartbeats per minute. This can be classified into FC home, FC reserves, FC recovery, FC Maximum, FC target among other (SILVA; OLIVEIRA; FERNANDES FILHO 2004, p.7).

⁸RPM-number of pedal revolutions per minute, which serves as the unit of measure used for checking the Cadence (SILVA; OLIVEIRA; FERNANDES FILHO, 2004, p. 10).

⁹Power is the explosive aspect of the force, being the product of strength and speed of movement, where: P = (force x Distance)/time. The concept of power is applied in IC, particularly, in the sprint. (SILVA; OLIVEIRA; FERNANDES FILHO, 2004, p. 9)

¹⁰ CADENCE (Pace)-compass and harmony in motion/layout regularity [...]. This can be quantified through RPM, where for each technique there is a safety value. (SILVA; OLIVEIRA; FERNANDES FILHO, 2004, p. 6)

INFLUENCE OF MUSIC ON THE AMATEUR TRAINING OF PRACTITIONERS OF SPINNING**ABSTRACT**

This research, which is a descriptive bibliographical study of qualitative nature, sought to investigate the influence of the use of the music Spinning classes, both in aspects related to physical performance, on the socioaffective. The relevance of this work is based on the need for exploration of assumptions that subsidize the practice, as well as the practice of Spinning, as when considering the bibliography on the themes addressed, very few studies were found in the area. So, we decided to first conceptualize the Spinning and various types of training. Then performed the song as an intervening factor which influences the physical activity and, finally, the correlation of music with the performance of the amateur sportsman. It is concluded that this modality, by having the associated music, greatly increases the performance of amateur and professional practitioners of this activity, as well as positively influence on interpersonal relationships, contributing to the reduction of stress and increased self-esteem.

KEYWORDS: physical education; Music; Spinning.

INFLUENCE DE LA MUSIQUE DANS LA FORMATION DES PRATICIENS DE FILATURE AMADOR**RÉSUMÉ**

Cette recherche, qui est une étude descriptive bibliographique à l'approche qualitative, nous avons étudié l'influence de l'utilisation de la musique dans les classes de Spinning, tant dans les aspects liés à la performance physique, dans les socioaffectifs questions. La pertinence de ce travail est basé sur la nécessité d'explorer des hypothèses qui soutiennent la pratique et Spinning séances d'entraînement, parce que lors de l'examen de la littérature sur le thème choisi, très peu d'études ont été trouvés dans la région. Nous avons donc opté d'abord conceptualiser Filature et ses différents types de séances d'entraînement. Puis est apparu le lecteur de musique comme un facteur qui influe sur l'activité physique et, enfin, la corrélation entre la musique et la performance athlétique amateur. Il est conclu que cette modalité pour la musique ayant associé augmente considérablement la performance des praticiens amateurs et professionnels de cette activité du corps, mais aussi une influence positive sur les relations interpersonnelles, ce qui contribue au stress diminué et augmenté l'estime de soi.

MOTS-CLÉS: Éducation physique; De musique; De filature.

INFLUENCIA DE LA MÚSICA EN LA FORMACIÓN DE PROFESIONALES AMATEUR DE SPINNING**RESUMEN**

Esta investigación, que es un estudio descriptivo con enfoque cualitativo bibliográfica, se determinó la influencia del uso de la música en las clases de Spinning, tanto en los aspectos relacionados con el rendimiento físico, en los asuntos socioaffectivos. La relevancia de este trabajo se basa en la necesidad de exploración de los supuestos que sustentan la práctica y Spinning entrenamientos, porque la hora de considerar la literatura sobre el tema seleccionado, muy pocos estudios se han encontrado en la zona. Así que nos decidimos a conceptualizar primero Spinning y sus diversos tipos de entrenamientos. Entonces apareció el reproductor de música como un factor que influye en la actividad física y, por último, la correlación entre la música y el rendimiento deportivo amateur. Se concluye que esta modalidad de música que tiene asociado aumenta considerablemente el rendimiento de los practicantes aficionados y profesionales de esta actividad del cuerpo, sino que también influye positivamente en las relaciones interpersonales, lo que contribuye a la disminución del estrés y aumento de la autoestima.

PALABRAS CLAVE: Educación Física, Música, Spinning.

INFLUÊNCIA DA MÚSICA NO TREINAMENTO AMADOR DE PRATICANTES DE SPINNING**RESUMO**

Esta pesquisa, que se trata de um estudo bibliográfico descritivo de cunho qualitativo, procurou investigar a influência da utilização da música nas aulas de Spinning, tanto nos aspectos relacionados ao desempenho físico, quanto aos aspectos socioaffectivos. A pertinência desse trabalho está fundamentada na necessidade de exploração dos pressupostos que subsidiam a prática, bem como os treinos de Spinning, pois ao considerar a bibliografia referente à temática abordada, foram encontrados pouquíssimos estudos na área. Então, optou-se por primeiro, conceituar o Spinning e seus diversos tipos de treinos. Em seguida, apresentou-se a música como fator interveniente que influencia a atividade física e, por fim, a correlação da música com a performance do esportista amador. Conclui-se que essa modalidade, por ter a música associada, incrementa consideravelmente o desempenho de praticantes amadores e profissionais dessa atividade corporal, como também influencia positivamente nas relações interpessoais, contribuindo com a diminuição do estresse e o aumento da autoestima.

PALAVRAS-CHAVE: Educação Física; Música; Spinning.