

Original scientific paper

## BODY IMAGE PERCEPTION AND ANOREXIA NERVOSA

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**Abstract:** Body image perception is a complex construct which involves not only the perception of physical appearance, but also attitudes, feelings and behaviours. Anorexia is an eating disorder whose main characteristic is an intentional loss of body weight. Determined in multiple ways, this disorder pervades all aspects of functioning. The aim of this research was to examine certain specificities of the social perception of persons with anorexia. The examinees involved 40 young females aged 15 to 25. It was indicated that young females with anorexia specifically perceive females of different physiques, as well as themselves. Perception is stereotypical and affected by imposed cultural standards, but also disharmonious and contorted through the prism of a disorder such as anorexia nervosa.

**Keywords:** *body image, anorexia, perception, stereotype*

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## INTRODUCTION

Modern culture and fitness industry promote care about physical appearance, health, physical condition and life balance. The perception of one's own physical appearance is a complex construct which involves the perception of one's own body, but also attitudes, beliefs, feelings and behaviours. (Cash & Smolak, 2011). Researchers' interest into body image has increased ever since it was proved that the perception of one's own body is in connection with eating disorders, low self-respect, depression and social anxiety (Thompson, 1992; Frederick & Morrison, 1996; Leondari, 2011). Physical appearance evaluation coming from other people may become a crucial variable for developing eating disorders and disorders linked to body shape perception (Lundgren, Anderson & Thompson, 2004).

Body image is prone to stereotypical perception, considering that modern culture has been sending a message that being goes together with personal happiness, success, intelligence, etc.

Empirical researches carried out by Sheldon (1942) show that a person's physique can lead to valid conclusions about some personality features, especially the temperament. Certain body types highly correlate with certain temperament features and in most cases people clearly perceive this fact. Therefore, as Sheldon (Hol & Lindzi, 1983) states, the endomorph type (Figure 1a), which is characterized by being round and soft, is most often associated with sociability, tenderness, tolerance, and greed for food. The mesomorph physique (Figure 1b) is characterized by a firm and square body, with pronounced bones and muscles. These persons are characterized by courage, aggression, proneness to risk and venturesome actions, and insensitivity to other people's feelings. The ectomorph somatotype (Figure 1c) is characterized by thin and feeble appearance, which implies reserve, stiffness, and a desire to hide (Hol & Lindzi, 1983).

Body image disturbance is among the diagnostic criteria for anorexia nervosa and bulimia nervosa in the DSM-5 (American Psychiatric Association, 2013) as well as the ICD-10 (World Health Organization, 1996), and it is also associated with disordered eating in non-clinical samples (Vossbeck-Elsebusch, Waldorf, Legenbauer, Bauer, Cordes, & Vocks 2014).

The aim of this research was to establish whether young females suffering from a disorder like anorexia nervosa perceive persons of different physiques in specific ways. On the other hand, since individuals with anorexia nervosa (AN) have a wrong perception of their own physique, it was important to examine their self-perception as well.

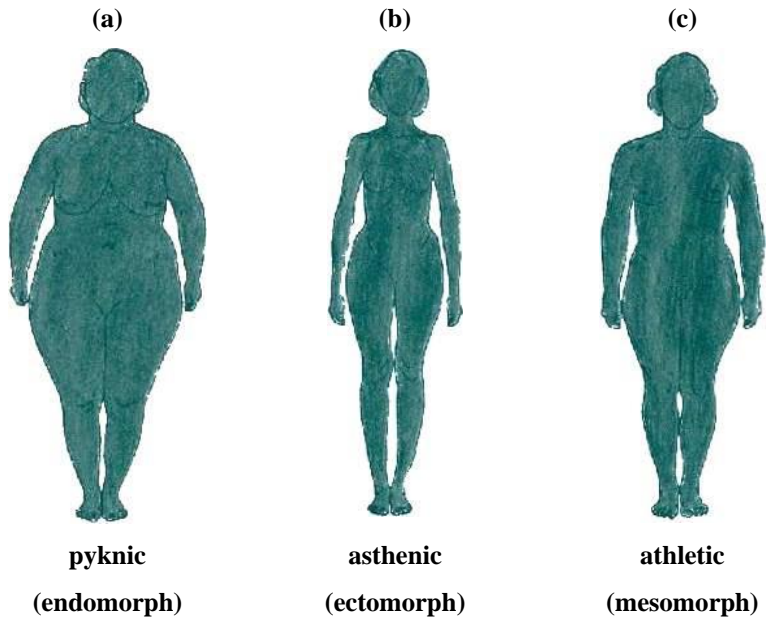
METHOD

A questionnaire containing a list of features and drawings of female physiques was used for this research (Figure 1). The list of the features used in this research was based on a number of ready-made ones, specifically the ones used in researches by Fulgosi (1987), Ehrlich (1973), Djuric (1980), Ilic (1996), Havelka (1967), Mladenovic (1991) and Rot & Havelka (1967). All of the features from these lists are divided into the following categories: physical appearance, abilities, affective features, relation to oneself, relation to others, relation to work. The features were categorized by a jury consisting of psychology students and highly educated individuals. The features that a majority of the jury agreed on were evaluated with a one-to-five scale according to the degree of desirability. High school students were the ones to assess the desirability of these features.

The list of features used in this research was standardized in accordance with some basic psychological categories and social desirability. The final list of features is available in the Appendix.

The drawings of female physiques were taken from *Person Perception and Stereotyping* (Stewart et al, 1979). They are Sheldon’s original sketches of the endomorph, ectomorph and mesomorph body types, respectively (Figure 1). For the purpose of this research, the pictures were retouched.

**Figure 1.** *Sketches of female somatotypes according to Sheldon (Stewart et al, 1979)*



The questionnaire for examining the perception of others and self-perception among young females suffering from anorexia nervosa has four parts. The first three parts contain drawings of female silhouettes along with lists of features, and they examine the perception of others. The fourth part contains solely a list of features, examining self-perception. The order of the drawings was determined in a preliminary research. Figure one represents the endomorph type, figure two ectomorph, and figure three the mesomorph type.

The participants were asked to circle the numbers in front of the features which they considered attributable to the person in the picture (free choice). As to self-perception, the subjects could choose from the list all the features they thought they possessed. At the bottom of every questionnaire the participants were asked to choose three features from the list they considered to be most typical of the persons on the drawings and to choose three features that are most typical of them (compulsory choice).

The experimental sample comprised 40 young females (aged 15-25) with anorexia nervosa. The participants were diagnosed as anorexic in one of the following institutions: Clinical Hospital Center "Dr. Dragisa Misovic" Dedinje, Belgrade, Serbia; Institute for Mental Health, Belgrade, Serbia; Institute of Hygiene and Medical Ecology, Belgrade, Serbia; Clinic for Neurology and Psychiatry for Children and Adolescents, Belgrade, Serbia, and Mental Health Protection Clinic, Nis, Serbia. The research was reviewed and approved by the institutional review boards.

The control sample comprised 78 female participants (16-18 years of age), who were students at one of Belgrade's High Schools. The research was reviewed and approved by the school board. After applying EDDS (Stice, Telch & Rizvi, 2000) none of the following three eating disorders were found: anorexia nervosa, bulimia nervosa and binge – eating. Since the incidence of eating disorders among adolescent population can be up to 10%, it was important to use a filter-questionnaire to remove potential cases of eating disorders from the control group.

The data underwent univariate analysis, and the significance of the results was proved by means of the chi-square test. Regarding free choice, we set a 33% criterion. In case of compulsory choice, the criterion was set at 10%, because the very fact that the choice was compulsory is strict enough.

## RESULTS

The results showed hetero and auto stereotypes both from the clinical sample and the control group.

### *The perception of endomorph female*

When dealing with a pyknic female we got almost the same stereotype, regardless of whether participants suffered from anorexia nervosa (AN) or not. The only thing they differed in was the extent, although not a significant one, to

which individuals with anorexia nervosa and participants from the control group attribute certain features. Free choice results are given in Table 1a. Shaded are the features chosen by both groups of participants.

**Table 1a.** *Pyknic – the frequency of the free choice of features*

Individuals with AN			Control group		
Feature	F	%	feature	f	%
Hefty	37	92,5	Hefty	71	91,0
Inert	30	75,0	Inert	59	75,6
Generous	20	50,0	generous	51	65,4
Sensitive	19	47,5	sensitive	50	64,1
insecure	16	40,0	insecure	42	53,8
relaxed	14	35,0	Modest	31	39,7
			Nervous	28	35,9
			Sociable	27	34,6
			fearful	27	34,6

Table 1a shows that the key features chosen for pyknics are *hefty* and *inert*. Almost the same percentage of both groups of participants opted for these features, regardless of whether they suffer from anorexia nervosa or not. The next three features are *generous*, *sensitive* and *insecure*. It is obvious that some other features meet the 33% criterion as well. The females with AN consider that being relaxed is a feature of pyknics, whereas the females from the control group ascribe to them a few more attributes: *modest*, *nervous*, *sociable* and *fearful*.

However, a statistically significant difference was perceived among the features that did not enter the pyknic stereotype. Apart from *nervous*, chosen by the participants from the control group, an important difference emerges in the selection of *confident* and *self-assured*. Table 1b shows the chi-square values and the frequencies of these two features. As shown by the data we obtained, the participants from the control group think that one of the features of endomorphs is being nervous, whereas the participants with AN think that female pyknics are *confident* and *self-assured*.

**Table 1b.** *Pyknic – the free choice of features, statistically significant differences*

Feature	Individuals with AN		Control group		Chi-square	df	Sig.
	F	%	F	%			
Self-assured	5	12,5	1	1,3	6,894	1	0,009
Nervous	6	15,0	28	35,9	5,629	1	0,018
Confident	8	20,0	6	7,7	3,830	1	0,050

The compulsory choice does not reveal anything new about pyknics. There are no statistically significant differences between the participants with AN, and the participants from the control group, and the features that appear as the most typical ones had already been selected in free choice. The results of the compulsory choice are given in Table 1c.

**Table 1c.** *Pyknic – the frequency of the choice of the most typical features*

	most typical 1			most typical 2			most typical 3		
	Feature	F	%	Feature	f	%	Feature	f	%
<b>Individuals with AN</b>	Hefty	22	55,0	Hefty	7	17,5	Inert	8	20,0
	Relaxed	5	12,5	Inert	7	17,5	Insecure	6	15,0
				Sensitive	6	15,0			
				Generous	5	12,5			
				Insecure	4	10,0			
<b>Control group</b>	Hefty	39	50,0	Inert	19	24,4	inert	11	14,1
	Generous	12	15,4	Insecure	12	15,4	sensitive	10	12,8
				Hefty	11	14,1	fearful	8	10,2

### *The perception of ectomorph female*

Stereotyped perceptions of asthenics was obtained from both groups, but they are significantly less in accordance than in case of endomorphs. There are also some statistically significant differences.

Both participants with AN and those from the control group think that *beautiful* is the main feature of an asthenic female. There are differences about other features they stated. A high percentage of females with AN ascribe *responsible* and *nervous* to this body type, whereas the majority of females from the control group agree that apart from being beautiful, an asthenic's main

attributes are *svelte*, *sociable*, *self-assured* and *confident*, as well as *athletic*. The list of these and other features that meet the stereotyped perception criterion are given in Table 2a. The features chosen solely by the participants with AN or by the control group are shaded.

**Table 2a.** *Asthenic – the frequency of the free choice of features*

Individuals with AN			Control group		
Feature	f	%	feature	f	%
Beautiful	24	60,0	beautiful	48	61,5
Responsible	17	42,5	svelte	45	57,7
Nervous	16	40,0	sociable	44	56,4
self-assured	15	37,5	self-assured	43	55,1
Insecure	15	37,5	confident	43	55,1
Athletic	15	37,5	athletic	42	53,8
intelligent	14	35,0	relaxed	34	43,6
meticulous	14	35,0	intelligent	31	39,7
Sensitive	14	35,0	amiable	31	39,7
Sociable	14	35,0	meticulous	29	37,2
Svelte	14	35,0	sensitive	27	34,6
Confident	14	35,0	resourceful	27	34,6

It can be noticed that *beautiful* is undoubtedly the most important quality of asthenics. The features which the participants from the control group are focused on are, in a way, “repressed” in the perception of young females with AN, who opted for *responsible*, *nervous* and *insecure*. On the other hand, the features chosen solely by the participants from the control group are *relaxed*, *amiable* and *resourceful*.

The use of the chi-square test indicates some statistically significant differences. The features regarding which there are significant differences are shown in Table 2b.

**Table 2b.** *Asthenic – the free choice of features, statistically significant differences*

Feature	Individuals with AN		Control group		Chi-square	df	Sig.
	f	%	f	%			
Nervous	16	40,0	15	19,2	5,888	1	0,015
Insecure	15	37,5	10	12,8	9,645	1	0,002
Sociable	14	35,0	44	56,4	4,850	1	0,028
Fearful	12	30,0	10	12,8	5,145	1	0,023
Svelte	14	35,0	45	57,7	5,446	1	0,020
Confident	14	35,0	43	55,1	4,290	1	0,038

The fact that the participants with AN opted for *nervous* and *insecure*, which are not selected by the participants from the control group, turned out to be significant. However, the fact that the features selected solely by the control group are not part of the stereotyped perception of females with AN, is not significant. What is more important is that the females from the control group underline features such as *sociable*, *svelte* and *confident*, whereas the participants with AN perceive them as less significant. Fearful failed to meet the stereotyped perception criterion, but is statistically significant. Participants with AN are more prone to opt for this feature than the ones from the control group.

**Table 2c.** *Asthenic – the frequency of the choice of the most typical features*

	most typical 1			most typical 2			most typical 3		
	Feature	f	%	feature	f	%	feature	f	%
	beautiful	10	25,0	nervous	4	10,0	insecure	5	12,5
<b>Individuals with AN</b>	self-assured	6	15,0	intelligent	4	10,0	confident	5	12,5
	Nervous	6	15,0	meticulous	4	10,0			
	beautiful	18	23,1	sociable	12	15,4	confident	12	15,4
<b>Control group</b>	self-assured	15	19,2	self-assured	8	10,3	athletic	10	12,8
	Relaxed	12	15,4	svelte	8	10,3			

The compulsory choice results are not statistically significant, but it is interesting to note what *gestalt* the most typical features form. Features like *beautiful* and *confident* make completely different impressions, depending on whether *relaxed* or *nervous* are combined with them.

The second most typical feature creates a completely different picture.



*Nervous, intelligent* and *meticulous*, on the one hand, and *sociable, self-assured* and *svelte* on the other hand seem to speak more about the perceiver than about the perceived person. The third most typical feature merely confirms the former contradiction. Features like *confident* and *athletic*, chosen by the participants from the control group, make a much more harmonious whole than *confident* and *insecure*.

*The perception of mesomorph female*

In case of women-athletes, at least as presented by Sheldon, we got the ‘scantiest’ stereotype. Both groups of participants agree that this person is hefty. The females with AN think that a woman-athlete is also *responsible, confident, self-assured* and *relaxed*. The females from the control group attribute *insecure* and *resourceful* to mesomorphs. The free choice results are given in Table 3a.

**Table 3a.** *Athletic – the frequency of the free choice of features*

Individuals with AN			Control group		
feature	f	%	feature	f	%
Hefty	27	67,5	hefty	44	56,4
responsible	16	40,0	insecure	26	33,3
confident	16	40,0	resourceful	26	33,3
self-assured	15	37,5			
relaxed	14	35,0			

There are statistically significant differences between *confident* and *self-assured*. Although these features were chosen by both groups of participants, the stereotyped perception criterion was met only by the participants with AN.

**Table 3b.** *Athletic – the free choice of features, statistically significant differences*

feature	Individuals with AN		Control group		Chi-square	df	Sig.
	f	%	f	%			
self-assured	15	37,5	11	14,1	8,426	1	0,004
confident	16	40	16	20,5	5,080	1	0,024

The compulsory choice results are given in Table 3c. One can notice certain similarities, but the differences in free choice appear here as well, although they are statistically insignificant.

**Table 3c.** *Athletic – the frequency of the choice of the most typical features*

	most typical 1			most typical 2			most typical 3		
	feature	f	%	feature	F	%	feature	f	%
<b>Individuals with AN</b>	hefty	11	27,5	responsible	6	7,8	sensitive	4	5,1
	relaxed	9	22,5	hefty	4	5,1	resourceful	4	5,1
	self-assured	4	10,0				confident	4	5,1
<b>Control group</b>	hefty	20	25,6	insecure	11	14,1	sociable	9	44,5
	relaxed	8	10,3	hefty	8	10,3			

### *Self-perception*

The investigation of the self-perception of females suffering from anorexia nervosa as well as females without eating disorders led to stereotyped self-perception.

The most prominent features in the self-stereotype of the participants with AN, as can be seen in Table 4a, are: *nervous*, *insecure*, *responsible*, *sensitive*, *intelligent*, and *fearful*. On the other hand, the participants from the control group attribute to themselves features such as *sensitive*, *sociable*, *responsible*, *intelligent*, *generous*, *passionate* and *amiable*.

**Table 4a.** *Self-perception – the frequency of the free choice of features*

Individuals with AN			Control group		
feature	f	%	feature	f	%
nervous	31	77,5	sensitive	67	85,9
insecure	27	67,5	sociable	57	73,1
responsible	26	65,0	responsible	49	62,8
sensitive	25	62,5	intelligent	43	55,1
intelligent	22	55,0	generous	41	52,6
fearful	21	52,5	passionate	41	52,6

meticulous	19	47,5	amiable	39	50
sociable	18	45,0	resourceful	34	43,6
thorough	17	42,5	modest	33	42,3
generous	16	40,0	nervous	33	42,3
modest	14	35,0	insecure	32	41,1
inventive	14	35,0	beautiful	31	39,7
			relaxed	30	38,5
			inventive	27	34,6
			meticulous	27	34,6

Features that appear in both stereotypes are shaded in Table 4a. One can see that the self-stereotype of the females with AN contains features like *fearful* and *thorough*, which is not the case with the females without eating disorders. The latter group see themselves as *passionate*, *amiable*, *resourceful*, *beautiful* and *relaxed*, which is not part of the self-perception of the participants with AN.

Apart from these differences, there are also some statistically significant ones. In Table 4b we can see that significant differences appear in the features chosen by both groups and those chosen by one group only.

**Table 4b.** *Self-perception – the free choice of features, statistically significant differences*

feature	Individuals with AN		Control group		Chi-square	df	Sig.
	F	%	f	%			
relaxed	4	10,0	30	38,5	10,442	1	0,001
unsociable	8	20,0	2	2,6	10,363	1	0,001
Hefty	0	0,0	8	10,3	4,401	1	0,036
Nervous	31	77,5	33	42,3	13,193	1	0,000
Insecure	27	67,5	32	41,1	7,413	1	0,006
Amiable	11	27,5	39	50,0	5,482	1	0,019
Sensitive	25	62,5	67	85,9	8,426	1	0,004
Sociable	18	45,0	57	73,1	8,999	1	0,003
self-centred	9	22,5	4	5,1	8,139	1	0,004
fearful	21	52,5	19	24,4	9,345	1	0,002
selfish	9	22,5	0	0,0	18,999	1	0,000
passionate	5	12,5	41	52,6	17,843	1	0,000

Although both groups opted for *nervous*, *insecure*, *sensitive* and *sociable*, the difference is statistically significant. The participants with AN are much more *nervous* and *insecure*, whereas the members of the control group perceive themselves a *sensitive* and *sociable* to a much higher degree.

*Fearful* does not appear in the self-perception of the females without eating disorders, which is statistically significant. Apart from that, the members of the control group believe they are *passionate*, *amiable*, and *relaxed*, which is not the case with anorexics. This finding is also statistically significant.

There are some features which did not meet the stereotyped perception criterion, but which brought about significant differences. The participants with AN attributed to themselves features such as *unsociable*, *self-centered* and *selfish*. The control group opted for the first two features to a considerably lesser extent, and all of them left out *selfish*. On the other hand, there was not a single female with AN who considered herself *hefty*, unlike participants without eating disorders, who occasionally described themselves as such.

The compulsory choice results (Table 4c) are merely complementary to the free choice results and confirm them. It can be noticed that both groups of participants consider *responsible* to be their most typical feature. *Intelligent* is another feature they share. Apart from these features, the females with AN describe themselves as *nervous* and *unsociable*, whereas the females without eating disorders perceive themselves as *sensitive* and *relaxed*.

**Table 4c.** *Self-perception – the frequency of the choice of the most typical features*

	most typical 1			most typical 2			most typical 3		
	Feature	F	%	feature	f	%	Feature	f	%
	responsible	12	30,0	intelligent	6	15,0	self-centred	5	12,5
<b>Individuals with AN</b>	nervous	5	12,5	insecure	6	15,0	thorough	5	12,5
	intelligent	5	12,5	responsible	5	12,5	sensitive	5	12,5
	unsociable	4	10,0	nervous	5	12,5	sociable	4	10,0
				meticulous	4	10,0			
<b>Control group</b>	responsible	12	15,4	sensitive	17	21,8	sociable	14	17,9
	intelligent	11	14,1	sociable	8	10,3	sensitive	13	16,7
	sensitive	10	12,8	insecure	8	10,3	amiable	8	10,3
	relaxed	8	10,3						

Unlike the first compulsory choice, which did not prove to be statistically significant, the results of the second and third ones are. Table 4c indicates that *sensitive* and *sociable* dominate the self-perception of the participants without eating disorders. The self-perception of the participants with AN also introduces

*self-centered*, which did not meet the stereotyped perception criterion in free choice, although it was significant.

## DISCUSSION

According to the results we obtained, it is clear that there is stereotypicality in the perception of persons, which depends on the physique of adolescent females, regardless of whether they suffer from anorexia nervosa or not (Havelka, 1992).

Adolescent females perceive a female pyknic as hefty, inert, sensitive, generous and insecure, regardless of whether they have *anorexia nervosa* or not. If we take into account the estimate of the desirability of features, obtained through the preliminary research, we can see that these features are relatively harmonized in that respect. Highly undesirable attributes are *inert* and *insecure*, whereas *generous* and *sensitive* are very desirable ones. However, the key stereotype about pyknics, *hefty*, is a slightly undesirable feature, which leads us to the conclusion that the stereotype about endomorph women is more negative than positive. Apart from that, it is also interesting that the most prominent features (*hefty* and *inert*) are physical, which confirms that physical appearance does have an impact on the impression of another person.

The obtained data also show that the females without an eating disorder have a wider, but also a more negative stereotype about pyknics. The patients with anorexia nervosa add one more attribute to the aforementioned features – *relaxed*. This feature is considered very positive, and it partly contributes to the balance of the stereotypes that the participants with AN share.

On the other hand, the participants without eating disorders add some other features: *modest*, *nervous*, *sociable* and *fearful*. Of these, only *sociable* is a highly positive feature, whereas *nervous* and *fearful* are highly negative. *Modest* is regarded as neutral.

The statistical significance check pointed to the importance of the fact that the patients with AN are much more inclined to attribute *self-assured* and *confident* features, while the participants without eating disorders mainly opt for *nervous*.

An inevitable conclusion based on the obtained data implies that there is a great deal of coincidence in perceiving endomorphs, regardless of whether the perceiver belongs to the clinical or non-clinical population. Adolescent females, whose concern with the physique can be considered normal, have a more negative stereotype about pyknics. This may be attributed to their exposure to social and cultural factors that impose the model of a thin woman. On the other hand, the adolescents suffering from *anorexia nervosa* ascribe to pyknics the features that a female pyknic, at least according to what modern culture suggests, should not possess (Tovée, Edmonds & Vuong, 2012). It remains uncertain why the females with AN perceive female pyknics as self-assured and confident.

Regarding asthenics, one cannot escape the conclusion that both groups of participants are in favour of this body type, but some differences can be noticed. A physical trait is in the focus again – *beautiful*. Both groups of participants consider this to be the most typical feature of a female asthenic. Female ectomorph stereotypes also comprise *sociable, svelte, self-assured, confident, athletic, intelligent, sensitive, and meticulous*.

This stereotype is clear and pronounced among the females without eating disorders. However, the patients with AN make an imbalance in this social stereotype with features like *responsible, nervous* and *insecure*. It is also interesting to note that the same percentage of the participants with AN attribute to asthenics features like self-assured and insecure. It seems contradictory that somebody is both self-assured and insecure at the same time (Watters & Malouff, 2012).

Checking the statistical significance of the data deepened and confirmed the contradictory image of female asthenics. A higher percentage of the females with AN consider an asthenic to be nervous, insecure and fearful. The participants without eating disorders see an asthenic female as highly sociable, svelte and confident.

According to the data, it is obvious that the individuals without eating disorders have a much more positive picture of asthenics, although it would seem closer to ‘common sense’ that the females with AN would be more in favour of this body type.

Apart from the features we have already mentioned, there are others that the females without eating disorders selected, and the participants with AN did not. The features in question are *relaxed, amiable* and *resourceful*.

Based on the data, it can be assumed that the females without eating disorders have successfully assimilated the social model of thinness, which goes along with numerous virtues (Shisslak & Cargo, 2001). It seems that the image of a thin person is harmonious, just the way the modern culture represents it (Cash, 2005).

On the other hand, certain distortion is obvious in the social perception of the females with anorexia nervosa. It seems that they have also accepted the set of virtues which accompany the favoured asthenic type. However, *insecurity, nervousness* and *responsibility*, which they also perceive in themselves, are a part of the social perception of asthenics. It is known that, in spite of physical reality, patients with anorexia nervosa perceive themselves as obese, and it is therefore interesting to note why attributes such as *insecure, nervous* and *responsible*, which are the key self-stereotypes, are ascribed to asthenics in particular (Garfinkel, 2002).

The stereotype of mesomorphs is the scantiest. Both groups of participants agree solely on one feature, i.e. *hefty*. Thus, a physical feature is in the focus again. Other perceptions about female-athletes are different. The patients with AN

ascribe to them features such as *responsible, confident, self-assured, relaxed*, along with *sensitive* and *resourceful*.

On the other hand, the females without eating disorders have far less varied stereotypes about mesomorphs. Apart from hefty, there are only a few more – *insecure* and *resourceful*, although we can take into account *relaxed* and *sociable*, as well.

Self-assured and confident are statistically significant. It is interesting to note that only the participants with AN opted for these features. An incidental comment from a patient can serve as an explanation, or at least, an illustration. She said, “I don’t know, this one seems like she has an attitude.”

Athletic build is often seen as something between pyknics and asthenics. This may be the reason why females without eating disorders formed a slightly vague and unconvincing stereotype. Regarding the patients with AN, it can be assumed that they see mesomorphy as a possible solution to their imaginary obesity. Being “hefty”, and yet “self-assured” and “confident” seems like a salvation from one’s insecurity. Engaging in sports that result in an “athletic physique” may be a solution that provides an “attitude”. Perhaps systematic engaging in sports could help young females develop a healthy personality, accept their own body shape and enhance their general confidence (Amorose, 2001).

The most extensive stereotype with the highest degree of statistically significant differences between the females with AN and the females without eating disorders comes from examining self-perception.

A majority of the features forming the self-stereotype are chosen by both groups of participants, but depending on whether they have *anorexia nervosa* or not, different attributes are favoured. The individuals with AN see themselves as *nervous, insecure, responsible, sensitive, intelligent* and *fearful*. The females without eating disorders have a ‘brighter’ self-stereotype. They perceive themselves as *sensitive, sociable, responsible, intelligent, generous, passionate* and *amiable*.

It turned out that the individuals without eating disorders have a somewhat wider self-stereotype. The females with *anorexia nervosa* have a narrower one, but it is also far more negative than in case of the other group.

It is interesting to note that, while the perception of other people begins with a physical trait, physical traits are completely neglected in self-perception. There is not a single physical trait in the self-perception of the females with AN, whereas a number of the females without eating disorders describe themselves as *beautiful*.

Both in case of free and compulsory choice, a statistically significant difference refers to being *sensitive* and *sociable*. These are the features that the highest percentage of the individuals without eating disorders ascribe to themselves. On the other hand, although these features exist in the self-perception of the females with AN too, the dominant attributes are *nervous* and *insecure*.

What is interesting and important is that there are some features that neither of the groups opted for. For example, no person without eating disorders described themselves as *selfish*, whereas no female with AN said she was *hefty*. It is also important that the participants with AN are more prone to describe themselves as unsociable and *self-centered*. On the other hand, the individuals without eating disorders consider themselves *amiable* and *passionate*.

According to the obtained data it can be concluded that there is a certain degree of similarity, but also significant differences in the self-perception of the females with anorexia nervosa and the females without eating disorders. Although a majority of the selected features are the same, the differences in the intensity in which the participants ascribe these features to themselves are important. Apart from that, the *gestalts* these features create are completely different.

The self-stereotype of the females with anorexia nervosa seems very dreary and rigid and it clearly expresses the tension and confusion imminently brought about by *anorexia nervosa*. The self-perception of the females without eating disorders reflects the cheerfulness and joy of becoming mature that adolescence brings, although that process may and must be marked by a certain degree of uncertainty (Castellini, Trisolini & Ricca, 2014; Rosenberg, 1965; Banfield & McCabe, 2002).

## CONCLUSION

A person's physical appearance could serve as a basis for stereotypical perception. The stereotypes about persons of different physiques largely depend on social influences, but it is also evident that they can be influenced by a disorder such as anorexia nervosa.

It was proved that female adolescents with anorexia bend the imposed social stereotype about persons of different physiques to a certain extent. Even though they accept the image about pyknics as *hefty*, *inert*, *sensitive*, *generous* and *insecure* persons, for some reason the females with AN believe these persons are *self-assured* and *confident*.

The imposed cultural stereotype about asthenics as *beautiful*, *sociable*, *sensitive*, *intelligent*, *self-assured*, *svelte* persons, has obviously been disturbed by the nervousness and insecurity that the anorexic persons project onto the thin model.

The females with anorexia perceive female-athletes as *hefty*, *responsible*, *self-assured*, *confident* and *relaxed*. It appears that mesomorphy represents a compromise (or a solution) between their own imaginary "*heftiness*" and the lack of confidence.

The self-perception of the anorexic females is also stereotyped. They perceive themselves as *nervous*, *insecure*, *responsible*, *intelligent*, *sensitive*, *fearful*, but also *selfish*, *self-centred* and unsociable. What is obvious is the



disharmony and tension caused by a disorder such as anorexia nervosa.

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**Appendix** – the features used in investigating the perception and self-perception of females with anorexia nervosa

- |                 |                  |
|-----------------|------------------|
| 1. inventive    | 16. modest       |
| 2. relaxed      | 17. sensitive    |
| 3. unsociable   | 18. resourceful  |
| 4. hefty        | 19. sociable     |
| 5. self-assured | 20. self-centred |
| 6. indolent     | 21. fearful      |
| 7. beautiful    | 22. svelte       |
| 8. responsible  | 23. unmethodical |
| 9. nervous      | 24. wise         |
| 10. intelligent | 25. selfish      |
| 11. generous    | 26. athletic     |
| 12. insecure    | 27. confident    |
| 13. meticulous  | 28. thorough     |
| 14. amiable     | 29. stupid       |
| 15. inert       | 30. passionate   |