

## The narcissistic features and eating disorders in male bodybuilders

### Cechy narcystyczne a zaburzenia odżywiania u mężczyzn ćwiczących na siłowniach

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#### Streszczenie

Celem pracy było określenie różnic w zakresie cech osobowości oraz nasilenia objawów zaburzeń odżywiania między mężczyznami regularnie ćwiczącymi i niećwiczącymi na siłowni.

Grupa badana: Przebadano 30 mężczyzn, którzy regularnie ćwiczą na siłowni oraz 30 mężczyzn niećwiczących na siłowni. Średnia wieku badanych osób z obu grup wynosiła 26 lat. Z miasta pochodziło 87% mężczyzn ćwiczących i 100% osób niećwiczących na siłowni. Z grupy klinicznej 60% mężczyzn miało wykształcenie średnie, a 40% - wyższe. W grupie kontrolnej 17% mężczyzn uzyskała wykształcenie średnie, a 83% - wyższe. W rodzinie pełnej wychowywało się 73% mężczyzn ćwiczących i 90% osób niećwiczących na siłowni. Alkoholu nadużywało 40% mężczyzn ćwiczących i 23% osób niećwiczących na siłowni.

Metody badawcze: W pracy zastosowano Ankieta autorstwa Zofii Stankiewicz, Kwestionariusz Zaburzeń Odżywiania (EDI) opracowany przez D.M. Garnera, M.P. Olmsted i J. Polivy oraz Kwestionariusz Narcyzmu autorstwa F. Deneke, B. Hilgenstock i R. Müller, w polskim opracowaniu Januszewskiego.

Wyniki: Mężczyźni regularnie ćwiczący na siłowni uzyskali istotnie niższe wyniki od mężczyzn niećwiczących, w zakresie skal Kwestionariusza EDI: Niezadowolenie z własnego ciała i Nieefektywność oraz istotnie wyższe wyniki w skali – Perfekcjonizm i we wszystkich skalach tworzących czynnik „Klasyczne narcystyczne ja” i czynnik „Idealizujące ja” Kwestionariusza Narcyzmu.

Wnioski: 1. Mężczyźni ćwiczący na siłowni odczuwają silną presję odnoszenia sukcesów, zdobywania wyjątkowych osiągnięć w życiu. 2. Mężczyźni ćwiczący na siłowni charakteryzuje, w porównaniu z mężczyznami niećwiczącymi, znacząco bardziej nasilona wielkościowość, potrzeba wywyższania i przeceniania siebie, poczucie szczególnej wyjątkowości, dotyczącej atrakcyjności fizycznej oraz potrzeba zwracania na siebie uwagi innych. 3. Mężczyźni ćwiczący regularnie na siłowni częściej niż mężczyźni niećwiczący, traktują innych ludzi instrumentalnie, manipulują nimi celem realizacji własnych potrzeb oraz oceniają innych ludzi jako powierzchownych, zagrażających, pozbawionych ideałów, nieodpowiedzialnych, rozczarowujących i niegodnych zaufania. 4. W sytuacji stresu i problemów mężczyźni ćwiczący regularnie na siłowni, częściej niż niećwiczący, stosują mechanizm obronny zaprzeczania i strategie zorientowane na emocjach. 5. Mężczyźni regularnie ćwiczących na siłowni charakteryzuje nasilony narcyzm oraz perfekcjonizm. Intensywne ćwiczenia fizyczne mogą być dla nich sposobem zwrócenia na siebie uwagi, budowania poczucia własnej wyjątkowości, oryginalności i atrakcyjności fizycznej oraz formą ucieczki przed stresem i problemami. 6. Intensywne korzystanie z siłowni i nadmierna koncentracja na własnej sylwetce u mężczyzn nie łączy się z zaburzonym zachowaniem żywieniowym, jak to jest u kobiet, ale z nasilonym perfekcjonizmem i cechami osobowości narcystycznej.

#### Summary

The purpose of the study was to investigate the differences in personality traits and symptoms of eating disorders among men regularly practicing and non-practicing in the gym.

Examined group: There were examined 30 men, who exercise regularly at the gym (clinical group) and 30 men who do not exercise at the gym (control group). The average age of the respondents in both groups was 26 years.

City dwellers were 87% of male bodybuilders and 100% of people not exercising at the gym. In the clinical group: 60% of men had secondary education and 40% - higher. In the control group 17% of respondents had secondary education and 83% - higher. Coming from full family was reported by 73% of male exercisers, and 90% of people not exercising at the gym. Alcohol abuse was reported by 40% of bodybuilders and 23% of non-exercisers.

Methods: The study used The Survey by Zofia Stankiewicz, the Eating Disorder Inventory (EDI) by D.M. Garner, M.P. Olmsted and J. Polivy and the Narcissism Inventory (N) by F. Deneke, B. Hilgenstock and R. Müller, in Polish study by Januszewski.

Results: Men who exercise regularly at the gym scored significantly lower scores in comparison with non-exercising men in the range of EDI scales: Body dissatisfaction and Ineffectiveness, and significantly higher scores in Perfectionism scale of EDI Inventory and in all scales of factors: "Classic Narcissistic Self" and "Ideal Self" of the Narcissism Inventory.

*Conclusions: 1. Male bodybuilders feel strong pressure to succeed, gain exceptional achievements in their lives. 2. Male bodybuilders are characterized, in comparison with non-athletes, by significantly more severe greatness, the need to exalt and exaggerate themselves, a sense of special uniqueness concerning physical attractiveness and the need for attracting attention of others. 3. Men who practice regularly at the gym, more often than non-exercisers, treat other people instrumentally, manipulate them to meet their own needs and consider others as superficial, threatening, devoid of ideals, irresponsible, unreliable and disappointing. 4. In a situation of stress and problems, men who practice regularly at the gym, more often than those not exercising, use the defence mechanism of denial and strategies focused on emotions. 5. Male bodybuilders are characterized by severe narcissism and perfectionism. Intense exercises can be a way of drawing attention to themselves, building a sense of their own uniqueness, originality and physical attractiveness, and a form of escape from stress and problems. 6. Intensive exercising at the gym and excessive concentration on own figure in men is not connected with disturbed eating behaviours, as it is among women, but with severe perfectionism and narcissistic personality features.*

*Słowa kluczowe:* zaburzenia odżywiania, siłownia, mężczyźni, narcyzm

*Key words:* eating disorders, gym, men, narcissism

## Introduction

In the era of the image created by media of the "ideal" man as being one who is athletic and muscular, it is not surprising that there is increased motivation among young men for intense workouts at gymnasium.

Contemporary men are, just as much as women, focused on their appearance, but in contrast to them they desire to increase their body mass and musculature, rather than reduce it [1]. There is considerable similarity between male bodybuilders and women with anorexia nervosa in the range of body image and dietary behaviour. It was shown that both groups use dietary restrictions, over-intensive exercises, take supplements, nutrients and medications to support the achievement of appearance out of dreams [2].

A relatively new term related to strength training is introduced by Pope et. al. [3] Muscle Dysmorphia (MD) (also known as "reverse anorexia" or "bigorexia"). This disorder consists in excessive preoccupation with muscularity, and the affected person perceives himself as "puny", despite normal or excessive muscle mass. This results in intensive exercises, use of a specially prepared diet, nutrients, vitamin supplements and anabolic steroids in order to develop muscles [4,5].

Olivardia et. al [6] found that men with muscle dysmorphia are characterized by negative body image, difficulties in social relationships, severe mood disorders, anxiety and eating disorders, and use of anabolic steroids. Kanayama et al [7] and Leit et. al [8] believe that men resort to anabolic steroids mainly guided by aesthetic considerations, dissatisfaction with their bodies and the fear of negative evaluation and being laughed at by other people, while ignoring the numerous and serious side effects of them. The most common adverse events of steroids include: a slight increase in strength and the

lean body mass by about 2-5 kg, increased erythropoiesis and blood haemoglobin level, but with no effect on endurance performance, excessive increase or decrease in sexual drive, the occurrence of acne, increased body hair. The administration of steroids affects personality traits i.e. by worsening of aggressive behaviour, excessive irritability, frequent mood changes and difficulties with interpersonal relationships [9]. The appearance of these changes is dependent on the dose and length of use of steroids. An increased risk of cardio-vascular disorders (cardiac arrhythmia, hypertension, myocardial ischemia, systolic dysfunction of the left atrium, atherosclerosis), changes in haemostasis (thrombosis, embolism), endocrine disorders and liver damage were also confirmed [10,11].

The available data from the literature [12,13] have shown an increased risk of comorbidity of eating disorders in men exercising at the gym. Men practicing professionally strength sports were found to have bulimic tendencies and episodes of binge eating. Also they are characterized by more increased concentration on body weight than men already diagnosed with bulimia [14].

Based on the literature the authors attempted to answer the following questions:

- are there any differences between men regularly exercising at the gymnasium and those not exercising with regard to narcissistic features?
- are there any differences between men regularly exercising and those not exercising at the gym with regard to the symptoms of eating disorders and body image?

## Examined group

There were examined 30 men, who exercise regularly at the gym (clinical group) and 30 men, who do not exercise at the gym (control group). The average age of respondents from both groups was 26 years.

City dwellers were 87% of male bodybuilders and 100% of people not exercising at the gym. In the clinical group: 60% of men had secondary education and 40% - higher. In the control group 17% of respondents had secondary education and 83% - higher. Male exercisers coming from traditional family constituted 73%, and 90% were people not exercising at the gym. Alcohol abuse was reported in 40% of bodybuilders and 23% of non-exercisers.

### **Methods**

In the study the Survey by Zofia Stankiewicz, the Eating Disorder Inventory (EDI) by D.M. Garner, M.P. Olmsted and J. Polivy [15] and the Narcissism Inventory (N) by F. Deneke, B. Hilgenstock and R. Müller, in Polish study by Januszewski [16] were used.

### **Eating disorders in men regularly exercising at the gym**

At the first stage of the study, the scores in the Eating Disorder Inventory (EDI) obtained by male bodybuilders and non-athletes were compared with the use of t-test (Tab.1).

Men regularly exercising at the gym received significantly lower scores than men not exercising within the two EDI scales: Body dissatisfaction and Ineffectiveness and significantly higher scores than the control group in Perfectionism scale. Men regularly practicing at the gym are substantially more satisfied with their appearance and body shape, have higher self-esteem and more severe perfectionism than non-exercisers. Clinical group is characterized by excessive submission and adaptation, which is disrupted in the face of increasing pressure to succeed, implementation of excessive expectations for exceptional life achievements.

### **Narcissistic features in men regularly exercising at the gym**

At the next stage of the study there were compared average scores obtained by men exercising in the gym and not exercising in the range of the Narcissism Inventory scales (Tab. 2).

Men who exercise regularly at the gym received significantly higher scores in comparison with non-exercising men in all scales of factors: "Classic Narcissistic Self" and "Ideal Self" of the Narcissism Inventory and in the two scales included in the factor "Endangered Self": Basal hope potential and Social isolation.

Male bodybuilders are characterized, in comparison with non-exercisers, by substantially more severe sense of greatness, the need to exalt

and exaggerate themselves, a sense of special uniqueness regarding their physical attractiveness. Men from the clinical group, more often than non-exercisers, look for situations and people, by means of which they could be in the centre of attention and experience appreciation. The bodybuilders' group is characterized by intense conviction of possession and being guided by more subtle, carefully considered and timeless moral principles than other people, who not only do not possess those moral principles, but also often because of lack of them, they cause pain to others.

Bodybuilders, in comparison with control group, are significantly more distrustful to other people characterized as superficial, threatening, devoid of ideals, irresponsible and disappointing. Men from clinical group tend to subjugate others in order to achieve their own goals and needs. In development of relationships with other people, the athletes are mainly seeking for contacts with those people who have real competence and potentially can support them, for example through advice, assistance, or even who would bring joy or relief from suffering. They resign from their personal effort and choose a helpful activity of their partners instead, expecting them to be unconditionally faithful and loyal. In fact, they focus mainly on their own needs instrumentally abusing the generosity of others.

Male bodybuilders in case of problems more frequently use a defence mechanism of denial, when confronted with stress, they use emotional strategies more frequently than the cognitive ones, and exhibit a low tolerance of frustration.

### **Discussion of results**

The results of the study indicate significant differences in perfectionism, body dissatisfaction, sense of inefficiency and narcissistic traits between men regularly practicing at the gym and non-exercisers.

Men regularly exercising at the gym are characterized by greater satisfaction with their appearance, pursuit of success and more severe narcissism, which is reflected in feeling great, haughtiness and self-overestimation, a sense of uniqueness, desire to remain in the centre of attention and tendency to humiliate, manipulate others, and instrumental use of them to achieve own goals and satisfy own needs. Bodybuilders are afraid of negative evaluation from other people perceived as devoid of ideals, irresponsible and untrustworthy. They exhibit a low tolerance of frustration, and when confronted with stress, they use emotional strategies and defence mechanism of denial.

Table 1. Comparison of average scores gained by male athletes (N=30) and non-athletes (N=30) in EDI scales

EDI scales	Clinical group		Control group		t	p
	M	sd	M	sd		
Drive for thinness	0,22	0,35	0,28	0,37	-0,56	n.i.
Bulimia	0,35	0,25	0,48	0,27	-1,87	n.i.
Body dissatisfaction	0,39	0,44	0,77	0,51	-3,05	0,003
Ineffectiveness	0,28	0,46	0,50	0,33	-2,10	0,04
Perfectionism	0,71	0,58	0,37	0,56	2,33	0,02
Interpersonal distrust	0,60	0,51	0,80	0,54	-1,48	n.i.
Interceptive awareness	0,16	0,31	0,31	0,41	-1,54	n.i.
Maturity fear	0,46	0,42	0,63	0,36	-1,68	n.i.

Table 2. Comparison of average scores gained by athletes (N=30) and non-athletes (N=30) in N Inventory scales

N scales	Clinical group		Control group		t	p
	M	sd	M	Sd		
Helpless self	1,97	0,82	2,04	0,52	-0,41	n.i.
Loss of control over affect/ impulse	2,33	0,80	2,16	0,63	0,90	n.i.
Derealisation /depersonalization	1,85	0,88	1,94	0,52	-0,50	n.i.
Basal hope potential	3,33	0,70	2,54	0,69	4,38	0,001
Insignificance self	2,40	0,92	2,29	0,53	0,57	n.i.
Negative body self	1,71	0,93	1,84	0,61	-0,66	n.i.
Social isolation	2,66	0,76	2,31	0,53	2,09	0,04
Archaic withdrawal	2,40	0,74	2,27	0,55	0,81	n.i.
Greatness self	3,17	0,73	2,42	0,56	4,51	0,001
Longing for an ideal self	2,97	0,64	2,25	0,48	4,95	0,001
Craving for praise and validation	2,96	0,69	2,24	0,56	4,41	0,001
Narcissistic rage	2,97	0,68	2,29	0,60	4,09	0,001
Autarky ideal	3,30	0,61	2,56	0,64	4,60	0,001
Object depreciation	3,00	0,59	2,34	0,63	4,18	0,001
Value ideal	3,38	0,72	2,55	0,68	4,61	0,001
Symbiotic self-protection	3,49	0,67	2,69	0,71	4,47	0,001
Hypochondriac anxiety bonding	2,18	0,69	1,98	0,50	1,29	n.i.
Narcissistic gains from illness	2,15	0,75	1,96	0,63	1,05	n.i.

Intense physical exercises, aspiring to gain a shape of bodybuilder, may be for regular exercisers the way to draw someone's attention, build self-esteem, uniqueness, originality and physical attractiveness, and a form of escaping from the stress, disappointment, fear of negative evaluation from the environment.

It should be noted that men who practice regularly at the gym have significantly more severe narcissistic personality traits than not exercising men -identified by the American Psychiatric Association DSM-IV [17], and including grandiose sense of self-importance, valuation of own achievements, fantasizing about unlimited success, beauty and conviction of uniqueness, requirement of excessive admiration, using others to achieve own goals, disregard of needs and feelings of others and jealousy towards people.

Female exercisers do not differ from non-exercisers in any feature of "Classic Narcissistic

Self' factor, identified in the Narcissism Inventory by F. Deneka, B. Hilgenstock and R. Müller, in contrast to men, who are characterized by intensity of all narcissistic traits highlighted in this factor.

Referring to the views of Drozdowski [18], the hypothesis could be formulated that just like for women - anorexic figure, in the case of male figure of bodybuilder, by acquiring the status of uniqueness, becomes the object of narcissistic gratification of need of originality.

The results of Stankiewicz and Pawłowska [19] correspond with these views, which indicate that women exercising at the gym substantially more than the control group, are dissatisfied with their body, they tend to gain extremely slim figure, and more often use diet and provoke vomiting. However, men regularly practicing at the gym, are satisfied with their appearance.

The results obtained in the present study suggest no correlation between eating disorders in

men and exercising intensive physical exercises, in contrast to women, in whom an intensive training at the gym is closely associated with disturbed eating behaviors. However significant correlations were found between the narcissistic personality in men and regular attendance at the gym.

The obtained results do not confirm the results obtained by researchers [12,13], who combine symptoms of bigorexia with anorexia or bulimia. They also show personality traits that seem to play a leading role in the genesis of muscle dysmorphia in men: narcissism and perfectionism.

Based on the results obtained by the subjects in the range of Eating Disorders Inventory (EDI) and the Narcissism Inventory, the following conclusions have been formulated.

### Conclusions

1. Male bodybuilders feel strong pressure to succeed, gain exceptional achievements in their lives.
2. Male bodybuilders are characterized, in comparison with non-athletes, by significantly more severe greatness, the need to exalt and exaggerate themselves, a sense of special uniqueness concerning physical attractiveness and the need for attracting attention of others.
3. Men who practice regularly at the gymnasium more often than non-exercisers, treat other people instrumentally, manipulate them to meet their own needs and consider others as superficial, threatening, devoid of ideals, irresponsible, unreliable and disappointing.
4. In a situation of stress and problems, men who practice regularly at the gym, more often than those not exercising, use the defence mechanism of denial and strategies focused on emotions.
5. Male bodybuilders are characterized by severe narcissism and perfectionism. Intense exercises can be a way of drawing attention to themselves, building a sense of their own uniqueness, originality and physical attractiveness, and a form of escape from stress and problems.
6. Intensive exercising at the gym and excessive concentration on own figure in men is not connected with disturbed eating behaviours, as it is among women, but with severe perfectionism and narcissistic personality features.

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