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SARA CARDOSO FERREIRA

Eating disorders in female athletes: a study in the adult population

ARTIGO CIENTÍFICO ORIGINAL

ÁREA CIENTÍFICA DE PSIQUIATRIA

Trabalho realizado sob a orientação de: PROFESSOR DOUTOR JOAQUIM MANUEL SOARES CEREJEIRA DRª TÂNIA VIEIRA DA SILVA

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Investigadores:

Sara Cardoso Ferreira¹

Tânia Vieira da Silva^{1,2}

Joaquim Manuel Soares Cerejeira^{1,2,3}

¹Faculty of Medicine, University of Coimbra, Portugal ²Coimbra Hospital and University Centre ³Coimbra Private Psychiatric Unit

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ABBREVIATIONS

- AIS: Australian Institute of Sport
- AN: Anorexia Nervosa
- APA: American Psychiatric Association
- ARFID: Avoidant/Restrictive Food Intake Disorder
- **BED: Binge Eating Disorder**
- BMI: Body Mass Index
- BN: Bulimia Nervosa
- BSI: Brief Symptom Inventory
- DSM-5: Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition
- ED: Eating disorders
- EDE: Eating Disorder Examination
- EDE-Q: Eating Disorder Examination Questionnaire
- EPQ-R: Eysenck Personality Questionnaire Revised
- FED: Feeding and Eating Disorder
- GDS: General Disability Score
- ICD-10: International Statistical Classification of Diseases and Related Health Problems, 10th Revision

NEDC: National Eating Disorders Collaboration

OCD: Obsessive-Compulsive Disorder

OSFED: Other Specified Feeding and Eating Disorder

UFED: Unspecified Feeding and Eating Disorder

WHO: World Health Organization

WHODAS 2.0: World Health Organization Disability Assessment Schedule 2.0

ABSTRACT

Introduction: Eating disorders are a well-known cause of impaired quality of life in the general population. Literature shows that athletes and specially women are more prone to develop disordered eating behaviors that can lead to eating disorder diagnosis, compromising their performance and optimal health. The key purpose of this study was to assess the relationship between the practice of sports and the development of eating disorder symptoms, while examining psychosocial factors. Authors compared these data to the ones collected from non-athlete females, to understand the true impact of the sport's practice.

Methods: A cross-sectional study was constructed. A questionnaire was built, including: general demographic and social information, Brief Symptom Inventory (BSI), Eysenck Personality Questionnaire Revised (EPQ-R), Eating Disorder Examination Questionnaire (EDE-Q) and World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0). Surveys were distributed to female athletes (N=155) and non-athletes (N=84). Descriptive and inferential analysis were performed.

Results: There were no statistical differences in the BSI subscales' score in athletes or nonathletes, as well as in personality traits and functional difficulty. The athlete group showed more disordered eating patterns than the control group, scoring higher in EDE-Q. Athletes with a higher BMI demonstrated, in general, higher rates of psychological suffering and reported more weight-related concerns and disordered eating behaviors (these differences were statistically significant (p<0.05)). Weak positive correlations were found between higher EDE-Q scores and higher BMI; higher BSI score and higher WHODAS score.

Discussion: These results translate in an important role of disordered behaviors in compromising the quality of life of athletes. If athletes are constantly exposed to a specific body goal, it is expected that those who do not necessarily meet these "criteria" feel discontent and develop mechanisms to try and reach what is asked of them. Therefore, if differences, though minimal, can be observed in a small sample, larger scale studies can bring vital information to this matter.

Conclusion: Even though authors were not able to draw statistically significant results, clinical findings and behavior patterns show that it is of great interest to closely follow female athletes and their daily nutritional and exercise conducts, to ensure that they follow an optimal plan that allows them a better life and better sports performance.

Keywords: Athletes, Disordered Eating, Eating Disorders, Personality/Personality Assessment, Psychosocial Functioning, Female.

RESUMO

Introdução: Perturbações do comportamento alimentar são uma causa conhecida de compromisso da qualidade de vida da população. A literatura mostra que atletas e, em especial, mulheres, são mais suscetíveis ao desenvolvimento de comportamentos alimentares desviantes que podem conduzir ao diagnóstico de perturbações alimentares e comprometer a sua saúde e performance. O objetivo deste estudo foi apurar a relação entre a prática de desporto e sintomas de perturbações do comportamento alimentar, bem como analisar fatores psicossociais associados. Os autores compararam uma amostra de atletas femininas com uma amostra controle, de forma a entender o verdadeiro impacto da prática de desporto.

Métodos: Construiu-se um estudo transversal. Desenhou-se um questionário que incluiu: informação demográfica e social, *Brief Symptom Inventory* (BSI), *Eysenck Personality Questionnaire Revised* (EPQ-R), *Eating Disorder Examination Questionnaire* (EDE-Q) e *World Health Organization Disability Assessment Schedule 2.0* (WHODAS 2.0). Os formulários foram distribuídos junto de atletas femininas (N=155) e mulheres não atletas (N=84). Foi desenvolvida uma análise descritiva e comparativa.

Resultados: Não se encontraram diferenças estatisticamente significativas na pontuação das subescalas do BSI entre os dois grupos, bem como nos traços de personalidade e dificuldade funcional. O grupo de atletas demonstrou maior padrão de comportamentos alimentares desviantes, com maior pontuação no EDE-Q. Atletas com um IMC superior demonstraram, no geral, maior sofrimento psicológico e reportaram mais preocupação com o peso e comportamentos alimentares desviantes (estas diferenças foram estatisticamente significativas (p<0,05). Correlações fracas e positivas foram encontradas entre a pontuação do EDE-Q e o IMC; entre a pontuação do BSI e a pontuação do WHODAS.

Discussão: Estes resultados traduzem-se num papel importante dos comportamentos alimentares desviantes no compromisso da qualidade de vida das atletas. Se as mesmas são constantemente expostas um determinado objetivo corporal específico, é expectável que aquelas que não incorporem esses "critérios" necessariamente se sintam descontentes e desenvolvam mecanismos que lhes permitam atingir o que lhes é pedido. Assim, se diferenças, ainda que mínimas, podem ser inferidas numa amostra pequena, estudos de larga escala podem trazer informação vital para este tópico.

Conclusão: Ainda que os autores não tenham obtido resultados estatisticamente significativos no global, os achados clínicos e padrões de comportamento mostram que é de grande importância seguir de perto as atletas, a sua nutrição diária e conduta de exercício, de modo a assegurar que as mesmas sigam um plano otimizado que lhes permita manter uma melhor qualidade de vida e performance desportiva.

Palavras-chave: Atletas, Comportamento Alimentar, Funcionamento Psicossocial, Mulher, Personalidade, Perturbações do Comportamento Alimentar.

INTRODUCTION

The World Health Organization has meticulously defined "eating disorders" (ED) In the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (1) as "a broad group of psychological disorders with abnormal eating behaviors leading to physiological effects from overeating or insufficient food intake".(1) In this classification, the following physiological and psychological disturbances are included: Anorexia Nervosa (AN), Atypical AN, Bulimia Nervosa (BN), Atypical BN, Overeating associated with other psychological disturbances, Vomiting associated with other psychological disturbances, other eating disorders and ED unspecified.(1) Characteristics of each disorder are referred to in Appendix I.

At the same time, Feeding and Eating Disorders (FED) are defined in American Psychiatric Association's (APA) Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) as a "persistent disturbance of eating or eating-related behavior that results in the altered consumption or absorption of food and that significantly impairs physical health or psychosocial functioning".(2) Moving forward in this paper, these disorders will be addressed simply as "ED". The DSM-5 also provides meticulous criteria for diagnosing the different disorders that fall in this category, which include AN, BN, binge eating disorder (BED), other specified feeding and eating disorder (OSFED), unspecified feeding and eating disorder (UFED) and other diagnosis, like pica, rumination disorder and avoidant/restrictive food intake disorder (ARFID).(2) The specific diagnostic criteria for each ED can be found in Appendix II, since its extensive analysis falls outside the main goal of this article.

According to the WHO, women are more likely than men to develop an ED and it usually starts in the adolescence.(1) A systematic review conducted regarding the 2000-2018 period reported weighted means of lifetime ED of 8.4% (3.3-18.6%) for women and 2.2% (0.8-6.5%) for men, along with a point prevalence in Europe of 2.2%, globally.(5) When we talk about the reality in Portugal, it is important to mention a study by Cruz et al published in 2018 that concluded that between 2000 and 2014, 4485 of all the hospitalizations in the country were due to ED – 54% were cases of AN, 13% were of BN and 27% were caused by other ED.(6) Subjects were mainly women with an average age of 26. However, it is crucial to mention that the prevalence of ED cannot be taken as reality, given the fact that many cases are not reported or diagnosed.(3)

These disorders have an important mortality rate – Cruz et al., 2018 registered 0.9% intra-hospital mortality for AN - and are associated with problems such as suicide and social

impairment.(6) ED can also be associated with consequences such as malnutrition and dehydration, amenorrhea, hair loss, low blood pressure, gastroparesis, etc.(7-9) ED are also commonly concomitant with depression, anxiety disorders and substance abuse.(1)

When discussing feeding and eating behaviors, some concepts other than fully developed ED must be introduced, namely "disordered eating" (DE) and "optimal nutrition" (Figure 1).(8)

DE is a concept used to describe a spectrum of different eating behaviors ranging between what is a normal, optimal nutrition for each individual and a full-on established ED.(8, 10) DE patterns can include symptoms used to define ED; however, these do not occur with enough frequency or severity to fall into the specific definition of the DSM-V. It may include restrictive eating, compulsive eating, rigid eating patterns, use of laxatives and/or diet pills, excessive exercise or other irregular feeding behaviors.(9, 11) This concept is of much relevance to this essay, given that DE behaviors and adherence to dieting are among the most common risk factors for the development of a clinical ED.(10, 11)

Opposed to both DE and ED concepts, optimal nutrition can be described as a safe, conscious, and individualized nutritional lifestyle that allows the individual to maintain his/her best balance both health and performance wise.(8)

OPTIMAL NUTRITION	DISORDERED EATING	EATING DISORDER
A safe, conscious, and	Eating patterns used to	Eating behaviors that obey
individualized nutritional	define eating disorders,	the DSM-V diagnostic
lifestyle that allows the	which do not occur with	criteria for feeding and
individual to maintain his/her	enough frequency/severity	eating disorders
best balance	to fall into its definition.	

Figure 1: Spectrum of eating behaviors from optimal nutrition to the development of eating disorders. (Elaborated by the authors)

There are numerous risk factors for the development of an ED. Among them are multiple psychosocial factors, biological features as genetic factors and environmental sets. Some of those risk factors worth mentioning are low self-esteem, anxiety, perfectionism, neuroticism, parental problems, family history of ED, adolescence, practice of sports with emphasis on leanness, traumatic distress, childhood obesity and many others.(12-15)

Oppositely, factors like higher socioeconomical status, higher educational level and having a social support net can be described as protecting lines.(15, 16)

The type of sport that athletes are inserted in can also be relevant to the development of DE.(11) For the purpose of this subject, sports can be divided into non-lean and lean sports. Non-lean sports include ball (football, volleyball, basketball), power (powerlifting, shot put) and technical (golf, alpine skiing) sports and are less associated with the development of DE, given that they do not rely on body weight or shape to increase performance. Lean sports can be further subdivided into endurance (track, cycling, swimming), aesthetic (gymnastics, dance, bodybuilding) and weight-dependent (wrestling, karate, kung fu) modalities. These lean sports are linked to a possible increase in the risk of developing DE patterns due to the belief that a lower body weight can increase performance and prestige.(17, 18)

A term introduced by the American College of Sports Medicine in 1992 and renewed in 2007, called "The Female Athlete Triad", can be described by the presence of low energy availability (through DE, ED, excessive exercise, etc.), menstrual dysfunction (like amenorrhea) and low bone mineral density (like osteopenia or osteoporosis).(19) This concept derives from the fact that while looking for their best performance, many athletes create an energy deficit that can go too far, leading up to amenorrhea in female athletes, which can cause bone demineralization.(19) However, contrarily to its purpose, these DE patterns have a real and stablished consequence in performance and safety of athletes, given that they need an optimal nutrition the most to ensure the quality of all their activities and human physiology. These consequences vary from anemia to risk of infection, chronic fatigue, higher risk of sport-related injuries and many others.(10, 20)

Even though ED are present in the general population and are often referred to as a public health concern, literature shows clear evidence that these deviant eating behaviors are more prevalent in athletes, particularly, but not exclusively, in female athletes, given the fact that athletes are frequently more exposed to DE behaviors and advice from colleagues and coaches while living under the pressure of performance and excellence.(10, 21, 22) The accurate prevalence of both DE and ED in athletes is unknown through literature, given that different studies present various outcomes depending on age, type of sport, gender, level of competition, etc.(11)

The key purpose of this study was to assess the relationship between the practice of sports and the development of ED symptoms, while examining the association with other variables that can contribute to the start and progress of such behaviors, like psychosocial factors, neuroticism and anxiety. Alongside that, it is also the study's aim to compare these data to the ones collected from non-athlete females, to understand the true impact of the sport's practice.

It was hypothesized that female athletes are more prone to developing DE and ED, comparatively to non-athlete women. As formerly discussed, DE behaviors are more often observed in athletes and can progress to fully developed ED, therefore making it crucial to evaluate the prevalence of such symptoms so that the intervention can be in the preventive spectrum rather than the curative one.

As a secondary goal, this study may come to raise awareness to the need for prevention of ED in female athletes, intervening throughout the DE spectrum to reach optimal nutrition for all, not only to improve the athlete's health and quality of life, but also their sports performance.

METHODS

Study Design

To fulfill the goals of this article, a cross-sectional study was constructed. Variables and target population were chosen according to the study's goals.

Measures and Participants

A questionnaire was built in different parts to address numerous variables. The questionnaire can be consulted on Appendix III. Questions were developed or assembled to allow the authors to control or study the widest range of pertinent variables. These included:

1. General demographic and social information, including date and place of birth, current residence, marital status, education level, current employment, and existing diseases. Subjects were also asked about their household and family history of eating disorders. Finally, some questions were posed about past and current practice of sports, type and duration assessed, as well as eating habits.

2. Brief Symptom Inventory (BSI), an assessment tool providing an overview of a person's symptom dimension and psychological distress throughout 53 items divided in: 9 subcategories such as somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism, where each item is evaluated in a 5-point scale from 0 (not at all) to 4 (extremely). The validity and reliability of the BSI have been well stablished, having also been validated for the Portuguese population.(23)

3. Eysenck Personality Questionnaire Revised (EPQ-R) is a widely recognized selfreporting instrument designed to measure three fundamental personality dimensions through 70 items, namely, psychoticism, extroversion, and neuroticism, each regarding their own assessment scale, and an additional fourth scale of social desirability (used as a validity scale). This questionnaire features "yes" or "no" answers, with different quotation appliable to different items. The EPQ-R was thoroughly validated to the Portuguese population and authorization for the use of this version in the present study was cordially given by the authors, as well as the needed tools and assistance.(24)

4. Eating Disorder Examination Questionnaire (EDE-Q), also a self-reporting instrument regarding DE behaviors that results from adaptation of the Eating Disorder Examination (EDE) interview. It is a well-recognized 33-item questionnaire, which also assesses information about weight, height, menstrual cycle, and contraceptive intake. Answers generally regard a 28-days frame and vary from a 7-level scale (number of days) to a 4-level scale (frequency) to written answers. Studies show that EDE-Q is a reliable instrument to study eating disorder behaviors and was equally validated to address the Portuguese population. Authorization for its use in this paper and instruments were cordially given by the author.(25)

5. World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0) was used in its 36-item self-administered version and works as a valuable tool to assess disability in adults. It approaches six domains which include understanding and communicating, self-care, moving, socializing, daily activities, and participation in society. Each item regards the difficulty level that the subject perceived in the last 30 days. This instrument is a widely accepted and reliable tool and is validated to the Portuguese population. It is openly accessible online.(26)

Having chosen the adequate instruments to construct the questionnaire, the needed authorizations and guidelines for their use were obtained. Questions were manually transferred to a Google Forms format. A written informed consent was added to the first page of the survey. Posteriorly, the study design and questionnaire were submitted to the Ethics Committee of the Faculty of Medicine, University of Coimbra, Portugal, in March 2021, having been approved in April 2021, as shown in Appendix IV.

Surveys were distributed both digitally and on paper, with the digital version being the main source of answers. Regarding the online distribution, in a primary phase the questionnaire was sent to several National Sport's Federations, regional sports teams, academic teams and other associations. In a secondary phase, questionnaires were distributed through social networks. Printed questionnaires were used to collect data from a sample of male athletes, further not included in this study.

The answers to the survey were collected through the course of several months, from July 2021 to December 2021. All participations were informedly consented. Participants were first divided into two groups:

The first group included all female athletes (i.e., women who are trained or skilled in a sport and regularly compete with others in organized events) currently practicing at least one sport (i.e., a game, competition or activity needing physical effort and skill that is played or done according to rules, for enjoyment and/or as a job), born between 1990 and 2003 (ages 18 to 30 at the time of data gathering).

The second group included all the women that are non-athletes, never practiced any sport and are sedentary, previously practiced some sport but do not maintain it or have a regular exercising routine that does not meet the sports criteria (e.g., going to the gym).

The collected variables did not include body mass index (BMI) values, which were calculated through its formula by using the weight and height of each participant. BMI is defined as a person's weight in kilograms divided by the square of the person's height in meters (kg/m²). Criteria: Below 18.5: Underweight; 18.5-24.9: Normal weight; 25.0-29.9: Pre-obesity; 30.0-34.9: Obesity class I; 35.0-39.9: Obesity class II; Above 40: Obesity class III.

Analysis

Analysis was performed using SPSS software, version 27. Descriptive statistics of the different studied variables were calculated and are presented according to the type of variable (mean and standard deviation, N and frequency). Normality of distribution for the various variables of the study was evaluated using Kolmogorov-Smirnov test. The results showed that variables did not follow a normal distribution (p<0.05), therefore t-tests were not used throughout the analysis. Instead, Mann-Whitney tests were performed. Significance was set at <0.05.

Accepting an alpha risk of 0.05 and a beta risk of 0.2 in a two-sided test, 523 exposed subjects and 261 in the non-exposed are necessary to recognize as statistically significant a relative risk greater than or equal to 0.25. A proportion in the non-exposed group has been estimated to be 0.04. It has been anticipated a drop-out rate of 0%. The POISSON

approximation was used to perform this calculation. (Granmo sampleardes size and power calculator available on: <u>https://www.imim.es/ofertadeserveis/software-public/granmo/</u>) There was a total of 282 participants in this study, with 155 subjects in the athletes group and 84 women included in the control group. 43 answers were considered invalid for the present study, given that the participants did not meet the study's inclusion criteria.

RESULTS

1. Descriptive analysis

Overall results are expressed on Table 1.

The most frequent local of residency was the district of Lisbon (n=44), followed by Porto (n=22) and Braga (n=22) for the athlete sample, while in the control group the most frequent one was the district of Porto (n=23), followed by Aveiro (n=21) and Coimbra (n=19). The most frequent age in the case group was 19, with ages ranging between 16 and 31 years, and in the control group ages ranged from 19 to 31, with 23 being the most frequent age. Most of the subjects from the athlete group reported to be single (n=149, 96.1%), as well as the ones from the control sample (n=79, 94%). When asked about their family and residency, they mostly reported to have one sibling (Cases: n=88, 56.8%; Controls: n=51, 60.7%) and married parents (Cases: n=121, 78.1%; Controls: n=66, 78.6%) and to be currently living in the family home (Cases: n=124, 80.0%; Controls: n=44, 52.4%).

Approximately half of the athlete's group's subjects had a high school degree (6) and a third was a college graduate (n= 54, 34.8%). Most of them were presently studying (n=112, 72.3%), with 3.9% reporting to be currently unemployed. More than half of the control group subject was a college graduate (n=49, 58.3%) and/or was presently studying (n=52, 61.9%), with 3.6% reporting to be currently unemployed.

To simplify the data's analysis, sports were divided into three groups: non-lean sports (basketball, volleyball, handball, football, badminton, etc.), weight-dependent and endurance sports (biking, running, judo, karate, kung fu, etc.) and aesthetic sports (dance, gymnastics, bodybuilding). One third of the athletes (n=51, 32.9%) played a non-lean sport, 38.1% (n=59) are either dancers, gymnasts, or bodybuilders, with 29% of athletes (n=45) performing a weight-dependent sport.

79.4% of the women in the athlete's group performed a type of physical activity other than their main modality and 19.4% of these subjects reported spending more than three hours a day exercising. More than half of the women (n=55, 65.5%) from the control group had practiced some type of sport in the past or did physical activity that did not meet the sports definition used in this essay. From these, almost half (n=24, 28.6%) were involved in body image dependent sports.

Only one athlete (0.6%) and one control subject (1.2%) reported having a diagnosed ED, namely AN. Eight athletes (5.2%) and ten out of the control group (11.9%) reported having a family history of some type of ED.

	Group	N	Mean	Median	Mode	SD	Min	Max
Age	Athletes	155	21.63	21.00	19.00	3.54	16.00	31.00
Age	Control	84	24.18	24.00	23.00	2.32	19.00	31.00
DMI	Athletes	155	21.56	21.00		2.60	16.00	31.00
DIVII	Control	84	22.26	22.00		4.50	12	42
Homo district	Athletes	155			Lisbon			
nome district	Control	83			Porto			
Marital status	Athletes	155			Single			
Maritar Status	Control	84			Single			
Number of	Athletes	155	1.17	1.00	1.00	0.73	0	4
brothers	Control	84	1.06			0.75		
Parental	Athletes	155			Married			
marital status	Control	84			Married			
Education	Athletes	155			College graduate			
Education level	Control	84			High school graduate			
Occupational	Athletes	155			Student			
status	Control	84			Student			
Living	Athletes	155			Family home			
situation	Control	84			Family home			
Total hours of daily exercise	Athletes	155			1 to 2 hours			
	Control	84			Less than an hour			
Total number	Athletes	155			3 to 5			
of daily meals	Control	84			3 to 5			

Table 1: Overall descriptive analysis of both athlete's and control samples.

2. Inferential Analysis

Matching between groups according to age and education level was attempted.

To assess matching by age: Normality was evaluated by performing Kolmogorov-Smirnov tests. The age means (Cases: 21.63 ± 3.54 , Controls: 24.18 ± 2.32) from the sample and control groups did not follow a normal distribution (p<0.05), therefore, t-tests could not be performed. The Mann-Whitney test was used instead, showing that the mean ages were statistically different (Mann-Whitney U value 3289.00, p<0.001).

To assess matching by education level: The variable was recoded into two categories to be comparable by a Qui-square test. The result was statistically significant, (Qui-square value 26.82, p<0.001) which means that there were differences in the education levels of both groups.

BMI mean was lower in the case group when compared to the control group and the latter presented with a higher inner variability of BMI values among participants (Figure 2). Differences were not statistically significant (Mann-Whitney U value 6209.00, p=0.552).



Figure 2: BMI values variation according to each of the study's group.

The analysis of the differences in the means for evaluation instruments (BSI, EDE-Q, EPQ-R, WHODAS) between the athletes and the control group is below and completed on Table 2.

2.1. BSI Score

Total score's mean was similar in both groups (1.01) with no statistical significancy (see Table 2). The following results were observed in subscales for Somatization (Cases: 0.74 vs Controls: 0.76), Depression (Cases: 1.11 vs Controls: 1.16), Hostility (Cases: 1.00 vs Controls: 0.98), Anxiety (Cases: 1.11 vs Controls: 1.13), Phobic Anxiety (Cases: 0.73 vs Controls: 0.63), Psychoticism (Cases: 0.90 vs Controls: 0.63) Paranoid Ideation (Cases: 1.19 vs Controls: 1.13), Obsessive-Compulsive (Cases: 1.15 vs Controls: 1.20) and Interpersonal Sensibility (Cases: 1.20 vs Controls: 1.23). None of these differences was statistically significant (Table 2).

2.2. EDE-Q Score

Total score's mean was higher in the athlete's group (7.27) than in the control group (6.64), with no statistic significancy. The results for the subscales were as follows: Restraint concern (Cases: 1.88 vs Controls: 1.47), Eating concern (Cases: 1.15 vs Controls: 0.98), Shape concern (Cases: 2.28 vs Controls: 2.24) and Weight concern (Cases: 1.98 vs Controls: 1.95). None of these results had significancy (Table 2).

For analysis of missing periods, a Chi-square test was performed and showed no statistical significancy (Pearson Chi-Square 2.249; p = 0.134). A similar test was performed to analyze the intake of contraceptive pills, which showed statistically significant differences between the two groups (Pearson Chi-Square 5.499; p = 0.019) with the athletes presenting higher use of the contraceptive pills than the control group.

As a part of the EDE-Q form, a few written questions were analyzed descriptively for clearer results:

To the question "In the last 28 days, how many times did you eat what other people would consider an unusually big amount of food (given the circumstances)?", 45.3% of the control's subjects report doing it more than once (one subject reported doing it every day). 54.2% of the athletes did it at least once, none of them doing it every day.

Concerning the question "Following up on the previous question, in how many of these situations did you feel the loss of control over what you were eating (when you were eating)?",

20.9% of the non-athletes felt it at least once, 3 of them felt it every day. 27.7% of the athletes felt it at least once, 4 of them report feeling it every day.

To the question "In the last 28 days, in how many days did these overeating episodes occur (i.e., eating a great amount of food and feel loss of control)?", 33.7% of the control participants had them at least once (one subject reported doing it every day). 34.2% of the case sample did it at least once (one subject reported doing it every day).

Regarding the question "In the last 28 days, how many times did you purge to control your weight or body shape?", 4.65% of the control sample and 1.93% of the athletes did it at least once.

Answering the question "In the last 28 days, how many times did you use laxatives to control your weight or body shape?", 3.49% of the control sample and 4.52% of the athletes did it at least once.

To the question "In the last 28 days, how many times did you exercise in a compulsive way to control your weight, body shape or body fat, or to burn calories?", 16.27% of the control sample and 30.3% of the athletes did it at least once (three subjects report doing it every day).

Furthermore, Figure 3 shows the distribution of EDE-Q mean scores according to the kind of sport performed by the athletes (strictly in the athlete's group).



Figure 3: EDE-Q mean according to kind of sport performed.

2.3. EPQ-R Score

Results were obtained for the three personality dimension scales, either in the N dimension (Cases: 13.38 vs Controls: 13.15), E dimension (Cases: 12.44 vs Controls: 11.39) and P dimension (Cases: 0.59 vs Controls: 0.48). Validity Scale (L dimension) was also applied (Cases: 9.44 vs Controls: 9.63).

2.4. WHODAS 2.0

All obtained values were not statistically significant (Table 2). On absolute terms, global domain score mean was higher in the athlete's group (Cases: 53.55 vs Controls: 51.88; Out of 180), as well as in Cognition (Cases: 10.74 vs Controls: 10.15), Mobility (Cases: 6.62 vs Controls: 6.39), Interpersonal Relationships (Cases: 7.92 vs Controls: 7.49), Household activities (Cases: 6.32 vs Controls: 5.89) and Participation (Cases: 11.88 vs Controls: 11.40), subscales. Opposite results were obtained in the Self-care (Cases: 4.73 vs Controls: 4.77) and Work activities (Cases: 6.32 vs Controls: 5.89) subscales.

Table 2: Statistical analysis of the differences in the means for evaluation instruments (BSI, EDE-Q, EPQ-R, WHODAS 2.0) between the athletes and control group.

BSI	Total Score	Somatization	Depression	Hostility	Anxiety
Mann-Whitney U	6254.00	6357.50	6344.50	6174.00	6380.50
p value	0.616	0.764	0.745	0.508	0.799
	Phobic Anxiety	Psychoticism	Paranoid Ideation	Obsessive Compulsive	Interpersonal Sensitivity
Mann-Whitney U	5857.00	6201.50	6102.50	6214.00	6422.00
p value	0.195	0.543	0.423	0.561	0.862
EDE-Q	Total Score	Restraint	Eating concern	Shape concern	Weight concern
Mann-Whitney U	6297.00	5905.00	6304.00	6467.00	6421.50
p value	0.676	0.233	0.682	0.933	0.862
EPQ-R	Total Score	Neuroticism	Extraversion	Psychotism	Lies scale
Mann-Whitney U		6281.50	5782.50	6068.00	6348.50
p value		0.654	0.153	0,320	0.751
WHODAS 2.0	Cognition	Mobility	Self-care	Socialization	Household
Mann-Whitney U	6057.00	6140.00	6396.00	5828.50	6090.00
p value	0.370	0.405	0.756	0.161	0.363
	Work	Participation	General Disability Score		
Mann-Whitney U	5761.00	5696.50	5930.50		
p value	0.123	0.276	0.256		

2.5. Further investigation according to BMI

Athletes were subdivided into two groups based on their BMI's median (21.00), with the same number of subjects in each subgroup, to try and study the prevalence of psychopathology or DE behaviors in each of them. The results for the four questionnaires (BSI, EDE-Q, EPQ-R and WHODAS) were furtherly analyzed using this division and the statistics can be read on Table 3.

BSI: Total score is higher in the group with BMI over 21 kg/m² than in the group with lower BMI (Mean: 1.10 vs 0.91), as well as Somatization (0.77 vs 0.69), Depression (1.14 vs 1.06), Anxiety (1.14 vs 1.05) and Psychoticism (0.97 vs 0.77) subscales. None of these results was statistically significant. Paranoid ideation subscale is also higher in the group with BMI over 21 kg/m² than in the group with lower BMI (Mean: 1.29 vs 1.00) and there is statistically

significance (p<0.05). Oppositely, Hostility results are similar (1.00), and Obsessive-Compulsive (1.22 vs 1.03) and Interpersonal Sensitivity (1.23 vs 1.12) subscales show lower scores in the group with higher BMI.

EDE-Q: Total score is higher in the group with BMI over 21 kg/m² than in the group with lower BMI (Mean: 8.52 vs 4.77), as well as in Restraint (2.11 vs 1.35), Eating (1.38 vs 0.71), Shape (2.65 vs 1.54) and Weight (2.38 vs 1.17) concern subscales. All these differences were statistically significant (p<0.05).

EPQ-R: Neuroticism and Extraversion subscales show similar means in both groups (13.38 and 12.44, respectively). Psychoticism score is higher in the group with BMI under 21 kg/m² than in the group with higher BMI (Mean: 0.62 vs 0.57).

WHODAS 2.0: Cognition difficulty score is higher in the group with BMI under 21 kg/m² than in the group with higher BMI (Mean: 11.44 vs 10.39), as well as in Mobility (6.75 vs 6.55), Social engagement (8.04 vs 7.86), Household activities (6.58 vs 6.18) subscales and General Disability Score (GDS) (54.13 vs 53.26). Oppositely, they show a lower score in the Self-care (4.52 vs 4.83), Work activities (5.00 vs 5.52) and Participation (11.81 vs 11.91) difficulty scores. None of these results had statistical significance

	-			-	-
BSI	Total Score	Somatization	Depression	Hostility	Anxiety
Mann-Whitney U	2244.00	2517.00	2366.50	2530.00	2466.50
p value	0.100	0.539	0.236	0.573	0.421
	Phobic	Dovebaticiam	Paranoid	Obsessive	Interpersonal
	Anxiety	PSycholicism	Ideation	Compulsive	Sensitivity
Mann-Whitney U	2056.00	2348.50	2042.50	2287.50	2422.00
p value	0.017**	0.209	0.016**	0.138	0.329
EDE O	Total Score	Postraint	Eating	Shape	Weight
	Total Score	Restraint	concern	concern	concern
Mann-Whitney U	3769.50	1902.00	1746.50	1650.50	1430.00
p value	<0.001**	<0.001**	<0.001**	<0.001**	<0.001**
EPQ-R	Total Score	Neuroticism	Extraversion	Psychotism	Lies scale
Mann-Whitney U	-	2675.00	2672.50	2545.00	2480.00
p value	-	0.991	0.983	0.568	0.451
WHODAS 2.0	Cognition	Mobility	Self-care	Socialization	Household
Mann-Whitney U	2324.50	2625.50	2497.00	2590.00	2575.50

Table 3: Statistical analysis of the evaluation instruments according to BMI in the athletes' group.

p value	0.176	0.821	0.347	0.728	0.670
	Work	Participation	General Disability Score		
Mann-Whitney U	2371.00	2626.50	2541.50		
p value	0.221	0.841	0.604		

**Statistically significant results.

2.6. Correlations performed in the athlete's group

Spearman's correlation tests were performed in determined variables (Age, BMI, BSI Total Score, WHODAS General Disability Score, EDE-Q Total Score and EPQ-R subscales, regarding the athlete's group. Results are presented in Table 4.

A statistically significant negative correlation was found between age and the BSI total score (Spearman's Coefficient = -0.208, p=0.001), age and WHODAS GDS (Spearman's Coefficient = -0.167, p=0.010).

A statistically significant positive correlation was found between BMI and EDE-Q total mean score (Spearman's Coefficient = 0.388, p<0,001), BSI total score and WHODAS GDS (Spearman's Coefficient = 0.602, p<0,001), BSI total score and EDE-Q total score (Spearman's Coefficient = 0.489, p<0,001), and WHODAS GDS and EDE-Q total score (Spearman's Coefficient = 0.451, p<0,001).

		Age	BMI	BSI Total Score	WHODAS GDS	EDE-Q Total Score
Age	Correlation coefficient		0.071	-0.208**	-0.167**	0.058
	Sig. (2 extremities)		0.272	0.001	0.010	0.370
	N		239	239	239	239
BMI	Correlation coefficient	0,071		0.074	-0.058	0.388**
	Sig. (2 extremities)	0,272		0.256	0.369	<0.001
	N	239		239	239	239
BSI Total Score	Correlation coefficient	-0.208**	0.074		0.602**	0.489**

Table 4: Statistical correlation between chosen variables in the athletes' group.

	Sig. (2	0.001	0.256		<0.001	<0.001
	extremities)					
	Ν	239	239		239	239
WHODAS	Correlation	-0.167**	-0.058	0.602**		0.451**
GDS	coefficient					
	Sig. (2	0.010	0.369	<0.001		<0.001
	extremities)					
	Ν	239	239	239		239

** Statistically significant results.

DISCUSSION

The descriptive analysis performed in the previous section is of great importance to validate the conclusions drawn ahead. Similar psychosocial environments were found in both groups (siblings, parental marital status, self-marital status, current residence), allowing the authors to remove these variables as confounding factors.

Family history of ED was assessed for it is also known to be a risk factor.(12, 14, 15) The control group showed double the presence of family history than the athlete's group, which can work as a confounding factor as well by increasing the control's group risk of DE.

More than half of the women from the control sample report having practiced some type of sport in the past. It is known from literature that sports dropout can be a risk factor for de development of ED (27), therefore increasing this group's risk of DE and possibly altering the results of this study.

As previously mentioned, sports can be divided in groups according to its weightrelated dependence, which was applied in this investigation.(11) Analysis showed that all three types of sport (aesthetic, non-lean and weight-dependent) were similarly represented in the athlete's group. Even though most of the athletes spends 1-2 hours exercising daily (Table 1), a significant 19.4% of them reports spending more than three hours a day exercising. In the context of this study, this value should raise awareness for the hypothesis of athletes overexercising in the context of DE, which is known to happen from the literature.(28, 29)

There was an attempt to match both groups by age, educational level, and residency, as these can be confounding factors and be seen as risk or protecting factors for the development of DE.(16) According to previous studies, younger athletes seem to be at a higher risk of developing DE, therefore making it important to assess and match groups by age.(30) Due to the small sample of subjects used on the research and the randomly collected data (rather than selected subjects), age and educational level were found to be statistically different between case and control groups. Due to the way the questions were posed, though desirable, it was not possible to match groups by their residency (country/city living). According to literature, it seems unlikely that there is a major risk factor in living on metropolitan areas to develop an ED, however, when associated with other sociodemographic effects, there may be an increased risk.(31)

Evaluation instruments

BSI: Literature shows that higher levels of anxiety, depression and obsessivecompulsive traits are associated with the development of ED.(13, 21) There were no important statistical differences, in the presence of psychopathology parameters of BSI in athletes or non-athletes. Little differences shown in absolute values as described in the previous section can be justified by personal variability. However, there were no important parameters to report, which removes its impact on the evaluation of different DE patterns in both groups. The fact that the samples are similar psychopathology-wise allows to remove confounding factors from the analysis.

EDE-Q: These results are of clinical great importance as the athlete group shows more DE patterns than the control group, scoring higher in this self-reported questionnaire. Though not statistically significant, the authors believe that the results would be much more consistent and have a different statistical weight if the sample was larger. However, in absolute terms and as supported by literature, athletes do report more concern with weight, eating and shape when compared to non-athletes.(10, 11) Regarding the report of missing periods in the last months, there were no statistically relevant differences between the two groups. However, athletes seem to show a higher rate of the contraceptive pill use, with a statistically relevant difference. The fact that athletes take the pill at higher rates may distort the missing period rates and hide a possible higher rate of hypothalamic/secondary amenorrhea, which is known that athletes are at a higher risk of.(7-9)

Regarding the written questions analyzed descriptively, it is possible to infer that overall, the athlete's group reports a slightly higher percentage of DE and nutritional behaviors. These results deserve a closer look at the problem of DE in athletes, for it has been discussed in previous literature that these behaviors are usually underreported by athletes, who are afraid to compromise their image and reputation or to be obligated to stop these behaviors.(32) However, if differences, though minimal, can be observed in a small sample, larger scale studies can bring vital information to this matter.

Furthermore, EDE-Q mean scores were analyzed on the athlete's group regarding the type of sport they performed (non-lean, aesthetic or weight-dependent/endurance sports). Figure 3 shows that athletes who practice a weight-dependent sport score higher than others. Although this result is supported by literature, the fact that aesthetic athletes scored lower in the EDE-Q was unexpected, since it is known that aesthetic and weight-dependent sports can both work as risk factors for the development of DE.(11, 21)

EPQ-R: Globally there are higher scores in the athlete's group, which translates into different personality traits between the two groups. Though slightly different in numbers, interpretation of the subscales according to the authors of the Portuguese validation's guidelines must be applied. N dimension means obtained translate stable personalities in both groups (balanced, controlled, upbeat, calm women) with no neurotic personality criteria. E dimension results translate into the presence of globally introverted personalities in both groups. P dimension showed that women of both groups lack psychopathology and are within normality (loving, empathic, responsible individuals). Validity scale presented both groups as having low social desirability and high honesty. Therefore, athletes did not present with personality traits that could be associated with DE or the development of ED. A study from Claes et al. (2006) showed that neuroticism was directly and negatively related to the presence of DE behaviors, as well as low openness or high consciousness.(33) Nonetheless, athletes with no personality deviations also are at risk of DE from additional factors. These results allow the valorization of other results obtained in this investigation, given that the presence of confounding personality traits is not verified and does not modulate the possible different behaviors in the two groups.

WHODAS 2.0: A higher score for WHODAS 2.0 translates into more difficulty on performing the respective tasks/actions. There were not statistically differences between the two groups of women, however, in absolute terms, athletes presented a higher functional difficulty when compared to the control group, not only globally but also in almost every subscale. As young, globally healthy women it was not expected that the participants would present with great difficulties in their daily activities, which they did not. However, taking these differences in absolute values and considering other results of this research, it may mean that DE in athletes may be an impacting factor on their daily life's fulfillment. In fact, there seems to be a correlation, although weak, between the WHODAS GDS and the presence of DE behaviors (Table 4). This can be observed in the literature, for example, in Doll et al. (2005), where the presence of ED history showed to lead to an impaired quality of life.(34, 35)

Analysis in the athletes' group

BMI mean is lower in the case group when compared to the control group and the latter presents with a higher inner variability of BMI values among participants (Figure 2). Differences are not statistically significant however, the fact that athletes' BMI appears to be very condensed in a tight range can be a sign of the existing tendency to maintain a certain body constitution and image among athletes. Studies have shown that the prevalence of eating disorders in athletes can be increased by the awareness of the standard of body image in sports and sociocultural pressures for thinness or a "perfect" body. (28, 36) Based on this, authors chose to perform a group-specific analysis in the sample group of athletes to understand the impact of one's body composition in psychopathology and functioning. When comparing the two subgroups of athletes divided by their BMI, the authors were able to draw some conclusions.

Through BSI, it was concluded that athletes with a higher BMI demonstrated, in general, higher rates of psychological suffering. Phobic Anxiety and Paranoid Ideation assessment both showed statistically significant differences between the two groups of athletes, with higher BMI group reporting more symptoms. These results have been observed in previous studies, where subjects with higher BMI have presented higher levels of anxiety, particularly in the social physique anxiety setting attributed to low self-esteem and higher DE patterns.(37, 38) On the other hand, Obsessive-compulsive assessment showed differences between the two groups of athletes, with lower BMI group reporting more symptoms, even though this was not statistically significant. Lower BMI and therefore better adaptation to the "lean figure" criteria can be associated with higher Obsessive-compulsive traits through the goal-driven motivation of athletes to achieve a certain body image and composition. This is also supported by literature, in which obsessive-compulsive disorders are associated to lower BMI values and even AN diagnosis.(39) However, a statistical correlation could not be found in this investigation between BMI and BSI scores (Table 4).

EDE-Q results showed that athletes with a higher BMI reported more weight-related concerns and DE behaviors, which can translate an environmental factor of pressure to behave or look a certain way. When correlation was assessed, it showed a positive correlation (although weak) between BMI and EDE-Q total scores. This is supported by literature as studies show that probability to develop DE patterns is higher in athletes with higher BMI.(40, 41) If athletes are constantly pressured to achieve a specific body goal, it is expected that those who do not necessarily meet these "criteria" feel discontent and pressured and develop mechanisms (DE) to try and reach what is asked of them.(38) This translates in impaired understanding of how to feed themselves and how to nurture their bodies.

Regarding EPQ-R and WHODAS, statistical or clinical differences worth reporting were not found between the two groups of athletes. This translates into similar personality patterns and functional capacity between all athletes included in the case sample, despite their BMI. These results are supported by the correlation tests performed, that show no correlation between BMI and the scores obtained for EPQ-R and WHODAS. Regarding the correlation analysis, some of the results drawn are worth mentioning and analyzing: Although none of the established correlations was strong, there seems to be an association between higher EDE-Q scores (and therefore more DE behaviors and lower self-esteem) and higher BMI, higher BSI score (therefore more psychopathology) and higher WHODAS score (therefore higher everyday-life difficulties). These results translate in an enormous role of DE behaviors in compromising the quality of life of athletes, which has been described in previous studies and reviews.(34, 42, 43) Larger studies could highlight this even more.

Limitations of the study

The cross-sectional nature of the research limits the possible conclusions that can be obtained from this line of investigation. Being unable to study the subjects throughout a determined period to understand possible aggravations in symptoms or even diagnosis, weight and lifestyle changes is also a limiting factor.

Another possible constraint of this project is the fact that it relies on self-reported measurements and questionnaires, which can be prone to introduce bias such as commonmethod bias and self-perception bias. This way to collect data can also be compromised if participants have negative feelings of shame and fear towards their symptoms and tend to underreport.

One other compromising point is the use of unspecific non-athlete questionnaires, which are not entailed to screen this specific group and its needs. Some of the inserted questions should have been more carefully written, as it became difficult to distinguish present athletes from former athletes.

One of the main limitations of the present research is the sample size. As exposed in previous sections of this essay, the study sample is much smaller than needed to be representative. Investigators believe that the outcomes were not statistically significant mainly due to this fact, given that clinically relevant differences were found between athletes and non-athletes. If the results obtained were to have statistical significancy in such a small sample, it could be indicative of sports as a great risk factor for the development of DE or even ED.

Despite its limitations, this research also has its strong points. The diverse range of sports and ages sampled and the contact with National Sports Federations give meaning to

these results. Being able to collect so many data and control a wide range of variables gives the investigation the power to understand the complex relationship between the individual, the sport, and the DE behavior. Regardless of the statistical significancy, clinically significant results were drawn from this investigation that can be important for clinical practice and future results.

Conclusion

ED are a well-known cause of impaired quality of life in the general population. Literature shows that athletes and specially women are more prone to develop DE behaviors that can lead to ED diagnosis, compromising their performance and optimal health.

Even though authors were not able to draw statistically significant results, clinical findings and behavior patterns show that it is of great interest to closely follow athletes and their daily nutritional and exercise conducts, to ensure that they follow an optimal plan that allows them a better life and better sports performance.

Given the cross-sectional nature of this project, causal inference could not be made between sports and DE. It would be of great importance to expand this work into a longitudinal study where athletes can be followed throughout a period and a larger number of participants can be reached and included, such as adolescents and male athletes. Large scale studies with direct contact with the athletes and direct measurements may help to understand the true link between the practice of sports and the development of impaired eating behaviors. Interventional clinical studies could also be of importance to ascertain the importance of a multilayered team to accompany athletes.

Regardless of the results of this research not being conclusive on their own, they show that it would be worth it to pay a little more attention to nutritional behaviors in athletes, preventing them from unknowingly develop an ED while trying to achieve a certain and so often unreal goal. A great example of how that can be achieved has been given by the Australian Institute of Sport and National Eating Disorders Collaboration, having provided the practical recommendations that sports teams should follow in a multidisciplinary basis to clinically manage DE behaviors and ED among their athletes, providing the necessary help. Such initiatives should be taken as an example for National Sport's Federations as it has been demonstrated that athletes live with an increased risk of developing disease.

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REFERENCES

1. World Health Organization. ICD-10, the ICD-10 classification of mental and behavioural disorders : clinical descriptions and diagnostic guidelines. Geneva: World Health Organization; 1992. xii, 362 p. p.

2. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders {Feeding and Eating Disorders}. 5th ed. Washington, DC2013.

3. Santomauro DF, Melen S, Mitchison D, Vos T, Whiteford H, Ferrari AJ. The hidden burden of eating disorders: an extension of estimates from the Global Burden of Disease Study 2019. Lancet Psychiatry. 2021;8(4):320-8.

4. Hay P. Current approach to eating disorders: a clinical update. Intern Med J. 2020;50(1):24-9.

5. Galmiche M, Déchelotte P, Lambert G, Tavolacci MP. Prevalence of eating disorders over the 2000-2018 period: a systematic literature review. Am J Clin Nutr. 2019;109(5):1402-13.

6. Cruz AM, Gonçalves-Pinho M, Santos JV, Coutinho F, Brandão I, Freitas A. Eating disorders—Related hospitalizations in Portugal: A nationwide study from 2000 to 2014. International Journal of Eating Disorders. 2018;51(10):1201-6.

 Treasure J, Duarte TA, Schmidt U. Eating disorders. Lancet. 2020;395(10227):899-911.

8. Wells KR, Jeacocke NA, Appaneal R, Smith HD, Vlahovich N, Burke LM, et al. The Australian Institute of Sport (AIS) and National Eating Disorders Collaboration (NEDC) position statement on disordered eating in high performance sport. Br J Sports Med. 2020;54(21):1247-58.

9. Neglia A. Nutrition, Eating Disorders, and Behavior in Athletes. Psychiatr Clin North Am. 2021;44(3):431-41.

32

10. Hazzard VM, Loth KA, Hooper L, Becker CB. Food Insecurity and Eating Disorders: a Review of Emerging Evidence. Curr Psychiatry Rep. 2020;22(12):74.

11. Mancine RP, Gusfa DW, Moshrefi A, Kennedy SF. Prevalence of disordered eating in athletes categorized by emphasis on leanness and activity type - a systematic review. J Eat Disord. 2020;8:47.

12. Hilbert A, Pike KM, Goldschmidt AB, Wilfley DE, Fairburn CG, Dohm FA, et al. Risk factors across the eating disorders. Psychiatry Res. 2014;220(1-2):500-6.

13. Keski-Rahkonen A, Mustelin L. Epidemiology of eating disorders in Europe: prevalence, incidence, comorbidity, course, consequences, and risk factors. Curr Opin Psychiatry. 2016;29(6):340-5.

14. Russon J, Mensinger J, Herres J, Shearer A, Vaughan K, Wang SB, et al. Identifying Risk Factors for Disordered Eating among Female Youth in Primary Care. Child Psychiatry Hum Dev. 2019;50(5):727-37.

15. Frieiro P, González-Rodríguez R, Domínguez Alonso J. [Influence of personal and family variables on eating disorders.]. Rev Esp Salud Publica. 2021;95.

16. Maxwell M, Thornton LM, Root TL, Pinheiro AP, Strober M, Brandt H, et al. Life beyond the eating disorder: education, relationships, and reproduction. Int J Eat Disord. 2011;44(3):225-32.

17. Bonci CM, Bonci LJ, Granger LR, Johnson CL, Malina RM, Milne LW, et al. National athletic trainers' association position statement: preventing, detecting, and managing disordered eating in athletes. J Athl Train. 2008;43(1):80-108.

18. Ströhle A. Sports psychiatry: mental health and mental disorders in athletes and exercise treatment of mental disorders. European Archives of Psychiatry and Clinical Neuroscience. 2019;269.

19. Mehta J, Thompson B, Kling JM. The female athlete triad: It takes a team. Cleve Clin J Med. 2018;85(4):313-20.

20. Mountjoy M, Sundgot-Borgen J, Burke L, Carter S, Constantini N, Lebrun C, et al. The IOC consensus statement: beyond the Female Athlete Triad--Relative Energy Deficiency in Sport (RED-S). Br J Sports Med. 2014;48(7):491-7.

21. Petisco-Rodríguez C, Sánchez-Sánchez LC, Fernández-García R, Sánchez-Sánchez J, García-Montes JM. Disordered Eating Attitudes, Anxiety, Self-Esteem and Perfectionism in Young Athletes and Non-Athletes. Int J Environ Res Public Health. 2020;17(18).

22. Whitehead J, Slater G, Wright H, Martin L, O'Connor H, Mitchell L. Disordered eating behaviours in female physique athletes. Eur J Sport Sci. 2020;20(9):1206-14.

23. Canavarro MC. Inventário de Sintomas Psicopatológicos: BSI. In: M. R. Simões MG, &
L. S. Almeida (Eds.), editor. T estes e provas psicológicas em Portugal. II. Braga: SHO/APPORT1999. p. 87-109.

24. Almiro P, Simões MR. Questionário de Personalidade de Eysenck – Forma Revista (EPQ-R). *Instrumentos e contextos de avaliação psicológica* II. Coimbra: Edições Almedina;
2014. p. 211-29.

25. Machado PP, Martins C, Vaz AR, Conceição E, Bastos AP, Gonçalves S. Eating disorder examination questionnaire: psychometric properties and norms for the Portuguese population. Eur Eat Disord Rev. 2014;22(6):448-53.

26. Saúde OMd. Avaliação de Saúde e Deficiência: Manual do WHO Disability Assessment Schedule (WHODAS 2.0). In: Castro S, Leite C, editors. 2015.

27. Buckley GL, Hall LE, Lassemillante A-CM, Ackerman KE, Belski R. Retired Athletes and the Intersection of Food and Body: A Systematic Literature Review Exploring Compensatory Behaviours and Body Change. Nutrients. 2019;11(6).

28. Joy E, Kussman A, Nattiv A. 2016 update on eating disorders in athletes: A comprehensive narrative review with a focus on clinical assessment and management. British Journal of Sports Medicine. 2016;50(3):154.

29. Eichstadt M, Luzier J, Cho D, Weisenmuller C. Eating Disorders in Male Athletes. Sports Health. 2020;12(4):327-33.

30. Rice SM, Purcell R, De Silva S, Mawren D, McGorry PD, Parker AG. The Mental Health of Elite Athletes: A Narrative Systematic Review. Sports Medicine. 2016;46(9):1333-53.

31. Hay P, Mitchison D. Urbanization and eating disorders: a scoping review of studies from 2019 to 2020. Curr Opin Psychiatry. 2021;34(3):287-92.

32. Sundgot-Borgen J, Torstveit MK. Prevalence of eating disorders in elite athletes is higher than in the general population. Clin J Sport Med. 2004;14(1):25-32.

33. Claes L, Vandereycken W, Luyten P, Soenens B, Pieters G, Vertommen H. Personality prototypes in eating disorders based on the Big Five model. J Pers Disord. 2006;20(4):401-16.

34. Winkler L, Christiansen E, Lichtenstein M, Hansen N, Bilenberg N, Støving R. Quality of life in eating disorders: A meta-analysis. Psychiatry research. 2014;219.

35. Doll HA, Petersen SE, Stewart-Brown SL. Eating disorders and emotional and physical well-being: associations between student self-reports of eating disorders and quality of life as measured by the SF-36. Qual Life Res. 2005;14(3):705-17.

36. Sundgot-Borgen J, Torstveit MK. Aspects of disordered eating continuum in elite highintensity sports. Scand J Med Sci Sports. 2010;20 Suppl 2:112-21.

37. Ersöz G, Altiparmak E, Aşçı FH. Does Body Mass Index Influence Behavioral Regulations, Dispositional Flow and Social Physique Anxiety in Exercise Setting? J Sports Sci Med. 2016;15(2):295-300.

38. Gargari BP, Khadem-Haghighian M, Taklifi E, Hamed-Behzad M, Shahraki M. Eating attitudes, self-esteem and social physique anxiety among Iranian females who participate in fitness programs. J Sports Med Phys Fitness. 2010;50(1):79-84.

39. Abramovitch A, Anholt GE, Cooperman A, van Balkom A, Giltay EJ, Penninx BW, et al. Body mass index in obsessive-compulsive disorder. J Affect Disord. 2019;245:145-51.

40. Pustivšek S, Hadžić V, Dervišević E, Carruthers J. Risk for eating disorders and body composition among adolescent female and male athletes and non-athlete controls. International Journal of Adolescent Medicine and Health. 2020;32(4).

41. Muros JJ, Ávila-Alche Á, Knox E, Zabala M. Likelihood of suffering from an eating disorder in a sample of Spanish cyclists and triathletes. Journal of eating disorders. 2020;8(1):70-.

42. Wu XY, Yin WQ, Sun HW, Yang SX, Li XY, Liu HQ. The association between disordered eating and health-related quality of life among children and adolescents: A systematic review of population-based studies. PLOS ONE. 2019;14(10):e0222777.

43. Wagner AF, Stefano EC, Cicero DC, Latner JD, Mond JM. Eating disorder features and quality of life: Does gender matter? Quality of Life Research. 2016;25(10):2603-10.

APPENDICES

Appendix I - Eating disorders criteria, as defined in ICD-10

Anorexia Nervosa	A disorder characterized by deliberate weight loss, induced, and
(excludes loss of	sustained by the patient. It occurs most commonly in adolescent girls and
appetite)	young women, but adolescent boys and young men may also be affected,
	as may children approaching puberty and older women up to the
	menopause. The disorder is associated with a specific psychopathology
	whereby a dread of fatness and flabbiness of body contour persists as an
	intrusive overvalued idea, and the patients impose a low weight threshold
	on themselves. There is usually undernutrition of varying severity with
	secondary endocrine and metabolic changes and disturbances of bodily
	function. The symptoms include restricted dietary choice, excessive
	exercise, induced vomiting and purgation, and use of appetite
	suppressants and diuretics.
Atypical Anorexia	Disorders that fulfil some of the features of anorexia nervosa but in which
Nervosa	the overall clinical picture does not justify that diagnosis. For instance, one
	of the key symptoms, such as amenorrhea or marked dread of being fat,
	may be absent in the presence of marked weight loss and weight-reducing
	behavior. This diagnosis should not be made in the presence of known
	physical disorders associated with weight loss.
Bulimia Nervosa	A syndrome characterized by repeated bouts of overeating and an
	excessive preoccupation with the control of body weight, leading to a
	pattern of overeating followed by vomiting or use of purgatives. This
	disorder shares many psychological features with anorexia nervosa,
	including an overconcern with body shape and weight. Repeated vomiting
	is likely to give rise to disturbances of body electrolytes and physical
	complications. There is often, but not always, a history of an earlier
	episode of anorexia nervosa, the interval ranging from a few months to
	several years.
Atypical Bulimia	Disorders that fulfil some of the features of bulimia nervosa, but in which
Nervosa	the overall clinical picture does not justify that diagnosis. For instance,
	there may be recurrent bouts of overeating and overuse of purgatives
	without significant weight change, or the typical overconcern about body
	shape and weight may be absent.
Overeating	Overeating due to stressful events, such as bereavement, accident,
associated with	childbirth, etc.
other psychological	

disturbances	
(excludes obesity)	
Vomiting	Repeated vomiting that occurs in dissociative disorders and
associated with	hypochondriacal disorder, and that is not solely due to conditions
other psychological	classified outside this chapter.
disturbances	
(excludes nausea)	
Other eating	Pica in adults; excludes pica of infancy and childhood.
disorders	Psychogenic loss of appetite
Eating disorder,	-
unspecified	

Appendix II - Feeding and Eating Disorders criteria, as defined in DSM-V

Anorexia Nervosa	A. Restriction of energy intake relative to requirements, leading to a
(Includes subtypes,	significantly low body weight in the context of age, sex, developmental
namely restricting	trajectory, and physical health. "Significantly low weight" is defined as a
type and binge-	weight that is less than minimally normal or, for children and adolescents,
eating/purging type)	less than that minimally expected.
	B. Intense fear of gaining weight or of becoming fat, or persistent behavior
	that interferes with weight gain, even though at a significantly low weight.
	C. Disturbance in the way in which one's body weight or shape is
	experienced, undue influence of body weight or shape on self-evaluation,
	or persistent lack of recognition of the seriousness of the current low body
	weight.
Bulimia Nervosa	A. Recurrent episodes of binge eating. An episode of binge eating is
	characterized by both of the following:
	1. Eating in a discrete period of time (e.g., within any 2-hour period), an
	amount of food that is definitely larger than what most individuals would
	eat in a similar period of time under similar circumstances.
	2. A sense of lack of control overeating during the episode (e.g., a
	feeling that one cannot stop eating or control what or how much one is
	eating).
	B. Recurrent inappropriate compensatory behaviors to prevent weight
	gain, such as self-induced vomiting; misuse of laxatives, diuretics, or other
	medications; fasting; or excessive exercise.
	C. The binge eating and inappropriate compensatory behaviors both
	occur, on average, at least once a week for 3 months.
	D. Self-evaluation in unduly influenced by body shape and weight.
	E. The disturbance does not occur exclusively during episodes of
	anorexia nervosa.
Binge Eating	A. A. Recurrent episodes of binge eating. An episode of binge eating is
Disorder	characterized by both of the following:
	1. Eating in a discrete period of time (e.g., within any 2-hour period), an
	amount of food that is definitely larger than what most individuals would
	eat in a similar period of time under similar circumstances.
	2. A sense of lack of control overeating during the episode (e.g., a
	feeling that one cannot stop eating or control what or how much one is
	eating).
	B. The binge-eating episodes are associated with three (or more) of the
	following:
	1. Eating much more rapidly than normal.

	2. Eating until feeling uncomfortably full.
	3. Eating large amounts of food when not feeling physically hyngry.
	4. Eating alone because of feeling embarrassed by how much one is
	eating.
	5. Feeling disgusted with oneself, depressed, or very guilty afterward.
	C. Marked distress regarding binge eating is present.
	D. The binge eating occurs, on average, at least once a week for 3
	months.
	E. The binge eating is not associated with the recurrent use of
	inappropriate compensatory behavior as in bulimia nervosa and does not
	occur exclusively during the course of bulimia nervosa or anorexia
	nervosa.
Other Specified	This category applies to presentations in which symptoms characteristic
Feeding and Eating	of a feeding and eating disorder that cause clinically significant distress or
Disorder	impairment in social, occupational, or other important areas of functioning
	predominate but do not meet the full criteria for any of the disorders in the
	feeding and eating disorders diagnostic class. The other specified feeding
	or eating disorder category is used in situations in which the clinician
	chooses to communicate the specific reason that the presentation does
	not meet the criteria for any specific feeding and eating disorder. Includes:
	1. Atypical anorexia nervosa
	2. Bulimia nervosa (of low frequency and/or limited duration)
	3. Binge-eating disorder (of low frequency and/or limited duration)
	4. Purging disorder
	5. Night eating syndrome
Unspecified	This category applies to presentations in which symptoms characteristic
Feeding and Eating	of a feeding and eating disorder that cause clinically significant distress or
Disorder	impairment in social, occupational, or other important areas of functioning
	predominate but do not meet the full criteria for any of the disorders in the
	feeding and eating disorders diagnostic class. The unspecified feeding
	and eating disorder category is used in situations in which the clinician
	chooses not to specify the reason that the criteria are not met for a specific
	feeding and eating disorder and includes presentations in which there is
	insufficient information to make a more specific diagnosis (e.g., in
	emergency room settings).
Pica	A. Persistent eating of nonnutritive, nonfood substances over a period of
	at least 1 month.
	B. The eating of nonnutritive, nonfood substances is inappropriate to the
	developmental level of the individual.

Appendix III – Questionnaire

Perturbações do Comportamento Alimentar em Atletas Femininas Convidamo-la a participar neste estudo porque é mulher com idade compreendida entre os 18-30 anos.

A sua participação poderá contribuir para melhorar o conhecimento e prevenção das perturbações do comportamento alimentar (PCA) em atletas femininas.

Este estudo irá decorrer na Faculdade de Medicina da Universidade de Coimbra, no âmbito do Trabalho Final do Mestrado Integrado em Medicina, e foi aprovado pela Comissão de Ética da Faculdade de Medicina da Universidade de Coimbra (FMUC), de modo a garantir a proteção dos direitos, segurança e bem-estar de todos os participantes e a garantir prova pública dessa proteção.

Se aceitar participar, ser-lhe-á solicitado a preenchimento deste questionário de autorresposta, composto por várias partes, cujas questões são sobre si e o modo como se tem sentido. O preenchimento demora cerca de 20 minutos. Os seus registos manter-se-ão confidenciais e anonimizados de acordo com os regulamentos e leis aplicáveis. Os dados recolhidos através dos inquéritos online serão armazenados para posterior análise, em ficheiro na posse exclusiva dos investigadores, únicas entidades que deverão participar na consulta e utilização dos dados obtidos. Estes apenas serão conservados no tempo em que decorrer o estudo e conclusão da redação do artigo científico. Em caso de publicação, os participantes não serão identificáveis pelos dados obtidos.

É inteiramente livre de aceitar ou recusar participar neste estudo, escolhendo terminar ou não o preenchimento deste questionário. A sua participação não acarreta qualquer risco.

Caso não esteja interessado/a em participar, em nada será comprometida a sua relação com os/as investigadores/as.

Se estiver interessada em participar, pedimos que leia atentamente todas as questões e responda segundo as instruções.

Agradecemos desde já a participação!

*Obrigatório

CONTACTOS

Se tiver perguntas relativas aos seus direitos como participante deste estudo, deve contactar:

Presidence da Comissão de Érica da FMUC Universidade de Coimbra - Faculdade de Medicina Pólo das Ciéncias da Saúde - Unidade Central Azinhaga de Santa Comba, Celas 3000-334 COIMBRA - PORTUGAL Tel: +353 239 857 708 (Est. 542708) | Fat: +352 239 833 236 E-mail: comissorie a déned use ne l'avec fined use ne

Se tiver questões sobre este estudo, deve contactar os/as investigadores/as:

Sara Candosor <u>2222 cardeoozy@hormail.com;</u> 911109131 Dra. Tāmia Silvæ <u>ranizvdasilva md@gmail.com;</u> 914562287 Prof. Dousor Joaquim Cerejeirze <u>joaquim cerejeira@gmail.com</u>

Perturbações do Comportamento Alimentar em Atletas Femininas Declaro que recebi informação acerca das circunstâncias da minha participação neste projeto de investigação. Li atentamente e compreendi a informação do Consentimento Informado. Concordo com as condições e compreendo que a participação neste estudo é voluntária e confidencial e que os dados recolhidos serão analisados apenas para fins de investigação.

Reservo o direito de desistir da minha participação a qualquer momento.

1.	Consentimento Informado *	
	Marcar apenas uma oval.	
	Dou o meu consentimento informado e de	sejo prosseguir para o estudo.
Pe A	erturbações do Comportamento Alimentar em Iletas Femininas	Nesta secção, solicitamos-lhe alguns dados sociodemográficos relativamente a si e à sua familia.
2.	Data de nascimento *	
	Exemplo: 7 de janeiro de 2019	
3.	Naturalidade *	
4.	Local de residência *	
_		
5.	Estado civil *	
	Marcar apenas uma oval.	
	Solteira	
	Divorciada	
	Em união de facto	
	Viúva	
6.	Número de irmãos *	
7.	Estado civil dos progenitores *	
	Marcar apenas uma oval.	
	Casados	
	Divorciados	
	Sem relação	

8.	Escolaridade *	
	Marcar apenas uma oval.	
	. Dimension sinte	
	Ensino Dasico	
	Mastrada	
9.	Ocupação atual *	
	Marcar apenas uma oval.	
	Emprego assalariado	
	Trabalho por conta própria	
	Não assalariado (voluntário/caridade)	
	Estudante	
	Doméstica	
	 Desempregada (por razões de saúde) 	
	Desempregada (por outras razões)	
	Outra:	
10	Onde/com mem vive? *	
10.	Construction of Queries and	
	Marcar apenas uma oval.	
	Residência particular	
	Residência familiar (p.e.: em casa dos pais ou avós)	
	Residência partilhada com estudantes/amigos	
	Residência universitária	
	Outra:	
11	Tem alguma doenca diagnosticada? *	
	Manage and a sure and	
	marcar apenas uma ovai.	
	Sim	
	Não Não	
10	n 1 mm m1 Mala	
12.	se respondeu "5im" a pergunta anterior, qual(is)?	

13.	História familiar de perturbações do comportamento alimentar? * Marcar apenas uma oval. Sim Não
14.	Se respondeu "Sim" à pergunta anterior, quais? Marcar apenas uma oval.
	Andrexte nervosa Bulimia nervosa Perturbação de ingestão compulsiva Outra:
15.	Pratica/Praticou alguma modalidade desportiva? * Marcar apenas uma oval. Sim Não
16.	Se respondeu "Sim" à pergunta anterior, qual(is)?
17.	Durante quanto tempo praticou essa(s) mesma(s) modalidade(s)?
18.	Além da modalidade principal, pratica outro tipo de atividade física (p.e. Caminhadas)? Marcar apenas uma oval. Sim Não

19.	Qual o número de hora	as diário que passa, em média, a exercer a sua atividade física (modalidade ou outra)? *
	Marcar apenas uma	oval.
	Menos de uma l	hora
	Entre uma e dua	is horas
	Entre duas e trê	s horas
	Mais do que três	s horas
20.	Número de refeições di	iárias *
	Maraar anonar uma	aval
	Marcar apenas uma	ovar.
	Entre 1 e 2	
	Entre 3 e 5	
	🔵 6 ou mais	
Per	turbações do	BSI A seguir encontra-se uma lista de problemas ou sintomas que por vezes as pessoas apresentam.
Co	mportamento	Assinale, num dos espaços à direita de cada sintoma, aquele que melhor descreve o grau em que
Ali	imentar em Atletas	oada problema o arecou durante a unima semana. 0 - Nunca 1 - Poucas Vezes 2 - Algumas Vezes 3 - Muitas Vezes 4 - Muitíssimas Vezes
Fer	nininas	

21. Em que medida sofreu as seguintes queixas?*

	0	1	2	3	4
1. Nervosismo ou tensão interior	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
2. Desmaios ou tonturas	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
3. Ter a impressão que as outras pessoas podem controlar os seus pensamentos	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
4. Ter a ideia de que os outros são culpados pela maioria dos seus problemas	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
5. Dificuldade em se lembrar de coisas passadas ou recentes	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
6. Aborrece-se ou irrita-se com facilidade	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
7. Dores no coração ou sobre o peito	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
8. Medo de andar na rua ou nas praças públicas	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
9. Pensamentos de acabar com a vida	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
10. Sentir que não pode confiar na maioria das pessoas	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
11. Perda de apetite	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
12. Ter um medo súbito sem razão para isso2	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
13. Ter impulsos que não se podem controlar	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
14. Sentir-se sozinho mesmo quando está com mais pessoas	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
15. Dificuldades em fazer qualquer trabalho	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

22. Em que medida sofreu as seguintes queixas?*

	0	1	2	3	4
16. Sentir-se sozinho	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
17. Sentir-se triste	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
18. Não ter interesse por nada	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
19. Sentir-se atemorizado	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
20. Sentir-se facilmente ofendido nos seus sentimentos	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
21. Sentir que as outras pessoas não são amigas ou não gostam de si	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
22. Sentir-se inferior aos outros	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
23. Vontade de vomitar ou mal-estar no estômago	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
24. Impressão de que os outros o costumam observar ou falar de si	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
25. Dificuldade em adormecer	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
26. Sentir necessidade de verificar várias vezes o que faz	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
27. Dificuldade em tomar decisões	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
28. Medo de viajar de autocarro, comboio ou de metro	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
29. Sensação de que lhe falta o ar	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
30. Calafrios ou afrontamentos	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

23. Em que medida sofreu as seguintes queixas? *

	0	1	2	3	4
31. Ter de evitar certas coisas, lugares ou actividades que lhe causam medo	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
32. Sensação de vazio na cabeça	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
33. Sensação de anestesia (encortiçamento ou formigueiro) no corpo	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
34. Ter a ideia que deveria ser castigado pelos seus pecados	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
35. Sentir-se sem esperança no futuro	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
36. Ter dificuldades em se concentrar	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
37. Falta de forças em partes do corpo	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
38. Sentir-se em estado de tensão ou aflição	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
39. Pensamentos sobre a morte ou que vai morrer	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
40. Ter impulso de bater, ofender ou ferir alguém	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
41. Ter vontade de partir ou destruir coisas	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
42. Sentir-se embaraçado junto de outras pessoas	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
43. Sentir-se mal no meio de multidões como lojas, cinemas ou assembleias	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
44. Grande dificuldade em sentir-se *próximo* afectivamente de outra pessoa	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
45. Ter ataques de terror ou pânico	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

24. Em que medida sofreu as seguintes queixas?*

Marcar apenas uma oval por linha.

	0	1	2	3	4
46. Entrar facilmente em discussão	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
47. Sentir-se nervoso quando tem de ficar sozinho	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
48. Sentir que as outras pessoas não dão o devido valor ao seu trabalho ou capacidades	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
49. Sentir-se tão desassossegado que não consegue manter-se quieto	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
50. Sentir que não tem valor	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
51. Ter a impressão que, se deixasse, as outras pessoas se aproveitariam de si	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
52. Ter sentimentos de culpa	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
53. Ter a impressão que alguma coisa não regula bem na sua cabeça	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Perturbações do Comportamento Alimentar em Atletas

Femininas

EPQ-R Por favor, em cada questão que se segue responda "Sim" ou "Não. Não há respostas "certas" ou "erradas", por isso responda de acordo com a sua maneira habitual de ser, pensar e sentir. Responda rapidamente e não pense demasiado no significado exato das mesmas questões. Relembro que as respostas são confidenciais.

25. *

	Sim	Não
1. Tem muitos passatempos diferentes?	\bigcirc	\bigcirc
Gosta de conhecer novas pessoas?	\bigcirc	\bigcirc
3. Alguma vez se sentiu muito infeliz sem razão?	\bigcirc	\bigcirc
É uma pessoa faladora?	\bigcirc	\bigcirc
O seu estado de humor tem muitas vezes altos e baixos?	\bigcirc	\bigcirc
Daria dinheiro para fins de caridade?	\bigcirc	\bigcirc
Se disser que vai fazer alguma coisa, cumpre sempre a sua promessa, por mais incómodo que isso seja?	\bigcirc	0
Habitualmente é capaz de se descontrair e de se divertir numa festa animada?	\bigcirc	\bigcirc
Preocupa-se frequentemente com coisas que não deveria ter feito ou dito?	\bigcirc	\bigcirc
É uma pessoa alegre e bem-disposta?	\bigcirc	\bigcirc
É uma pessoa que se irrita com facilidadE?	\bigcirc	\bigcirc
Alguma vez estragou ou perdeu uma coisa que pertencesse a outra pessoa?	\bigcirc	\bigcirc
Ficaria muito perturbada se visse uma criança ou um animal a sofrer?	\bigcirc	\bigcirc
Alguma vez culpou alguém sabendo que a responsabilidade era sua?	\bigcirc	\bigcirc
Fica ofendida com facilidade?	\bigcirc	\bigcirc
Em encontros sociais prefere ficar em segundo plano?	\bigcirc	\bigcirc
Já alguma vez quis ficar com mais do que aquilo que lhe pertencia?	\bigcirc	\bigcirc
Costuma sentir dificuldades em tomar decisões?	\bigcirc	\bigcirc
Gosta de sair muitas vezes?	\bigcirc	\bigcirc
Todos os seus hábitos são bons e desejáveis?	\bigcirc	\bigcirc
É uma pessoa preocupada?	\bigcirc	\bigcirc
Às vezes fala sobre coisas de que nada sabe?	\bigcirc	\bigcirc
		0

Acha-se uma pessoa nervosa?	_	
Tem inimigos que lhe querem fazer mal?	\bigcirc	\bigcirc
Sente-se muitas vezes perturbada por sentimentos de culpa?	\bigcirc	\bigcirc
Está sempre disposta a admitir os erros que comete?	\bigcirc	\bigcirc
É capaz de animar facilmente uma festa aborrecida?	\bigcirc	\bigcirc
Às vezes gaba-se um pouco?	\bigcirc	\bigcirc
Sente-se muitas vezes "farta" de tudo?	\bigcirc	\bigcirc
Alguma vez disse mal de alguém?	\bigcirc	\bigcirc
Acha-se uma pessoa tensa e que "ferve em pouca água"?	\bigcirc	\bigcirc
Gosta de se misturar com as pessoas?	\bigcirc	\bigcirc
Sofre dos "nervos"?	\bigcirc	\bigcirc
Geralmente toma a iniciativa de fazer novas amizades?	\bigcirc	\bigcirc
Costuma sentir prazer em ver alguém com quem não simpatiza ser humilhado perante outras pessoas?	\bigcirc	0
Quando as pessoas falam consigo tem quase sempre uma "resposta pronta"?	\bigcirc	\bigcirc
Sente-se muitas vezes abatida e cansada sem motivo?	\bigcirc	\bigcirc
Alguma vez fez batota num jogo?	\bigcirc	\bigcirc
Gosta de fazer coisas em que tem que atuar rapidamente?	\bigcirc	\bigcirc
Existem muitas pessoas que tentam evitá- la?	\bigcirc	\bigcirc
Alguma vez ficou com alguma coisa (nem que fosse um alfinete ou um botão) que pertencesse a outra pessoa?	\bigcirc	\bigcirc
Já alguma vez desejou estar morta?	\bigcirc	\bigcirc
Nas conversas, tem tendência a falar mais do que as outras pessoas?	\bigcirc	\bigcirc
Fica preocupada durante muito tempo depois de uma experiência embaraçosa?	\bigcirc	\bigcirc
É capaz de organizar e animar uma festa?	\bigcirc	\bigcirc
Já alguma vez insistiu em impor a sua vontade?	\bigcirc	\bigcirc
	\frown	\frown

Sente-se muitas vezes só?	\bigcirc	\cup
Tenta não ser grosseira com as pessoas?	\bigcirc	\bigcirc
Age sempre de acordo com o que diz?	\bigcirc	\bigcirc
Costuma ficar aborrecida com a maneira como as pessoas a tratam?	\bigcirc	\bigcirc
Alguma vez se atrasou para um compromisso ou para o seu trabalho?	\bigcirc	\bigcirc
Tem muitos amigos?	\bigcirc	\bigcirc
Quando era criança alguma vez foi mal- educada para com os seus pais?	\bigcirc	\bigcirc
Colaboraria com as associações que ajudam as pessoas mais desfavorecidas (ou marginalizadas)?	\bigcirc	\bigcirc
Sente-se muitas vezes, a rebentar de energia?	\bigcirc	\bigcirc
Gosta de festas ou reuniões sociais com muita gente?	\bigcirc	\bigcirc
Fica especialmente afetada com algumas coisas?	\bigcirc	\bigcirc
Quando está irritada (ou de mau humor) tem dificuldade em controlar-se?	\bigcirc	\bigcirc
Deixa às vezes para amanhã o que deveria fazer hoje?	\bigcirc	\bigcirc
Às vezes sente-se cheia de energia e outras vezes muito abatida?	\bigcirc	\bigcirc
Já alguma vez disse, propositadamente, alguma coisa para magoar alguém?	\bigcirc	\bigcirc
É uma pessoa sofredora?	\bigcirc	\bigcirc
Emprestaria dinheiro a um amigo que estivesse a precisar?	\bigcirc	\bigcirc
Gosta de muita excitação e animação à sua volta?	\bigcirc	\bigcirc
Fica facilmente ofendida se as pessoas a criticam a si ou o seu trabalho?	\bigcirc	\bigcirc
Os outros acham-na uma pessoa muito divertida?	\bigcirc	\bigcirc
Sente-se muitas vezes tensa e enervada?	0	\bigcirc
Sente-se muitas vezes tensa e enervada? Alguma vez aceitou um elogio sabendo que o mérito era de outra pessoa?	0	0
Sente-se muitas vezes tensa e enervada? Alguma vez aceitou um elogio sabendo que o mérito era de outra pessoa? Gostaria que as outras pessoas tivessem medo de si?	0	0

Gosta de contar anedotas e histórias engraçadas aos seus amigos?

 \cup \cup

Perturbações do Comportamento Alimentar em Atletas Femininas

EDE-Q EDE-Q As questões que se seguem dizem respeito APENAS às últimas quatro semanas (28 dias). Por favor leia cada questão cuidadosamente e responda a todas as questões.

Questões 1 a 12: Por favor responda a cada questão cautelosamente e selecione o número apropriado à direita.

26. Quantos dias nos últimos 28 dias...*

0 - Nenhum | 1 - Um a 5 dias | 2 - 6 a 12 dias | 3 - 13 a 15 dias | 4 - 16 a 22 dias | 5 - 23 a 27 dias | 6 - Todos os dias

Marcar apenas uma oval por linha.

	0	1	2	3	4	5	6
 Tentou limitar propositadamente (com ou sem sucesso) a quantidade de comida que ingeriu para influenciar o seu peso ou forma corporal? 	\bigcirc						
2. Passou longos períodos de tempo (8 horas ou mais) sem comer nada para influenciar o seu peso ou forma corporal?	\bigcirc						
3. Tentou evitar comer alimentos de que gosta (tendo ou não conseguido) para influenciar o seu peso ou forma corporal?	\bigcirc						
4. Tentou seguir regras rígidas relativamente à sua alimentação (por exemplo, um limite máximo de calorias) para influenciar o seu peso ou forma corporal (tendo ou não conseguido)?	\bigcirc						
5. Teve um desejo claro de ter o seu estômago vazio para influenciar o seu peso ou forma corporal?	\bigcirc						
6. Teve um desejo claro de ter um estômago completamente liso?	\bigcirc						
7. Pensar sobre comida, comer ou calorias tornou muito difícil concentrar- se em coisas em que estava interessada (por exemplo, trabalhar, seguir uma conversa ou ler)?	\bigcirc	0	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
8. Pensar sobre o peso ou forma corporal tornou muito difícil concentrar-se em coisas em que estava interessada (por exemplo, trabalhar, seguir uma conversa ou ler)?	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
9. Teve medo intenso de perder o controlo sobre o que comia?	\bigcirc						
10. Teve um medo claro de poder ganhar peso?	\bigcirc						
11. Se sentiu gorda?	\bigcirc						
12. Teve um grande desejo de perder peso?	\bigcirc						

Questões 13 a 18: Por favor responda indicando o número adequado. Lembre-se que as questões se referem apenas às últimas quatro semanas (28 dias).

	Marcar apenas uma oval. 0 1 2 3 4 5
33.	19. Nos últimos 28 dias, em quantos dias comeu em segredo (i.e., às escondidas, furtivamente)? * 0 - Nenhum 1 - Um a 5 dias 2 - 6 a 12 dias 3 - 13 a 15 dias 4 - 16 a 22 dias 5 - 23 a 27 dias 6 - Todos os dias
Ques NÃO e ourrai de com	tões 19 a 21: Por favor responda a cada questão cautelosamente e selecione o número apropriado à direita. 2010: com os cpisódios de ingenão compulsiva. Note que para estas questões o termo "episódio de ingenão alimentar compulsiva" significa come pessoas considerariam uma quantidade invalgamente grande de comida, dadas as circunstâncias, e tendo uma sensação de falta de controlo sob er.
32.	10. Ivos ultimos 26 dias, quantas vezes rez exercicio excessivo ou de um modo compulsivo para controlar o seu p forma corporal ou quantidade de gordura, ou para queimar calorias? *
31.	17. Nos últimos 28 dias, quantas vezes tomou laxantes para controlar o seu peso ou forma corporal? *
30.	16. Nos últimos 28 dias, quantas vezes provocou o vómito para controlar o seu peso ou forma corporal? *
	quantidade de comida E teve na altura uma sensação de perda do controlo)?
29.	15. Nos últimos 28 dias, em quantos DIAS ocorreram estes episódios de comer demasiado (i.e., comeu uma gran
28.	14. Em relação à pergunta anterior, em quantas destas vezes sentiu que perdeu o controlo sobre o que estava a co (enquanto estava a comer)?
27.	grande de comida (dadas as circunstâncias)? *

34. 20. Quantas vezes, a seguir a comer, se sentiu culpada (sentiu que falhou) por causa do efeito que isso teria no seu peso ou forma corporal?

0 - Nenhuma | 1 - Algumas | 2 - Menos de metade | 3 - Metade | 4 - Mais de metade | 5 - A maioria | 6 - Sempre

Marcar apenas uma oval.



zr. Nos últimos 28 dias, até que ponto esteve preocupada com o facto das outras pessoas a verem comer?
 0 - Nada | 2 - Ligeiramente | 4 - Moderadamente | 6 - Extremamente

Marcar apenas uma oval.

0	1	2	3	4	5	6	
\subset		\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	

Questões 22 a 28: Por favor responda selecionando o número apropriado à direita. Lembre-se que as questões se referem apenas às últimas quatro semanas (28 dias).

36. Nos últimos 28 dias...*

0 - Nada | 2 - Ligeiramente | 4 - Moderadamente | 6 - Extremamente

Marcar apenas uma oval por linha.

	0	2	4	6
22. O seu peso influenciou o modo como se julga ou pensa sobre si própria como pessoa?	\bigcirc	\bigcirc	\bigcirc	\bigcirc
23. A sua forma corporal influenciou o modo como se julga ou pensa sobre si própria como pessoa?	\bigcirc	\bigcirc	\bigcirc	\bigcirc
24. Até que ponto ficaria aborrecida se lhe pedissem para se pesar uma vez por semana (nem mais nem menos vezes) durante as próximas quatro semanas?	\bigcirc	0	0	\bigcirc
25. Até que ponto se sentiu insatisfeita com o seu peso?	\bigcirc	\bigcirc	\bigcirc	\bigcirc
26. Até que ponto se sentiu insatisfeita com a sua forma corporal?	\bigcirc	\bigcirc	\bigcirc	\bigcirc
27. Até que ponto se sentiu desconfortável ao ver o seu corpo (por exemplo ao espelho, no reflexo de uma montra, enquanto se despia ou enquanto tomava banho)?	0	0	0	\bigcirc
28. Até que ponto se sentiu desconfortável com facto dos outros verem o seu corpo (por exemplo, em balneários, enquanto nadavam ou quando usa roupas justas)?	\bigcirc	0	\bigcirc	\bigcirc

37. Qual é o seu peso (kg) neste momento? (O mais aproximado possível, por favor) *

38. Qual é a sua altura (cm)? (O mais aproximado possível, por favor) *

39. Nos últimos três ou quatro meses falhou algum período menstrual? *

Marcar apenas uma oval.

C	\supset	Sim
C	\supset	Não

_

40. Se respondeu "Sim" na questão anterior, indique quantos períodos menstruais lhe falharam

41. Tem tomado a pílula anticoncecional?*

Marcar apenas uma oval.

Sim

Perturbações do Comportamento Alimentar em Atletas Femininas	WHODAS 2.0 As questões seguintes são acerca das dificuldades que sentiu devido à sua condição de saúde. Condições de saúde incluem doenças, problemas de saúde de curta ou longa duração, lesões, problemas mentais ou emocionais, ou problemas relacionados com álcool ou drogas. As suas respostas só devem refletir os últimos 30 dias e deverá responder às questões pensando em quanta dificuldade teve em realizar as seguintes atividades. 1 - Nenhuma 12 - Lideira 13 - Moderada 14 - Grave 15 - Comoletamente/Não faz
	1 - Nennuma 2 - Ligera 3 - Moderada 4 - Grave 5 - Completamente/Nao Taz

42. Nos últimos 30 dias, quanta dificuldade teve em: *

Domínio 1 - Cognição (Compreensão e Comunicação)

	1	2	3	4	5
1. Concentrar-se a fazer algo durante dez minutos?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
2. Lembrar-se de fazer coisas importantes?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
3. Analisar e encontrar soluções para problemas da vida quotidiana?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
4. Aprender uma nova tarefa, por exemplo, aprender o caminho para um novo lugar?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
5. Compreender, em geral, o que as pessoas dizem?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
6. Iniciar e manter uma conversa?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Nos últimos 30 dias, quanta dificuldade teve em: * Domínio 2 - Mobilidade

Marcar apenas uma oval por linha.

	1	2	3	4	5
1. Ficar de pé por longos períodos, como 30 minutos?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Levantar-se a partir da posição de sentado? 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
3. Deslocar-se dentro de casa?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
4. Deslocar-se para fora de casa?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
5. Andar uma distância longa como um quilómetro [ou equivalente]?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Nos últimos 30 dias, quanta dificuldade teve em: * Domínio 3 - Auto-cuidado

Marcar apenas uma oval por linha.

	1	2	3	4	5
1. Lavar todo o corpo?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
2. Vestir-se?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
3. Comer?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
4. Ficar sozinho por alguns dias?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Nos últimos 30 dias, devido à sua condição de saúde, quanta dificuldade teve em: * Domínio 4 - Relações Interpessoais

	1	2	3	4	5
1. Lidar com pessoas que não conhece?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
2. Manter uma amizade?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
3. Dar-se bem com pessoas que lhe são próximas?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
4. Fazer novos amigos?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
5. Atividades sexuais?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Nos últimos 30 dias, quanta dificuldade teve em: * Domínio 5 - Atividades Diárias

Marcar apenas uma oval por linha.

	1	2	3	4	5
1. Tratar das suas responsabilidades domésticas?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
2. Fazer bem as tarefas domésticas mais importantes?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
3. Realizar todo o trabalho doméstico que necessitava de fazer?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Realizar o trabalho doméstico tão rápido quanto necessário? 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

- Nos últimos 30 dias, quantos dias teve que reduzir ou deixar de fazer por completo o trabalho doméstico, devido à sua condição de saúde? (Registe o número de dias)
- 48. Devido à sua condição de saúde, nos últimos 30 dias, quanta dificuldade teve em: Domínio 5 - Atividades Diárias. SE TRABALHAR (PAGO, NÃO-PAGO, POR CONTA PRÓPRIA) OU ESTUDAR, COMPLETE AS QUESTÕES D5.5-D5.10. NOUTRA SITUAÇÃO, PASSE PARA A QUESTÃO D6.1.

Marcar apenas uma oval por linha.

1	2	3	4	5
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
		1 2 O O O O O O O O O O	1 2 3 Image: Second se	1 2 3 4

49. 9. Devido à sua condição de saúde, nos últimos 30 dias, teve de trabalhar com menor intensidade?

Marcar apenas uma oval.

Sim

50.	10. Devido à	sua condição de	e saúde, nos	últimos	30 dias,	ganhou	menos	dinheiro?
-----	--------------	-----------------	--------------	---------	----------	--------	-------	-----------

Marcar apenas uma oval.

\subset	Sim	
C	Não	

 Nos últimos 30 dias, quantos dias teve de faltar ao trabalho, meio dia ou mais, devido à sua condição de saúde? (Registe o número de dias)

52. Nos últimos 30 dias...*

Domínio 6 - Participação na sociedade. NOTA: Codificação*: Nenhum | Pouco | Médio | Muito | Todo ... Codificação**: Nada | Ligeiramente | Moderadamente | Gravemente |Completamente

Marcar apenas uma oval por linha.

	1	2	3	4	5
1. Quanta dificuldade teve em participar em atividades na comunidade (como p.e. festivais, religiosas oou outras) da mesma forma que qualquer outra pessoa?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Quanta dificuldade teve devido a barreiras ou obstáculos no ambiente à sua volta? 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
3. Quanta dificuldade teve em viver com dignidade devido às atitudes e ações de outras pessoas?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Quanto tempo gastou na sua condição de saúde ou nas suas consequências?* 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
5. Quanto se sentiu emocionalmente afetado pela sua condição de saúde? **	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Quanto é que a sua condição de saúde tem consumido os seus recursos financeiros ou os da sua família? ** 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
 Quanta dificuldade teve a sua família devido aos seus problemas de saúde? 	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
8. Quanta dificuldade teve em fazer coisas por si próprio para prazer ou para relaxar?	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

53. Globalmente, nos últimos 30 dias, quantos dias estiveram presentes estas dificuldades? (Registe o número de dias)

- 54. Nos últimos 30 dias, em quantos dias esteve totalmente impossibilitado de realizar as suas atividades habituais ou de trabalhar devido à sua condição de saúde? (Registe o número de dias)
- 55. Nos últimos 30 dias, sem contar os dias em que esteve totalmente impossibilitado, em quantos dias diminuiu ou reduziu as suas atividades habituais ou de trabalho devido à sua condição de saúde? (Registe o número de dias)

Este conteúdo não foi criado nem aprovado pela Google.

Google Formulários

Appendix IV – Approval from the Ethics Committee of the Faculty of Medicine, University of Coimbra, Portugal

\leftarrow	Envio parecer CE_Proc. CE-064/2021_Sara Ferreira			
CF	Comissão Ética - FMUC <comissaoetica@fmed.uc.pt> qui, 15/04/2021 16:41</comissaoetica@fmed.uc.pt>	5	«5 –	> ···
	Para: Você			
	Cc: joaquim.cerejeira@gmail.com; taniavdasilva.md@gmail.com			
	Exma. Senhora			
	Dra. Sara Cardoso Ferreira,			
	Cumpre-nos informar que o projeto de investigação apresentado por V. Exa. com o título "Perturbações do comportamento alimentar em atletas f	emini	nas: estu	do
	em população adulta", foi analisado na reunião da Comissão de Ética da FMUC de 14 de abril, tendo merecido o parecer que a seguir se transcreve:			
	"Parecer favorável".			
	Cordiais cumprimentos.			
	Helena Craveiro			
	Universidade de Coimbra • Faculdade de Medicina • STAG - Secretariado Executivo			
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