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# Coexistence of the features of perfectionism and anorexia readiness in school youth

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## **Summary**

**Aim:** The aim of the study was an attempt to determine the structure and intensity of perfectionism among junior secondary school students, which can significantly trigger the incidence of Anorexia Readiness Syndrome (ARS).

**Methods:** The empirical study was conducted by means of *the Food Attitude Questionnaire* (FAQ) by Beata Ziółkowska (2001) and *the Multidimensional Perfectionism Scale* (FMPS) by Frost et al. (1990). The study was conducted on a group of 345 junior secondary school students.

Conclusions: (1) A high level of anorexia readiness coexists with the parents' high level of criticism and their high expectations. (2) A high level of anorexia readiness coexists with excessive concern about one's own mistakes and doubts about actions. (3) The perception of one's own attractiveness coexists with excessive concern about one's own mistakes and excessive criticism on the part of the parents. (4) The higher the tendency to reduce weight, the deeper the concern about one's own mistakes and doubts about actions. (5) The individuals with a high level of anorexia readiness in comparison with the individuals with low anorexia readiness have a deeper concern about mistakes and higher personal standards. (6) The individuals with a high level of anorexia readiness, as compared to the people with low anorexia readiness, perceive their parents as more critical and demanding.

Key words: perfectionism, anorexia readiness syndrome, high personal standards

#### Introduction

Eating disorder is a serious medical and social problem in many countries. An increase in the occurrence of these disorders is being observed in Poland, as evidenced by the results of epidemiological studies [1]. Starting the study on anorexia readiness was inspired by the reports about an increase in the anorexia rate among young people, especially girls. Anorexia nervosa appeared in the medical literature nearly a hundred years ago, however, some of the symptoms of this disorder have been described for centuries [2, 3].

In the Dictionary of psychology the term 'anorexia nervosa' is referred to as nervous anorexia. It is a psychologically-based disorder manifesting itself in lack of appetite combined with a slowdown of the body's physiological activities [4]. The above-mentioned dictionary definition was developed extensively in the Lexicon of psychiatry. It was indicated therein that anorexia is characterized by food aversion, combined with the desire to reduce body weight and often leading to a significant loss of body mass, and even to emaciation (cachexia). To achieve the desired goal, the patients drastically limit the amount of consumed food and its composition (a variety of diets), which is usually combined with periodic starvation. Sufferers of eating disorder take a variety of laxatives, appetite suppressants, diuretics and they also purge and put a lot of physical effort in order to burn excess calories. Attempts to persuade or force the individual to eat are unsuccessful, they often result in exacerbation of the symptoms. Though there can be periods of improvement in the course of the disorder, after a short period of time, it relapses with some or all of the symptoms. Weight loss is usually dramatic, which often leads to the emaciation of the body and generates serious health complications [5].

Nowadays, anorexia nervosa is a well-known mental disorder. Nevertheless, the mechanism of the escalation of this phenomenon, as well as the susceptibility of a certain group of adolescents to response with destructive fasting and diets [6], defined as *Anorexia Readiness Syndrome*, is still socially surprising.

Anorexia Readiness Syndrome (also known as anorexic alert, anorexia readiness level or anorexic behavior) is an individual susceptibility conditioned primarily by: family upbringing, involvement in popular culture, adolescence, quality of coping strategies in difficult situations. This tendency manifests itself in taking restrictive and starvation diets [2]. Ziółkowska [6, p. 89] defines anorexia readiness syndrome (ARS) as a "set of symptoms suggesting suspicion of irregularities in the implementation of nutritional needs and attitude towards one's own body, conditioned psychologically, socially and culturally". Anorexia readiness syndrome, whose particular expression falls within the stage of adolescence, develops and shapes over a person's lifetime. This susceptibility to anorexia nervosa manifests itself through specific indicators regarding the psychological (psyche), physiological (soma) and social (polis) sphere of the human being. It is very important that Anorexia Readiness Syndrome does not determine the onset of eating disorder, but could be one of numerous risk factors [2, 6].

Although the accurate definition of perfectionism is difficult, in the psychological literature several important issues related to this problem are emphasized. Virtually all the authors dealing with the issues of perfectionism stress high personal standards as crucial to this concept [7, 8]. The constant attempt to achieve very high personal standards is not a bad thing in itself. On the contrary, some authors understand by this the enhancement of a positive attitude towards life. Hamachek (1978) distinguishes between the standard and neurotic level of perfectionism. This is defined as a combination of thoughts and behaviors related to high standards or expectations as to one's own achievements [9]. The author states that the nature of perfectionism is dual. On the one hand, it is perceived as a healthy and very important element of human development. In some cases, however, it turns out to be destructive. It leads to a lack

of satisfaction from the taken actions and excessive self-criticism [7]. Some authors claim that healthy perfectionism and neurotic one are distinct features, differing in the intensity and type of components included in their structure. It was found that there are two subscales that are associated with healthy perfectionism (*Personal Standards* and *Organization*), and two subscales associated with neurotic perfectionism (*Connection with parents' expectations, Connection with mistakes and doubts*) [10]. The individuals characterized by a neurotic variety of perfectionism are subject to constant stress accompanying the attempts to meet unrealistic goals [7]. Enthusiasm and commitment to the undertaken activity, combined with the lack of realism, consume a lot of time and energy, often with no visible effects. It is estimated that perfectionism in about 15–20% of highly gifted students becomes an important reason for learning difficulties at a certain education stage [10].

Encyclopedia of Behavior Therapy (2005) defines perfectionism based on concepts of different authors. The first cited author is Hollender (1978), according to whom "perfectionism is understood as a personality style, and the most important feature of perfectionism refers to setting oneself and others personal standards higher than necessary in a given situation" [11, p. 273]. Burns (1980), in turn, defines perfectionism from a cognitive perspective as "a set of attitudes, beliefs, expectations, interpretations, and assessment in relation to oneself or others, involving rigid adherence to unrealistic, high standards and tendencies; the sense of value depends on the results and implementation of the task" [11, p. 273].

Perfectionism has long been known and described by the authors as a central feature of eating disorder. The literature on the subject confirms that perfectionism has a big role in the etiology of problems related to eating [12]. In psychological literature, it is indicated that the study of the role of perfectionism in psychopathology is complicated due to its inaccurate definitions. Nevertheless, studies on these variables are undertaken by various authors [7, 13–17]. Bruch (1978) was one of the first authors to describe patients with eating disorder as aiming at reaching perfection, very submissive and very self-centered, fearful of others' evaluation and disrespect [12]. Cockell et al. [18] showed that the patients with anorexia had higher scores in the non-disclosure of their own imperfections criterion than other psychiatric patients and healthy individuals, which suggests that patients with anorexia present themselves as ideal while not accepting their imperfections. Additional studies have shown that all three dimensions of perfectionism associated with the aspect of self-presentation showed a tendency of anorexia sufferers to suppress negative feelings and to give others priority to express feelings [19].

Minarik and Ahrens [20] conducted and described two studies aimed at finding connection between multidimensional perfectionism and eating disorders. 'Concern about mistakes' and 'doubts about actions' in both studies were associated with the scales of eating behavior. An intense pursuit of slimness, a tendency to constantly think about this pursuit, uncontrollable eating, dissatisfaction with one's body, diet and behavior associated with weight loss coexisted with overall concern about mistakes. The authors pointed out that perhaps the fear of making mistakes is imposed and shaped by the social norms of beauty. The fear of not meeting this ideal leads to the development of

disturbed attitudes and eating behaviors. In the course of studies, Minarik and Ahrens [20] also found that parental expectations and personal standards do not refer to eating disorders. Similarly, parental criticism was not related to eating disorders in the first study and showed only a slight relationship in the second study [20]. These findings are contrary to the popular theories on the etiology of eating disorders [20–23].

Bastiani et al. (1995) conducted the studies using various methods for studying perfectionism in the people with anorexia nervosa. The authors created three groups: (1) underweight anorexia sufferers, (2) anorexia sufferers with restored weight and (3) a control group, and compared the results between the groups. It turned out that the patients of both anorexia groups achieved higher scores on the scale of perfectionism than the control group. The patients suffering from anorexia are featured by perfectionism imposed on themselves and by themselves, not by perfectionism as a response to others' expectations. Bastiani et al. (1995) stated that "rigid and obsessive perfectionist behaviors may contribute to resistance in the treatment and may accompany the relapse of the illness" [24, p. 147].

# 1. Aim

The aim of the conducted study was an attempt to determine the structure and intensity of perfectionism among junior secondary school students, which can significantly trigger the incidence of Anorexia Readiness Syndrome (ARS).

# 2. Study group

The study was conducted in two junior secondary schools, they were group studies and were carried out in class teams. The study took place during classes. The group consisted of 345 students, 172 of whom attended a Catholic junior secondary school, and 173 students attended a secular school. The study subjects were chosen randomly. They were motivated and willing to cooperate. They showed great interest in the study.

The group of subjects was diverse on the grounds of their age, sex, place of residence, number of siblings, average grades, and their self-esteem as a student. Considering sex, there were 198 girls (57%) and 147 boys (43%).

## 3. Methods

The Multidimensional Perfectionism Scale (FMPS) by Frost at al. [7] translated and developed by S. Tucholska (2010) [25] was used to study the structure and intensity of perfectionism. This Scale gives the opportunity to assess both the overall score of perfectionism as well as the distinguished factors. It consists of 35 items gauged on the 5-point Liekert scale, where 1 denotes 'strongly disagree', 5 – 'strongly agree'. The following factors are distinguished on the scale: CM – concern about mistakes, PS – personal standards, PE – parental expectations, PC – parental criticism, D – doubts about actions, O – order and organization preference.

Beata Ziółkowska is the author of the Food Attitude Ouestionnaire (FAO) [6]. This method is intended for measuring anorexia readiness syndrome. The questionnaire gives the opportunity to assess both the overall score of anorexia readiness syndrome, as well as its distinguished factors: weight reduction (WR), attitude to food (FA), parenting style (PS), and perception of one's own attractiveness (AP). The questionnaire consists of 20 statements describing the attitude to food. The subject of the study responding to each statement has two answers to choose from: 'yes' or 'no'. This questionnaire can be used to distinguish the individuals with different levels of anorexia readiness.

# 4. Study results

# 4.1. Coexistence of the features of perfectionism and anorexia readiness

The correlation coefficient (Person's r) between the dimensions of perfectionism and anorexic behavior of the studied group is presented in Table 1. The data in the table indicate the clear relationship between the structural factors of the Multidimensional Perfectionism Scale (FMPS) and the Food Attitude Ouestionnaire (FAO) factors.

readiness scales and dimensions of perfectionism							
Dimensions of perfectionism / dimensions of anorexia readiness	Weight reduction	Attitude to food	Parenting style	Perception of one's own	Overall score AR		

Table 1. The correlation coefficients (Pearson's r) and their significance between anorexia

Dimensions of perfectionism / dimensions of anorexia readiness	Weight reduction	Attitude to food	Parenting style	Perception of one's own attractiveness	Overall score AR
CM – concern about mistakes	0.204**	0.214**	0.311**	0.378**	0.434**
PS – personal standards	0.099	0.136*	0.217**	0.107*	0.193**
PE – parental expectations	0.155**	0.102	0.239**	0.055	0.177**
PC – parental criticism	0.216**	0.132*	0.347**	0.247**	0.348**
D – doubts about actions	0.158**	0.122*	0.202**	0.315**	0.326**
O – order and organization preference	-0.016	0.049	-0.030	-0.019	-0.011
Overall score	0.225**	0.218**	0.357**	0.315**	0.417**

<sup>\*\*</sup> The correlation is significant at the level of 0.01 (two-tailed).

The index that defines the weight reduction dimension correlates significantly with the five dimensions: concern about mistakes, parental expectations, parental criticism, doubts about actions, and the overall score. Such a distribution of scores implies that the higher the level of weight reduction, the greater the tendency for the concern about mistakes, doubts about actions and the greater the need for support and love on the part of the parents. The parents' high demands and critical attitude towards children strengthens the behaviors manifesting themselves in the desire to slim, adopt various restrictive forms of weight reduction and build up anorexia readiness syndrome. The statistical analysis has confirmed the assumptions adopted in the study.

<sup>\*</sup> The correlation is significant at the level of 0.05 (two-tailed).

Strong dependence also exists between the scale of parenting style and the factors of perfectionism: concern about mistakes, personal standards, parental expectations, parental criticism, doubts about actions, and the overall score of perfectionism. All of these correlations are at the level of significance of p = 0.001. In all the dimensions, the correlation is positive, which means that the higher the level of anorexia readiness syndrome (ARS), the more important is the dimension of parenting style. This means specific realization of the parent's role, manifesting itself either in excessive criticism or overprotection [6]. This overprotective or critical attitude of parents towards the child, as well as the lack of acceptance, are revealed in relation to his/her physicality, the way of creating his/her image, deep concern about mistakes, or doubts about actions. This results in continuous increase in the children's personal standards.

The factor of perceiving one's attractiveness is significantly correlated with the following dimensions of perfectionism: concern about mistakes, personal standards, parental criticism, doubts about actions, and the overall score on the scale of perfectionism. In all the dimensions there is a positive correlation. This constellation of the results implies that the perception of one's own physicality is based largely on dissatisfaction with one's own attractiveness, concern about mistakes, or concern about each piece of one's body. Parental criticism and doubts about taken actions significantly strengthen a critical attitude towards one's body and raise personal standards to such a degree that the person largely controls his/ her appearance and shapes with it social relations, as well as his/ her own self-esteem. The significance of the variable 'perception of physical attractiveness' in shaping attitudes among adolescents results, to a large extent, from the specificity of the adolescence stage. It is a time in the person's life which – due to raging hormones and the final process of maturation of the nervous system – strongly affects social relations. Parental criticism and expectations may have an impact on the depreciation of one's own attractiveness.

Significant correlations occurred between the indicator of attitude to food and concern about mistakes, personal standards, parental criticism, doubts about actions, and the overall score on the scale of perfectionism. All the above correlations are positive and the statistical significance level is p = 0.05. This distribution of the scores implies that the person is largely focused on the knowledge of the number of calories of consumed products and very negatively experiences his/her emotions resulting from losing control over the amount of consumed food. A person with a high score on the attitude to food scale can perfectly focus on the amount of consumed food. Personal standards, doubts about actions and parental criticism, in turn, increase more weakly, however, correlation is statistically significant here. It can be said that controlled attitude to food and the ability to control consumed meals in a perfect way increase the level of personal standards, and thus self-esteem.

There are significant correlations between the overall score of anorexia readiness and the following dimensions of perfectionism: concern about mistakes, personal standards, parental expectations, parental criticism, doubts about actions, and the overall score of perfectionism. The factors correlate with each other at the statistical significance level of p = 0.001. This denotes that the studied individuals assess themselves in relation to exorbitant standards. The higher the anorexia readiness syndrome

indicator, the higher the score in the assessment of perfectionism and its specific dimensions. Lack of tolerance in relation to mistakes being made, increased personal standards, too high parental expectations and criticism, as well as doubts about taken actions – accumulated in one entity – result in an increased level of the likelihood of anorexia episode.

The only dimension of perfectionism that does not correlate with anorexia readiness factors is the order and organization preference. This dimension does not affect the occurrence of eating disorder – especially in the case of anorexia nervosa. The literature on the subject indicates that attachment to careful organization and planning of undertaken activities is associated with healthy perfectionism, supportive of the development of the child's abilities [7, 10]. The studies referred to in this work confirm these reports.

# 4.2. Involvement of perfectionism in explaining anorexia readiness syndrome in the entire study group

Table 2. The results of multiple stepwise regression for the overall score of perfectionism explaining the overall score of anorexia readiness syndrome

Perfectionism	R	R <sup>2</sup>	β	Standard error	F	р
OS – overall score	0.417	0.172	0.417	0.008	72.23	0.000

The adjusted multiple correlation coefficient for the overall score on the perfectionism scale and on the anorexia readiness scale is  $R^2 = 0.172$  (F = 72.23; p = 0.000), which allows us to assume that the overall score on the perfectionism scale explains about 17% of the variance. The influence of the explanatory variable of perfectionism is directly proportional to the response variable ( $\beta$  value). This means that the higher the level of perfectionism in the study group, the higher will be the severity of anorexic readiness syndrome.

Table 3. The results of multiple stepwise regression for the overall score and the factors of perfectionism involved in explaining the overall score of anorexia readiness syndrome

Independent variables of perfectionism	β	Student's t	р
CM – concern about mistakes	0.347	6.35	0.000
PC – parental criticism	0.182	3.34	0.001

Multiple correlation coefficient: R = 0.214

Adjusted coefficient of multiple determination: R<sup>2</sup> = 0.209

Significance of the equation: F = 46.488; p = 0.001

The results of stepwise regression indicated that the contribution of two variables, i.e., CM – concern about mistakes and PC – parental criticism, explains 21% of the overall anorexia readiness score. Statistical significance is at the level of p = 0.001.

Habitually, perfect individuals notice mistakes and shortcomings in any situation, by comparing them to the idea of a perfect state. In the face of a perfect solution,

a physical feeling of 'letting go' and relaxation appears. Perfectionists claim that when they sense how perfect a situation may be, they have an irresistible urge to remove the mistakes they have noticed. It is then that they are anxiously focused on sorting out the most visible shortcomings. Such a high pressure, created by the desire to perfect the task and remove all of the appearing mistakes, strengthens the anorexia readiness indicator and may lead to eating disorder – anorexia.

Parental criticism is another very important factor explaining anorexia readiness syndrome. The fear of the parents' disapproval and criticism is conditioned by the results, successes, coping with a difficult situation. Such experiences make perfect individuals feel that they are 'not good enough' and at any price they want to achieve the high standards set by their parents, which in adult life are internalized and set by themselves. The result is a higher anorexia readiness indicator and a greater likelihood of anorexia incidence.

# 4.3. The comparison of the groups with low and high scores of anorexia readiness in terms of perfectionism

At this point, the characteristics of the distinguished groups in terms of anorexia readiness will be presented as well as their comparison with the dimensions of perfectionism.

In the study group, people with low (95 individuals) and high (87 individuals) anorexia readiness were identified. The assignment of the individuals to the groups based on the results in *the Food Attitude Questionnaire* raises a lot of doubts and is ambiguous because the dispersion of the results in the lower group ranges from 0 to 5 points and in the upper group from 10 to 20 points.

Table 4. The mean values (M) and standard deviations (SD) as well as the significance of differences between LAR and HAR groups on the scale of perfectionism

Dimensions of perfectionism	LAR N = 92		HAR N = 87		Student's t	р
Difficultions of perfectionism	М	SD	M	SD	Otadonts	P
CM – concern about mistakes	19.80	6.24	28.05	7.89	-7.85	0.000
PS – personal standards	22.40	5.31	24.85	5.32	-3.11	0.002
PE – parental expectations	14.22	3.96	16.11	4.37	-3.07	0.003
PC – parental criticism	6.51	2.92	9.66	4.27	-5.85	0.000
D – doubts about actions	10.45	3.23	13.28	3.39	-5.75	0.000
O – order and organization preference	23.57	3.73	23.30	3.81	0.48	0.630
Overall score	96.95	15.81	115.24	17.68	-7.37	0.000

LAR - low anorexia readiness

HAR - high anorexia readiness

The results presented in Table 4 show that there are significant differences in the intensity and structure of perfectionism in junior secondary school students in low anorexia readiness (LAR) and high anorexia readiness (HAR) groups. The LAR group is characterized by significantly lower scores in the intensification of the perfectionism factors and the overall score. The largest differences at the level of mean values occur in the overall score of perfectionism, concern about mistakes, parental criticism, parental expectations, doubts about actions, and personal standards.

The individuals in the high anorexia readiness (HAR) group are more likely to be concerned about mistakes, i.e., excessively focused on failures. They devote too much time to these and may have difficulty completing their actions. The analysis of the results shows that the individuals with high anorexia readiness obtained higher scores regarding the intensity of perfectionism factors compared to those with low anorexia readiness, and this difference is statistically significant (t = 7.85; p = 0.000).

In the HAR group, the higher level of parental criticism experienced by the students manifests itself in the attitude which is overly critical and not accepting the tasks performed by the child. It can also manifest itself in relation to the child's physicality and the way the child creates his/her image. Therefore, it can be concluded that the less parental criticism is experienced, the lower the level of anorexia readiness. The obtained results seem to complement the considerations presented in the section on parental expectations. The students under too much pressure may be afraid of failure and, consequently, hide their potential in order to avoid disappointment and painful criticism on the part of their parents [10]. If the child generally receives negative messages in the form of criticism, then he/she creates his/her picture as a person who cannot face problems and does not deserve success, which inevitably leads to an increase in the anorexia readiness indicator [10].

Major differences are also visible in the doubts about actions factor, which achieves the highest degree of severity in the HAR group. This manifests itself in the constant uncertainty as to the quality of the task performance and too much time devoted to the task. This is associated with a lack of faith in one's own effectiveness, which makes it difficult to complete the task and reduces the efficiency of work. A comparison of the group means indicates a significant difference between the studied groups and this difference exceeded the statistical significance threshold (t = 5.750; p = 0.001). In view of the obtained means, it can be concluded that the subjects from both groups are characterized by the high level of intensity of the studied feature. Due to the characteristics of the discussed dimension, it could have been expected that the students in the high anorexia readiness group will obtain much higher results than the students from the low anorexia readiness group. The statistical analysis has confirmed these expectations.

For the individuals with high anorexia readiness, a higher level of personal standards is distinctive. It indicates the desire to get the highest competences in the undertaken activities. Undoubtedly, this dimension does have a very large share in shaping the high anorexia readiness syndrome. A comparison of the group means showed that LAR and HAR students are different from each other in this respect. The students with low scores on the attitude to food scale achieved significantly lower scores in the studied dimension compared to the students with high scores in relation to anorexia readiness.

The statistical analysis confirmed this assumption. If a student strives to achieve high competences in a direction consistent with the development, this will result in high achievements. However, if he/she focuses on compulsive task performance and wants to be better at any cost, this could be at the expense of self-satisfaction and satisfaction with the work, and, consequently, lead to frustration, dissatisfaction and increase the possibility of anorexia or other eating disorders [10].

The dimension of parental expectations concerns the pressure exerted by the parents, subjectively perceived by the subject. The high level of this dimension is associated by researchers with neurotic (dysfunctional) perfectionism. The comparison of the group means showed a statistically significant difference in the scores of the groups with low and high anorexia readiness indicators (t = 3.066; p = 0.003). The subjects with high anorexia readiness obtained significantly higher scores in the studied dimension compared to the students with low anorexia readiness.

The comparison of the group means, in terms of the order and organization preference, did not show the existence of a statistically significant difference in the results of the LAR and HAR groups. The students with low and high scores in anorexia readiness obtained very similar scores. Both (LAR and HAR) studied groups appear to be very organized and structured in planning and implementing the activities. The obtained scores are consistent with the reports found in the literature on the subject. Previous research has shown that the dimension of order and organization is closely related to healthy perfectionism, supportive of development [10].

#### Discussion

The assumptions presented in the paper that a high level of anorexia readiness coincides with high parental criticism and high parental expectations have been confirmed. The individuals with a high level of anorexia readiness perceive their parents as more critical and demanding [26]. Overly demanding parents continue setting higher standards for the task performance and are often critical of the child's achievements. Probably the parents of the children with high anorexia readiness ignore their children's possibilities. One might think that they overload them with additional duties. They are perfectionist in the assessment of the tasks performed by the child, which is associated with a corrective attitude, with stressing the children's mistakes, focusing on their failure, inabilities and difficulties. These results correspond with the study by Ziółkowska [6], according to whom the mothers studied by her set excessive demands on the girls, brought them up in low self-esteem and supported as well as reinforced their pursuit of perfectionism. At the same time, they motivated their children to 'be above average', better than others, orderly, organized and striving to achieve success [6].

Moreover, the assumption that a high level of anorexia readiness coexists with excessive concern about one's own mistakes and doubts about actions has been confirmed. While analyzing the individual factors of perfectionism in this paper, it was noted that the greatest variation in the obtained scores occurs in the dimension of concern about mistakes. This means that the subjects focus on the mistakes, take minor mistakes as a failure, do not notice the positive sides of their achievements. The students spend

too much time completing the task, and thus may have difficulty completing their actions. They approach the undertaken activities with the 'all or nothing' assumption.

The assumption that perceiving one's attractiveness coexists with excessive concern about one's own mistakes, high expectations and excessive criticism on the part of the parents has been confirmed only partially. There is no correlation between perceiving one's own attractiveness and the parents' expectations. However, the correlation between the other variables coexists at the level of statistical significance of p = 0.001.

The higher the tendency to reduce weight, the higher the concentration on one's own mistakes and doubts about actions. According to the literature on the subject, the stronger the effort to use restrictive diets, which reduce body mass, and the more physical exercise, the deeper the concern about mistakes [12, 19, 27]. Hewitt et al. suggest that the desire for excellence is a highly-emphasized element in the patients with anorexia nervosa. They want to find acceptance from others by completing the task according to expectations, which leads to them having to keep raising their personal standards, which, consequently, may lead to doubts as to the implementation of the task and the delay in its completion [27]. Hewitt at al. have found that the individuals who were remarkably focused on their own perfectionism used diets especially frequently and were concerned about their physical attractiveness. Davis at al. [28] found that the high level of physical activity in anorexia nervosa sufferers based on the desire to reduce their body weight is associated with a higher perfectionism score.

The results of the stepwise regression indicate that the overall indicator of perfectionism explains 17% of the score of the general anorexia readiness syndrome. The contribution of the two variables, i.e., 'concern about mistakes' and 'parental criticism' explains 21% of the overall score of anorexia readiness. This means that in a habitual manner the perfect individuals see mistakes and shortcomings in every situation.

The individuals with a high level of anorexia readiness, as compared to the people with a low anorexia readiness, perceive their parents as more critical and demanding. In the HAR group, a higher level of parental criticism of the students is observed in comparison to the LAR group.

The individuals with a high level of anorexia readiness in comparison with the people with a low anorexia readiness have a deeper concern about mistakes and higher personal standards. The people in the group with a high level of anorexia readiness compared to the people with low anorexia readiness tend to overestimate the role of concern about mistakes, i.e., excessively focus on failures. They devote too much time to these and may have difficulty completing their actions.

The conclusion of this study is that the level of perfectionism has a significant impact on the perception of one's body and the feeling of attractiveness, it also enhances behaviors related to reducing weight, diets and intense exercise. A fully accepting parental attitude can provide appropriate conditions for the development of a correct body image and is the best protection against shaping in adolescents disorders related to the perception of their own physicality. Parental attitude described as: withdrawn, inconsistent, critical or overprotective is associated with the lack of emotional stability in relation to the child and very often strengthens the incorrect approach to standards and indicators defining the current ideal of female beauty. Certainly, other factors, e.g.,

personality traits, peer pressure also fulfill important roles in the formation of one's own body image in young people. Considering the influence of these factors, the importance of the level of perfectionism in shaping self-esteem in the youth cannot be ignored. According to the literature on the subject, excessive intensity of perfectionism and its generalization contributes to the emergence of various mental disorders, including psychological anorexia. Full knowledge of these conditions allows to predict the risk factors of eating disorders and enable the development of prophylactic programs and more effective therapy.

It seems that the specificity of the functioning of the students with high susceptibility to reacting with anorexic behavior combined with high scores on the scale of perfectionism (i.e., increased concern about mistakes, high personal standards, excessive criticism and parental expectations, and doubts about actions) is only a certain propensity to the incidence of difficulties in functioning. However, a lot depends on support, or lack of it, from the closest environment. This is a positive signal for the effectiveness of interventions undertaken by pedagogues, psychologists and teachers. The problem of anorexia readiness syndrome as well as the intensity and the structure of perfectionism in the youth remains open and requires further exploration. It would be very interesting to compare the results of the control group with the clinical group of anorexia sufferers.

### **Conclusions**

The study assumed the existence of a significant relationship between perfectionism and the formation of anorexia readiness syndrome. The students with a high level of anorexia readiness are much more severely affected by the pressure of demands, expectations and criticism from their parents than their peers with a low level of anorexic behavior. Constant pressure towards top achievements causes frustration and a lack of sense of fulfillment. Consequently, the fear of failure and criticism may arise, which leads to the avoidance of new challenges. Except the dimension appearing under the name 'order and organization', the other studied dimensions of perfectionism explain at the statistically significant level the difference between the individuals with low and high scores in anorexic behavior.

Moreover, the females obtained a higher score in ARS than the males. The intensity of perfectionism in the group of boys is much higher than in girls.

#### References

- 1. Banaś A, Januszkiewicz-Grabias A, Radziwiłłowicz P. Wieloczynnikowe uwarunkowania zaburzeń odżywiania się. Psychiatr. Pol. 1998; 32(2): 165–176.
- Ziółkowska B. Anoreksja od A do Z poradnik dla nauczycieli i wychowawców. Warsaw: Scholar Publishing House; 2005.
- 3. Żechowski C. *Historia badań nad jadłowstrętem psychicznym*. Postępy Psychiatrii i Neurologii. 2004; 13(3): 247–253.

- 4. Reber A, Reber E. Słownik psychologii. Warsaw: Scholar Publishing House; 2005. P. 54.
- 5. Pużyński S. Leksykon psychiatrii. Warsaw: State Publishing House for Medicine; 1993.
- Ziółkowska B. Ekspresja syndromu gotowości anorektycznej u dziewcząt w stadium adolescencji. Poznan: Humaniora Foundatioon Publishing House; 2001.
- 7. Frost RO, Marten P, Lahart C, Rosenblate R. *The dimensions of perfectionism*. Cognit. Ther. Res. 1990; 14(5): 449–468.
- 8. Schuler PA. Perfectionism and the gifted adolescent. J. Second. Gift. Educ. 2000; 11(4): 183–196.
- 9. Shafran R, Cooper Z, Fairburn CG. *Clinical perfectionism: A cognitive-behavioural analysis*. Behav. Res. Ther. 2002; 40(7): 773–791.
- Śliwińska K, Limont W, Dereszer J. Perfekcjonizm a osiągnięcia szkolne uczniów zdolnych. In: Limont W, Cieślikowska J, Dereszer J, editors. Zdolności. Talent. Twórczość. Torun: Nicolaus Copernicus University Press; 2008. P. 103-117
- 11. Antony MM, McCabe RC. *Encyclopedia of cognitive behavior therapy*. Term: 'perfectionism'. New York: Plenum; 2005. P. 273.
- 12. McGee BJ, Hewitt PL, Sherry SB, Parkin M, Flett GL. *Perfectionistic self-presentation, body image, and eating disorder symptoms.* Body Image. 2005; 2(1): 29–40.
- 13. Hewitt PL, Flett GL. Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. J. Pers. Soc. Psychol. 1991; 60(3): 456–470.
- 14. Hewitt PL, Flett GL, Besser A, Sherry SB, McGee B. *Perfectionism is multidimensional: A reply to Shafran, Cooper and Fairburn*. Behav. Res. Ther. 2003; 41(10): 1221–1236.
- 15. Rhéaume J, Freeston MH, Dugas MJ, Letarte H, Ladouceur R. *Perfectionism, responsibility and obsessive compulsive symptoms*. Behav. Res. Ther. 1995; 33(7): 785–794.
- 16. Shafran R, Cooper Z, Fairburn CG. "Clinical perfectionism" is not "multidimensional perfectionism": A reply to Hewitt, Flett, Besser, Sherry & McGee. Behav. Res. Ther. 2003; 41(10): 1217–1220.
- 17. Tozzi F, Aggen SH, Neale BM, Anderson ChB, Mazzeo SE, Neale MC et al. *The structure of perfectionism: A twin study*. Behav. Genet. 2004; 34(5): 483–494.
- 18. Cockell SJ, Hewitt PL, Seal B, Sherry SB, Goldner EM, Flett GL et al. *Trait and self-presentational dimensions of perfectionism among women with anorexia nervosa*. Cognit. Ther. Res. 2002; 26(6): 745–758.
- Geller J, Cockell SJ, Hewitt PL, Goldner EM, Flett GL. Inhibited expression of negative emotions and interpersonal orientation in anorexia nervosa. Int. J. Eat. Disord. 2000; 28(1): 8–19.
- Minarik ML, Ahrens AH. Relations of eating behavior and symptoms of depression and anxiety to the dimensions of perfectionism among undergraduate women. Cognit. Ther. Res. 1996; 20(2): 155–169.
- 21. Józefik B. *Relacje rodzinne w anoreksji i bulimii psychicznej*. Krakow: Jagiellonian University Press; 2006.
- Pawłowska M. Przegląd koncepcji dotyczących rodzin anorektycznych. In: Ziółkowska B, editor. Opętanie (nie) jedzeniem. Warsaw: Scholar Publishing House; 2009. P. 50-55
- Popławska A. Anorexia nervosa choroba jednostki czy choroba rodziny? In: Ziółkowska B, editor. Opętanie (nie) jedzeniem. Warsaw: Scholar Publishing House; 2009.
- 24. Bastiani AM, Rao R, Weltzin T, Kaye WH. *Perfectionism in anorexia nervosa*. International Journal of Eating Disorders. 1995: 17: 147–152.
- Frost RO, Marten P, Lahart C, Rosenblate R. Wielowymiarowy Kwestionariusz do Badania Perfekcjonizmu FMPS – unpublished version, translated and prepared by Tucholska S. 2010.

- 26. Halmi KA, Sunday SR, Strober M, Kaplan A, Woodside DB, Fichter M et al. *Perfectionism in anorexia nervosa: Variation by clinical subtype, obsessionality, and pathological eating behavior*. Am. J. Psychiatry. 2000; 157(11): 1799–1805.
- 27. Hewitt PL, Flett CL, Ediger E. Perfectionism traits and perfectionistic self-presentation in eating disorder attitudes, characteristics, and symptoms. Int. J. Eat. Disord. 1995: 18(4): 317–326.
- 28. Davis C, Kaptien S, Kaplan AS, Olmsted MP, Woodside DB. *Obsessionality in anorexia nervosa: The moderating influence of exercise*. Psychosom. Med. 1998; 60(2): 192–197.

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