



RESEARCH ARTICLE

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VIGOREXIA OR ADONIS SYNDROME - CHARACTERISTICS, CAUSES, SYMPTOMS AND CONSEQUENCES

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ARTICLE INFO

Article History:

Received 20th February, 2019
Received in revised form
06th March, 2019
Accepted 27th April, 2019
Published online 30th May, 2019

Key Words:

Body image, Psychopathology,
Vigorexia, Resisted Training.

ABSTRACT

In today's society, it is not difficult to feel pressured on our bodily structure and the standards set as ideal or perfect. The self perception of the subject in relation to their weight, body fat, musculature may be, due to this social pressure, related to a distortion of body image, is a psychopathology called Vigorexia. Vigorexia is a body dysmorphic disorder where the subject has a self-image distortion of reality. In men, this excessive worry, which makes one look extremely thin, small and weak, regardless of their body musculature - usually already well above average - can trigger in severe eating disorders, overexerted and completely out of control training and cause other evils to your body. The objective of this study was to analyze, through bibliographical references, the characteristics of this psychopathology, its probable causes, symptoms and the consequences that it can entail to the subject, as well as the care and attention that the physical education professional must have in order to their students / clients in order to assist them. Thus, we can conclude that such evidence is a clear warning to the sports community and also to physical education professionals for a deeper reflection of this problem, since it is an issue that reaches even the professional ethics part of these professionals.

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Citation: Daiane França Silva, Dayse Santana Costa, Filipe Evangelista Silva, Gabriela Cristina Gonçalves Ribeiro, Larissa Cristina Barbosa Manoel, Marcelo Luiz Vasconcelos and Carlos Alberto Kelencz, 2019. "Vigorexia or adonis syndrome - characteristics, causes, symptoms and consequences", *International Journal of Development Research*, 09, (05), 27731-27737.

INTRODUCTION

Vigorexia, also known as Adonis Syndrome is a Body Dysmorphic Disorder (BDD) is the distortion of perceptive body self-image to the subject, where it depreciates the body itself and creates a true obsession with a muscular body, which it believes to be the perfect body however, due to his constant perception of imperfection and dissatisfaction with his own body. According to Falcão (2008), such incidences can occur with any person, regardless of gender, social class or ethnicity; however, studies show that the prevalence of such cases is higher in men, thus, subjects with adequate body / muscle development and even even very advanced, see themselves as extremely weak and thin, completely different from what they really are, even withdrawing from social life for such psychological disorders of distortion of their bodily self-image. By body image, it should be understood as the definition given

by thought or by an associative image created by the subject about his own body in comparison to others or to his environment, that is, his image is constructed from external sensorial influences in its own development process (AGUIAR, MOTA, 2011) and dissatisfaction with this self-image or with this perception of body image is due precisely to the constant search for the preset established as ideal or perfect but which in his view is never enough, to seek in physical exercise the means to achieve it, however, such obsession becomes harmful because it uses physical exercise far beyond what is recommended for the promotion of its health and for its development, causing more harm to its good being than the attainment of his endless search. Damasceno *et al.* (2005) states that such obsession, especially in men, in resistance training is very common, leading to the use of "unconventional" means, such as the use of anabolic agents, which is already characterized as a BCD. In addition to the exhaustive physical exercise routine (which can reach more than 5 gym hours per day), Vigor is also related to the very specific eating patterns, usually composed of hyperproteic

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diets and countless supplements, amino acid compounds and other substances that aid in increasing their yield and physical development. And this obsessive crusade in search of the "perfect body" blinds the individual, not allowing him to see how his practices are harmful to his health. Maham and Escott-Stump (2005) note that there is great interest in good nutrition associated with sports for physical well-being and success, which has even led many sportsmen to experiment with new diets and nutritional supplements to help them achieve improvement in their level of well-being and their sporting performance. However, we can observe that there is also a very large collection of the society itself in relation to this, since it was established as "patterns" delineated, asymmetrical, perfect bodies - thin for women, muscular for men (Damasceno *et al.*, 2005). Thus, body image, directly related also to the subject's self-esteem, affects his own perception of self-esteem and personal satisfaction, causing the loss of self-confidence in relation to himself, as a result of seeing that the body he possesses does not fit the idealized patterns by society (BUCARETCHI, 2003). For Veggi *et al.* (2004) corroborate this theory by stating further that such cultural or social factors are predominant today due to diverse external influences.

Saikali *et al.* (2004) says that the individual's self-image can be evaluated in three ways: either the subject is extremist with him and demands a lot of his appearance, becoming extremely critical of himself; or is comparative and uses extreme patterns to compare, mirror and self-evaluate; it focuses on a determining aspect of its appearance. Whatever the criteria, a consonant is always present, the imposition. Whether by the media, society or even the sporting environment itself, there is a body pattern that is imposed as the ideal, where the subject establishes as the perfect, comparing it as a synonym for happiness and success (CONTI, FRUNTUOSO & GAMBARDELLA, 2005). Therefore, the objective of this study is to highlight the characteristics, causes, symptoms and consequences of Vigorexia in individuals, identifying the triggering factors through bibliographic reviews and highlight the importance of the physical education professional in identifying the symptoms of this psychopathology in order to guide and assist your students. In this way, it is sought with this study, to corroborate with the literature correct of this problematic in order to inform and clarify to the professionals in the area of health, as well as the physical education about this Disorder, so that they can realize an early identification of the symptoms so that can thus carry out a work of prevention and recovery of the same from the complications coming from this which may be today, one of the innumerable problems found within the resistance training environment, but which is still little discussed.

Out The Pathology

Influence: We live in a hypocritical society, which for the most part lives on appearances and patterns, defining and molding its surroundings at its whim and its conception of right and wrong, beautiful and ugly, good and bad. This same society produces what we call the manifestation of what is aesthetic and what should be desired, creating and exposing increasingly unreachable and rigid standards for what they call the "ideal body," without stopping to analyze the psychological evil it causes in every society - whether it be in the academy and sportsmen who seek the ideal / perfect body or even those who are not part of this "universe" but whose self-esteem and self-love are affected by not being part of the

standard. Thus topics such as miracle diets, time and methods of excessive training, illicit medication and even plastic surgeries actually become constantly heard in dialogues everywhere: gyms, work, school / college and even at leisure (BUCARETCHI, 2003). According to Melin and Araújo (2002) we can clearly see that the subject is only accepted within a society if it is within the standards established by it. Thus, people who are out of weight (above or below), not attractive ("ugly") or with any "deformity" are rather excluded and discriminated, not receiving adequate support for their development and, not infrequently, be even re-drawn. According to Kaikili *et al.* (2004) that corroborates this statement and adds that such an act hampers the development of the subject's social skills as well as directly affects their self-esteem.

Body image: According to Barros (2005), the British were the first to raise the issue of the psychological and neurological aspects related to body image, the neurologist Henry Head as the greatest scholar of his time on the subject and being the one to develop the terminology Body Image as the characterization of the construction of the self image or the figure of the body as well as the term "body schema" and to develop a theory about it. According to Fisher (1990, p.5, apud BARROS, 2005, p.547) "each individual constructs a model or figure of himself that constitutes a pattern against the judgments of posture and body movements." That is, to fit the stereotype considered as beautiful, healthy, desired, each human idealizes a model within these standards, in which you can work. Therefore, it can be said that the body image is the self-image or self-evaluation that the subject makes of himself, his body in comparison with the standards established by his environment, that is, the image he has of himself - and how recognizes his body (BARROS, 2005). Ayensa *et al.* (2002) complements this statement by adding that body image is a complex psychological construction because it deals with its own perception about its appearance / body, thus creating a mental representation of itself, based on an external and perceptual body schema, directly affecting its emotions, thoughts and social behaviors. Thus, we can affirm that the body image is a psychological construct developed individually by each subject through their thoughts and feelings, but with external influences and factors of the surroundings, as well as their perception of their appearance with the general picture - or either with pre-set standards. Therefore, it is multifaceted, being able to change by intrinsic or extrinsic aspects, exhibiting a new negative or positive construct (BARROS, 2005). But what are the extrinsic factors that can determine body image construction and lead to this distortion of the subject's body self-image that can lead to a Body Dysmorphic Disorder or Vigorexia?

One of them, and currently, perhaps the strongest, is the media. We are constantly connected, connected on television or on the internet, and we are constantly bombarded by stereotypes. Bodies that the novel says to be perfect, weight that the internet claims to be the ideal, type of haircut, clothing, food, and even things we could not even change, such as skin tone and eye color, are sold to us "Constantly by the media. This constant display of perfect bodies, patterns of beauty, etc., can lead the individual to believe factually that for happiness and success, well-being and ascension is related to the perfect body, causing the subject to dedicate himself to extremes to fit the "standard" that he considers "ideal." In the case of people who perform resistance training, attending academies, their

obsessive pursuit results in the performance of their training inadequately, extrapolating their own limits and often incorrectly, all to achieve the desired physical shape (CONTI; FRUTUOSO; BAMBARDELLA, 2005). Still on self-perception of body image, Aguiar and Mota (2011) state that it can be: Visual, being what the person sees when looking; Mental, what she thinks of herself when she realizes this self-assessment; Emotional, what she feels when facing and self-evaluating; Kinesthetic, the way it manages its body, or the parts of it that most emphasize it. Thus, such experiences can be positive or negative, providing pleasure or charges and criticism, depending solely on how well the person's psychological well-being is in self-evaluation. Body image is not only an isolated cognitive construct, but it is part of many important factors that define the subject, such as the reflection of their desires, their emotional actions, their social interaction, and so on. Therefore, the construction of the body image is something that happens progressively and daily, being able to maintain itself for years in a certain homeostasis and, due to external triggers, to change and make the person decide to change completely, both their way of life and your body and mind.

Vigorexia: Vigorism or Corporal Dysmorphic Disorder, also known as Adonis Syndrome, is a psychopathology originating from the personal dissatisfaction of the subject with his / her body self-image (FALCÃO, 2008). Its main characteristic is the obsessive desire to have a muscular body, independent of the consequences that this can cause to its health, ignoring the well-being of an active life and focusing solely on the absurd development of its musculature. The diagnosis of Vigorexia is confirmed when the person has an absolute obsession with leaving his body extremely muscular and, even if anyone else is already facing it, the subject is never enough (AGUIAR; MOTA, 2011). Silva (2005) also points out that such individuals almost always have problems with social relationships, so when they appear in public, they hide and try to hide their bodies, because in their self-image, they are weak and thin, regardless of the opinion of others or how obvious be the bulge of your muscles. Such behavior is so detrimental to the individual's physical and mental health that the individual can even come up with the use of anabolic steroids in alarming quantities to try to achieve the desired body. The consequences of these actions can be catastrophic, such as liver tumors, severe acnes, dysfunctions in the lipid profile, panic syndrome, extreme euphoria, among others. Not to mention the rigorous immune-compromising diets, rich in protein for lean mass gain but with a deficit of many essential vitamins for the body (Silva, 2005). In general we can say that Vigorexia is a totally psychological problem, where the mind of the subject misrepresents his own body image and causes him to have a completely distorted and negative view of himself and his body, causing it to seek, compulsive and obsessively a dream body through extreme and excessive exercises.

Vigorexia as a branch of Obsessive Compulsive Disorder:

As we have seen, Body Dysmorphic Disorder (DCD) or vigorexia is a psychological disorder where the subject's perception of himself is completely and absolutely distorted from reality. The individual creates irrational concerns about their appearance (especially their physique). The difference between the TDC and the Vigorexia is simply that in Vigorexia, the perceptual distortion of the individual is in its physique and it feels weak and small in relation to its musculature and usually affects the men more, whereas the

BCD affects in general the women because they see imperfections in small details, such as a nose supposedly crooked, or eyes misaligned, supposed imperfections in the skin, etc. But both, TDC and Vigorexia, are psychological disorders that can be considered as alternative expressions of OCD or Obsessive Compulsive Disorder (PHILLIPS *et al.*, 2001). We begin with the premise of studies related to psychopathology, genetics and therapies, where we can, according to Rauch *et al.* (2003) the similarities between DCD and Vigorexia with obsessive compulsive disorder as the unpleasant and unwanted thoughts that lead them to compulsive and repetitive behaviors that play a role of such importance in their routines that they completely detract from the administration of their time. Another similarity between psychopathologies is the suffering that their self-described "imperfections" cause in themselves, physically and psychologically, such as, for example, low self-esteem and shame, excessive extreme exercises and surgeries, completely deregulated diets and irrational paranoias with superfluous things, etc. Phillips *et al.* (1995) argues that the same experiences of incompleteness and dissatisfaction that are seen in people with obsessive compulsive disorder are also observed in people with BDD and vigorexia, regarding the feeling of constant discomfort and discomfort with what they consider "out of order, "" non-standard, "" incomplete, "or even" incorrect. "Rauch (2003) says that in both cases, subjects prioritize their own impressions and / or opinions, completely disregarding the actual perceptions of what bothers them (eg, a patient with OCD disregards their opinion if he thinks that, for example, a floor is misaligned, just as a patient with DCD ignores his opinion about the alignment of his eyes and a person with vigorexia, who has a strong athletic body). Brady, Austin, and Lydiard (1990) corroborate this line of thought by presenting, as a similarity, the fluctuating and chronic course in which the prognostic comorbidities of one of them (TDC / Vigorexia or OCD) predispose subjects to other psychopathologies such as anxiety attacks, panic syndromes, depression, etc. Not to mention that the treatment for such psychopathologies are basically the same ones, that is, psychotherapeutic approaches and drugs.

Although the similarities continue and can be widely studied, there are also their differences between them. McElroy, Phillips and Keck (1994) point out the main dissimilarity between these psychopathologies that is directly related to their origin, that is, their obsessions. While people with obsessive compulsive disorder are fond of the harmed criticism they have of their obsessions (such as a door not locked or switched innumerable times and yet, it has the feeling that it is not actually closed), people with body and body dysmorphic disorders vigorexia tend to have an overvalued view of themselves (such as a too big nose or too thin arms) which makes their obsessions egosynstonic. That is, individuals with OCD usually have obsessions with different contents and external character - somatic, symmetrical, religious, sexual, aggressive, etc. - while subjects with DCD and / or vigorexia deal with internal, personal, intimate, physical issues, inserting one or several concerns simultaneously or individually, progressively or simultaneously. And another curious difference between the parts - OCD, TDC and Vigorexia - is the pace of their treatments, since obsessive compulsive disorder can be easily diagnosed and amenable to treatment, BDT takes longer to see that there is a problem and then deepen to the root of it and thus treats it, vigorexia is the most complex to be diagnosed since it is said by its patients as

something normal, not being often admitted as a fact in fact and often even ridiculed, for they themselves do not consider it to be a real problem, but an aesthetic concern of their own, which is rarely revealed to the other person.

Prevalence of vigorexia in resistance training practitioners:

Let's focus now on sportsmen and sportsmen. Every day more and more people are entering the academy and looking for training to improve their physical performance, their appearance, and even their way of life - once so sedentary. What should be a cause of celebration for the health community has become a major concern as, as the number of academics has grown, so has the use of ergogenic substances or substances that increase the capacity for body work or mental, sought after for their ability to "eliminate" the sensation or symptoms of fatigue, which supposedly leads to better performance. Vieira, Rocha, and Ferrarezzi (2010) conducted a study with 80 resistance training practitioners of both genders to determine which types of supplements these people ingest and best adapted to them, and the results were void how many of the improvements in performance or even in the gain of significant body mass, resulting solely that the use of such resources is more frequent in men than in women. Another study, devised by Pope, Philips and Olivardia (2000), where 548 men underwent psychological and physical assessments, showed that about 75% of those involved are not actually satisfied with their body in general; 52% of these are dissatisfied with their weight and with their abdomen; 55% are dissatisfied with their muscle tone and; 38% with your chest. These were those who were specific to their physical dissatisfaction, but all 548 men approached in this study are resistance-training practitioners and dissatisfied with their own body, and who use whatever means to try to achieve their goals - whether by means of intensive training or use of ergogenic or other more dubious substances. This shows that the actual percentage of men who are dissatisfied with their body grows every day, which makes it clear that approximately 70% of men who currently practice resistance training tend to have latent or non-latent vigorexia (POPE, PHILIPS AND OLIVARDIA, 2000). These numbers are not easier to ignore or to relieve, since latent or not, vigorexia can erupt in these individuals from one hour to another, depending on the environment to which it is inserted and the accompaniment that it has during its training. Then, it becomes clear the need for greater attention from professionals and academies to this problem that grows every day among their clients, friends and family.

Use of supplements and anabolics in individuals with Vigorexia:

As pointed out by Vieira, Rocha and Ferrarezzi (2010) noticed that the use of ergogenic substances had a considerable increase among resistance training practitioners. Such substances are still somewhat less harmful than the more extreme ones used by these people, which are anabolic steroids and supplements. Anabolic steroids are highly concentrated hormones that have the function of helping the human body to increase and improve its performance. However, the use of these types of resources tends to pose serious risks to the subject's physical and mental health, such as hypertension, prostatic hypertrophy or enlargement of the prostate, coronary problems, liver tumors and even sexual impotence (in the case of men); with women, problems can range from a simple voice alteration - making it thicker and more severe than normal - to the production of erythropoietin and red blood cells, increase in acnes, body mass, and incidence of atherosclerosis

(ASUNCIÓN, 2002). According to Antunes *et al.* (2006) are currently developing several studies that deal with the dependence of resistance exercises, and the results show that the incidence is higher among women but that the use of ergogenic substances is greater among males, even reaching about 63 % of men who practice physical activities. Bamber *et al.* (2000) states that the demand for physical activity can be selected between primary and secondary, where in the primary its intrinsic motivation is the use of physical activity and exercise resisted by the promotion of health and well-being, improvement in its quality of life. In the secondary, the subject puts physical activity, resistance training, and the evolution and growth of his body as an emergency priority, giving it a much greater and harmful significance and significance than it should. Thus, it is up to the professional of the physical education, the teacher, the personnel, inside the spaces of resistance training, to verify how the development of its students and its evolutions are, since the dependence of the physical activity together with the abusive use of ergogenic and anabolic substances is a reality every day more present, and must be not only identified but treated, before it evolves into a possible vigorexia. Camargo *et al.* (2008) conducted a study with a total of 54 people, all of whom were activity practitioners and resisted exercises, but 24 of them were diagnosed with latent vigorexia and 30 of them were not. And he found that dissatisfaction with his self-image, combined with the use of ergogenic and anabolic, with differentiated and harmful feeds as well as mood swings and anxiety attacks, were found in all 24 participants who had vigorexia. As for food, from ancient times, from the Olympic games in ancient Greece to the Chinese millenary armies, the quest for perfect food, which interacts in harmony with nutrition and physical performance, are sought by coaches and athletes, with the aim of improving their performance, increase your physical performance and nourish and strengthen your body (BACURAU, 2005). According to Tirapegui (2002), although there is great and constant interest in studies related to sports nutrition, there is still a great lack of information, both athletes and their coaches, who are usually the ones who set up a diet for athletes, are at least consider the impacts that some foods can have on your body, since not everyone responds in the same way to everything that is ingested. Mcardle, Katch and Katch (2003) argue that nutritional ignorance of certain diets may even compromise athletes' health, forcing them to ineffective and inadequate results, often reaching a body weight with a minimum percentage of body fat but, with deficiency in their immune system. Alonso (2006) concludes that an inadequate diet (for example, the most common diet currently rich in carbohydrates and proteins) added to the irresponsible consumption of protein supplements, ergogenic and anabolic substances, can generate numerous metabolic disorders to the subject, especially those already diagnosed with can lead to failure of the kidneys, cholesterol, and blood glucose.

Who has the highest propensity

As mentioned, the most diagnosed with vigorexia are men, aged between 18 and 35 years. This does not exclude women from this picture, however, being more analyzed and expressed by emotional, physiological, cognitive, socioeconomic and behavioral factors, which influences a lot when compared to the discrepancy between men and women with vigorexia. That is, in general, men are more affine indifferent to any external factors, while women generally correspond to small

percentages influenced by other factors - such as, for example, such incidence in women were found more frequent in lower middle class individuals than in the upper middle class (ALONSO, 2006). To exemplify how a person's brain works with vigorexia, Alonso (2006) compares him to a religious fanatic, who takes his opinions and convictions to extremes without considering anything or anyone's opinion. This is how a person with body dysmorphic disorder and vigorexia acts: ignoring the recommendations of specialists, family and friends, he practices physical activity in a continuous and exaggerated way, always proving his physical form, rejecting external opinions and seeing himself always as a weak and small person, and does not care about the consequences that such actions may have on your body. For the person with vigorexia, small "failures," which would normally be invisible or imperceptible to most people, are real to them and, in fact, take on exorbitant proportions from their point of view, leading them to psychological crises, such as depression or anxiety, thus affecting all of their routine, whether in social, family or professional relationships (Chung, 2001; Olivardia, POPE and HUDSON, 2000).

According to Grieve (2007), several frames can trigger with vigorexia, such as cognitive or behavioral factors, psychological or emotional state, and even the environment where it is inserted. Baptista (2005) corroborates this line of thought by analyzing that those who are assiduously in gymnasiums or physical training spaces are more likely to develop psychopathology, especially when their training loads increase, their time of activity and they start charging more and more in its development, in the growth of its muscular mass and of its body, becoming extremely perfectionist with its forms, with its body, in search of a "pseudo-perfection" within the environments of physical training. However, according to Asuncion (2002), such complexes are aggravating over time, rather than diminishing, as their training rate increases, because their self-image is already so distorted that the individual is never satisfied with his body, seeking relentlessly and constantly for a physical beauty that only exists in its own unconscious, but that in fact, is never reached, and this brings on depressions, anxieties, compulsive actions and even can develop phobias. A Chinese study by Ung, Fones and Ang (2000) portrayed the picture of a 24-year-old man who had a morbid phobia about losing too much weight and reducing his muscle mass with so many workouts and exercises, changing his eating habits and compulsively increase his exercise routine so he would not lose the body conquered with so much effort. But such paranoia generated in the subject a very great depression because his body image disorder was already at such advanced level that he really believed that it was weakening and diminishing every day. The solution came about through antidepressant treatments, cognitive and behavioral psychotherapeutics and anxiety control medications. The results of the treatments were verified months later, with the reduction of his preoccupation with his muscles and the beginning of the acceptance of his real body image.

Kanayama *et al.* (2006) performed an analysis about the relationship of self-esteem, body image and eating behaviors with subjects using anabolic steroids and those who did not use them, and it was noticed that there were few distinctions from one group to the other with respect to their self-esteem, however, individuals who used ergogenic substances were more prone to muscle dysmorphia and had greater symptoms

of vigorexia. Baptista (2005) observes that many coaches are concerned with their athletes regarding their body mass, especially those who need to present low body weight. In bodybuilding, where athletes are judged by their appearance and not by performance, the concern of the coaches is (in) directly transferred to the athlete, who often develops vigorexia precisely because he thinks that the standards will never be adjusted. its modality, regardless of the category to which it will be inserted (ROGATTO, 2003). Aiming to achieve what they believe to be the perfect physical form, bodybuilders make manipulations with caloric intake, regulate the salt of their food and in many cases even make use of diuretic medicines for fluid loss and, often, stop ingesting any substances before competitions. It is not uncommon to use ergogenic substances and anabolic steroids, all for the "perfect body". Rogatto (2003) argues that the use of any resources such as these should not be vetoed only on the advice of trained specialists, since uncontrolled and unguided intake can lead to serious physical and mental health problems for sportsmen and women. In a study by Hildebrand *et al.* (2006) with more than 200 people, weightlifting athletes, all men, it was verified that individuals who presented with muscle dysmorphies usually already high standards of body image disorder, going directly from the psychopathology that is to vigorexia, and that these were in fact due to the exaggerated use of anabolic steroids and constant obsessive behavior in relation to their self-image. In another study of 100 bodybuilders and 68 weight lifters, Lantz, Rhea, and Comelius (2002) found that the greater propensity to develop vigorexia is concentrated among bodybuilders, given their constant concern for their body and symmetry, while weight lifters are in fact more prone to focus on their muscle development and strength without drawing too much on their self-image body.

Conclusion

Thus, we can conclude that such evidence is a clear warning to the sports community and also to physical education professionals for a deeper reflection of this problem, since it is an issue that reaches even the professional ethics part of these professionals, since the lack of strategies and specific treatments for this problem is a clear sign of the disregard of coaches, owners of academies, teachers and other professionals who should monitor these students / clients and aim at their well-being and quality of life, but at the same time On the other hand, they are only interested in their own interests in that subject and do not care about the consequences that such actions may entail. Therefore, with the completion of this work, we hope to have contributed to a satisfactory analysis of this problematic so present in our reality and also raise an alert for the sports communities about the importance of the concern for the same, for the physical and mental well-being of their students /customers.

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