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SYMPTOMS OF MENTAL HEALTH DISORDERS AND EARLY MALADAPTIVE SCHEMAS — ASSESSMENT OF DEPENDENCIES

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**early maladaptive schemas
mental health
symptoms of health disorder**

Summary

Objectives: The therapy practice shows that some patients report various symptoms that do not constitute any syndrome corresponding to particular disorders. In these recounts often there is no information about the events or diseases that may explain the existence of symptoms. The aim of the study was to assess whether and to what degree the early maladaptive schemas are related to experiencing symptoms of mental health problems and if they can explain them.

Methods: 476 people from the non-clinical group were the study subjects. Persons having any serious somatic illnesses or under psychological support were excluded from further analysis. Two questionnaires were used: Young's YSQ-S3 (short version) for early maladaptive schemas, and the Goldberg's General State of Health Questionnaire GHQ-28 for the symptoms of health's disorders.

Results: A number of significant correlations of average strength were found. Symptoms of depression and anxiety were related with schemas from Disconnection and Impaired autonomy domains. For other health's dimensions correlations with schemas were also significant, but with a weaker strength. The regression analysis indicated that schemas explain from 5% (for functioning disorders) up to 18% (depression) of the disorders symptoms' variability. Concurrently, for different groups of symptoms, there are different maladaptive schemas significant in regression models.

Conclusions: Early maladaptive schemas seem to be important in explaining health disorders. In some situations when symptoms persist despite implemented treatment strategies, or when there are no clearly visible the possible causes of the symptoms, working on the schemas is worth to considering.

Introduction

The report by CBOS (Centre for Public Opinion Research) from 2012 (Mental Health of Polish People) states that 34% of the respondents feel irritated, 19% feel helpless, 11% have a depressed mood [1]. A more recent epidemiological study conducted on a large representative group of Poles based on DSM diagnostic criteria for common mental disorders indicated that over 10% of the respondents abused alcohol, about 4% were diagnosed with depression, 0,6% had dysthymia, 13% suffered from anxiety disorders (total). The authors also point out that people who refuse to participate in the study are often more affected by the disorder than those who participate in it, and because only half of the interviews conducted are actually fully

completed, it can be presumed that the actual prevalence of the disorder is greater [2]. If we add subclinical states that are uncomfortable for patients but do not motivate them to take treatment, the number of people suffering from mental illness will be higher.

Psychotherapeutic practice indicates that people who report some specific symptoms, but who do not meet the diagnostic criteria for any disorder, also apply for a therapy. There are also occasional cases where patients remain symptomatic after a treatment, regardless of the type of the treatment taken [3], or the symptoms disappear, but recur quickly.

One explanation of this problem was suggested by Jeffrey Young. According to him, the persistent long-term symptoms are the result of inefficient coping strategies with negative knowledge about oneself, which he described as early maladaptive schemas (EMS). They are formed during childhood and adolescence as a response to adverse parental conditions causing the child's basic needs to be deprived. Based on the messages that come to the person, they form knowledge about themselves (e.g. I cannot be loved, I have to deserve the attention of others, I am worse than others). This knowledge is connected with negative emotions, thus, a child creates a strategy to avoid a confrontation (e.g. strives to be better, makes more effort, does much more to please others, gives up their own opinion). Such strategies are to some extent an adaptation in childhood to providing emotional peace. As a child grows older, however, they become increasingly dysfunctional, which leads to increased tension, which consequently manifests itself in different ways [4]. The greater the strength of these beliefs, the greater the effort that must be placed to deny the belief and prevent the emergence of emotions, which in turn leads to increased fatigue and tension. This may lead to difficulties in psychosomatic functioning, which, with the increase of strength or duration of tension, can develop into single symptoms, symptomatic syndromes or in a full-blown disorder [3, 5, 6].

Such people often complain about, for example, the feeling of fatigue, which has no apparent reason [7, 8]. Research confirms the significant association of EMS with a feeling of fatigue, both in its psychological dimensions, such as the sense of overload, discouragement or anxiety as well as physical, associated with weakened vitality or the appearance of physiological symptoms [9]. If such dependencies are observed, then those related to the assessment of symptoms of psychiatric disorders should also be expected. According to research, most people with mental disorders start seeking help by consulting their general practitioner, but non-specific symptoms can often be overlooked [10]. Some of the symptoms concerning tension can be ineffectively treated by different types of specialists.

The general aim of this paper was, firstly, to verify Young's theory [3, 11] and, secondly, to examine in practice how and to what extent the schemas are associated with non-specific

symptoms of mental health disorders. The existence of such dependencies in the non-clinical group would justify the need for wider mental health education and treatment options for mental disorders. If some of the symptoms depend on a person's own beliefs about themselves and their role in the world - as long as those beliefs are not changed, any other intervention will de facto reinforce ineffective coping strategies and thus further strengthen the patterns. In addition, this may increase the probability of further development of the disorder. Numerous studies confirm the association of schemas with disorders [5, 12-14], including Polish studies [6, 9, 15, 16]. The detailed purpose of the author's study was to verify the existence of causal relationships between schemas and symptoms of mental health disorders. It was expected that:

1. The schemas will positively correlate with the dimensions of mental health measured by GHQ-28, with the strongest correlations being connected with the depressive symptoms.
2. Specific groups of symptoms of mental health disorders will be explained by other groups of schemas underlying them.

Material and method

In order to verify the above assumptions, 476 fully completed questionnaires were analysed. The study group comprised 252 women (53%) and 224 men (47%). The subjects were 18-77 years old, mean age 33.98, while standard deviation was 13.70 years. 31% of the respondents live in the countryside, 40% in a small or medium city and 29% in a big city. The majority of respondents are in formal or informal relationships (39.4% and 27.0% respectively), 3.1% are divorced, 1.3% report being widowed, 28.7% are single. 43.2% of the respondents rated their financial situation as average, 46.8% as rather bad, 6.3% very bad, and 3.5% rated their financial situation as good or very good.

Only healthy people were allowed to participate in research, having no serious somatic illness, and whose family members have no history of such illnesses. Any psychiatric disorder (past or present) or use (in the past or at the time of recruitment) of any form of psychotherapy were an indication for exclusion from the research. All the respondents were informed of their rights and signed their consent to participate in the study with full awareness. The entire project was approved by the Ethics and Clinical Research Committee.

The respondents filled out a personal data sheet and two questionnaires:

1. The Young Schema Questionnaire Short Form YSQ-S3 [3]. The questionnaire consists of 90 statements, to which the respondent replies in a 6-point scale (1 = entirely untrue of me, 6 = describes me perfectly). It measures 18 schemas grouped into 5 areas (domains), according to Young's assumptions:

- Disconnection and Rejection, 5 schemas: Abandonment, Mistrust, Emotional Deprivation, Defectiveness, Social Isolation,
- Insufficient autonomy and performance, 4 schemas: Dependence, Vulnerability to Harm, Emotional Enmeshment, Failure,
- Impaired limits, 2 schemas: Claims, Insufficient Self-control,
- Other Directedness, 3 schemas: Subjugation, Self-sacrifice, Approval-seeking,
- Overvigilance and inhibition, 4 schemas: Negativity, Emotional Inhibition, Unrelenting Expectations, Punitiveness.

The theoretical scope of the scale results ranges from 5–30 points; the scores exceeding 15 points are clinically accepted. The Polish adaptation of the Questionnaire is currently under preparation by Oettingen, Chodkiewicz, Maćik, Gruszczyńska. Adaptations for other cultural circles confirm its theoretical assumptions, although it has not always been possible to confirm its factorial structure [17–20].

2. General Health Questionnaire GHQ-28 by David Goldberg, adapted by Zofia Makowska and Dorota Merecz, used to assess mental health of adults, allows screening of people with possible psychiatric morbidity. The questionnaire consists of 28 questions, measuring 4 areas of symptoms: somatic symptoms (A), anxiety (B), dysfunction (C) and depression (D). Theoretical scores for scales range from 7 to 28 points, the higher the score - the greater the difficulty experienced [21–23].

The results were using the statistical package SPSS version 22. The coefficients of the reliability of Cronbach's alpha obtained in the study presented are shown in Table 1.

Table 1. Basic Descriptive Statistics and Reliability Factors for Schemas (EMS) and Mental Health Dimensions (GHQ)

EMS / GHQ	M	SD	Min	Max	alfa
Abandonment	13.97	5.67	5	30	0.775
Mistrust	12.51	5.18	5	30	0.772
Emotional Deprivation	10.31	5.09	5	28	0.788
Defectiveness	9.10	4.54	5	30	0.784
Social isolation	11.48	5.17	5	29	0.779
Dependence	9.98	4.34	5	29	0.742
Vulnerability to harm	11.04	4.89	5	29	0.747
Undeveloped self	9.77	4.49	5	30	0.722
Failure	10.79	4.78	5	30	0.804
Entitlement	15.52	4.62	5	30	0.525
Insufficient self-control	14.17	4.15	5	30	0.689
Subjugation	10.86	4.53	5	28	0.712

Self-sacrifice	16.30	4.65	5	30	0.663
Approval-seeking	12.29	5.01	5	28	0.763
Negativity	13.75	5.37	5	30	0.756
Emotional inhibition	13.47	4.81	5	27	0.743
Unrelenting standards	15.64	5.42	5	30	0.565
Punitiveness	13.43	4.64	5	30	0.697
GHQ – somatic symptoms	13.35	3.72	7	27	0.788
GHQ – anxiety	13.06	4.50	7	28	0.882
GHQ – functioning dysfunction	13.95	2.60	7	23	0.776
GHQ - depression	9.16	3.49	7	28	0.885

For GHQ, all the dimensions are satisfactorily reliable; in the case of two (Unrelenting Standards and Entitlement) the ratio is noticeably lower, therefore, their interpretation must be more careful, the next three (Self-sacrifice, Insufficient Self-control and Punitiveness) have values slightly below the expected value of 0.7, which allows for their interpretation in a statistical context. Table 1 also includes mean, standard deviations, and minimum and maximum results for each scale.

Results

In the first stage, a calculation was made of the correlation of the ratios between early non-adaptive schemas and dimensions of mental health. Due to non-compliance with normality of distribution, Spearman's rank correlation coefficient was used. The coefficients obtained are shown in Table 2.

Table 2. Spearman's rank correlation coefficient used for GHQ dimensions and schemas

EMS	GHQ-28			
	A	B	C	D
Abandonment	0.269**	0.344**	0.188**	0.389**
Mistrust	0.236**	0.259**	0.132**	0.381**
Emotional Deprivation	0.186**	0.203**	0.098*	0.379**
Defectiveness	0.180**	0.248**	0.137**	0.423**
Social isolation	0.211**	0.218**	0.167**	0.386**
Dependence	0.275**	0.314**	0.187**	0.413**
Vulnerability to harm	0.330**	0.357**	0.183**	0.433**
Undeveloped self	0.165**	0.226**	0.063	0.317**
Failure	0.278**	0.290**	0.202**	0.385**
Entitlement	0.134**	0.203**	0.102*	0.189**
Insufficient self-control	0.066	0.100*	-0.004	0.186**
Subjugation	0.265**	0.339**	0.169**	0.410**
Self-sacrifice	0.193**	0.188**	0.059	0.126**
Approval-seeking	0.163**	0.199**	0.138**	0.294**
Negativity	0.334**	0.353**	0.196**	0.407**

Emotional inhibition	0.204**	0.247**	0.155**	0.296**
Unrelenting standards	0.080	0.100*	0.027	0.194**
Punitiveness	0.187**	0.231**	0.099*	0.269**

Note: * – significant correlation at $p < 0.05$; ** – significant correlation at $p < 0.01$

The analysis of the results indicates that there are significant correlations between the majority of schemas and the dimensions of mental health. It is worth noting that they take values from weak to average. The highest coefficients are observed for the association of the patterns of the areas of Disconnection and Impaired autonomy with the dimension of depressive symptoms in GHQ. Also in the case of anxiety, the factor correlation values are slightly higher. In the case of somatic symptoms the correlations are weaker, while the dysfunction factor has the weakest association with the schemas. The correlation coefficients presented are mostly significant at the level of $p < 0.01$, however their size indicates correlation as weak to average. Yet, this appears to be adequate due to a non-clinical study in which neither the pattern nor the psychosomatic symptoms are clinically evident. However, the existence and direction of dependence indicate a convergence with the assumptions of theory. Thus they positively verify hypothesis 1: *The schemas will positively correlate with the dimensions of mental health measured by GHQ-28, with the strongest correlations being connected with the depressive symptoms.*

In the next stage of the analysis, it was decided to check whether, and if so, which schemas explain the different groups of symptoms measured by GHQ. It is possible that in the case of healthy individuals the same schemas will be responsible for overall poorer adaptation. It is assumed, however, that for different groups of symptoms, the schemas should play different roles due to their associated beliefs. In order to explore these dependencies, a stepwise regression analysis was used with the use of the backward elimination approach. The results - statistics models and their coefficients are shown in the following tables 3,4,5,6.

Table 3. Statistics model explaining the severity of somatic symptoms

Statistics model for somatic symptoms GHQ					
R ²	Adjusted R ²	F	p	Durbin-Watson statistic	
0.137	0.128	14.839	0.000	1.970	
Model coefficients					
Model	Non-standardized coefficients		Standardized coefficients	T	p
	B	Standard error	Beta		
(Constant)	9.322	0.722		12.911	0.000

Vulnerability to harm	0.102	0.051	0.134	1.990	0.047
Self-sacrifice	0.087	0.037	0.108	2.363	0.019
Emotional inhibition	0.082	0.043	0.106	1.923	0.055
Unrelenting standards	-0.097	0.037	-0.141	-2.638	0.009
Negativity	0.139	0.049	0.200	2.826	0.005

Table 4. **Statistics model for symptoms of anxiety**

Statistics model for symptoms of anxiety GHQ					
R ²	Adjusted R ²	F	p	Durbin-Watson statistic	
0.180	0.171	20.557	0.000	1.911	
Model coefficients					
Model	Non-standardized coefficients		Standardized coefficients	t	p
	B	Standard error	Beta		
(Constant)	7.667	0.772		9.930	0.000
Abandonment	0.164	0.046	0.207	3.575	0.000
Emotional inhibition	0.133	0.049	0.142	2.700	0.007
Unrelenting standards	-0.158	0.046	-0.190	-3.432	0.001
Negativity	0.180	0.049	0.215	3.708	0.000
Entitlement	0.084	0.047	0.087	1.786	0.075

Table 5. **Statistics model for the symptoms of dysfunctions**

Statistics model for the symptoms of dysfunctions GHQ					
R ²	Adjusted R ²	F	p	Durbin-Watson statistic	
0.061	0.055	10.116	0.000	1.999	
Model coefficients					
Model	Non-standardized coefficients		Standardized coefficients	t	p
	B	Standard error	Beta		
(Constant)	12.525	0.407		30.765	0.000
Abandonment	0.085	0.025	0.185	3.441	0.001
Emotional inhibition	0.090	0.030	0.167	3.036	0.003
Unrelenting standards	-0.062	0.027	-0.129	-2.306	0.022

Table 6. **Statistics model for the symptoms of depression**

Statistics model for the symptoms of depression GHQ					
R ²	Adjusted R ²	F	p	Durbin-Watson statistic	
0.180	0.175	34.371	0.000	1.923	
Model coefficients					
Model	Non-standardized coefficients		Standardized coefficients	t	p
	B	Standard error	Beta		

(Constant)	5.240	0.425		12.339	0.000
Abandonment	0.068	0.033	0.109	2.040	0.042
Defectiveness	0.145	0.039	0.189	3.696	0.000
Vulnerability to harm	0.150	0.039	0.209	3.839	0.000

It was possible to estimate models for each of the dimensions of GHQ. These models explain a small percentage of the variance of symptoms of health disorders: the slightest for the symptoms of dysfunction (adjusted $R^2 = 0.055$), slightly more in other groups (somatic symptoms, anxiety and depression, R^2 respectively: 0.128, 0.171 and 0.175). Thus, the models are significant at $p < 0.001$, while the factors explaining these at the level of $p < 0.05$ with the exception of two remaining at a level for statistical tendency ($p < 0.10$). It was decided to include these factors into the model because of the test group, assuming that they would perhaps be relevant in the clinical groups. The small percentage of the variance explained is probably also due to the non-clinical measurement in which manifestations of the disorder do not appear to be very serious and the reported difficulties are probably related to life situations rather than to the patterns. However, the content analysis of model coefficients seems to be consistent with the type of performance problem. Some of the schemas are non-specific and appear to be relevant for overall deterioration of the functioning, but some are specific to the problem. It can therefore be assumed that hypothesis 2: *Specific groups of symptoms of mental health disorders will be explained by other groups of schemas underlying them* is positively verified.

Overview of the results

Symptoms of depression

The theoretical assumption of Young's concept, according to which the attempts to deal with negative emotions generated by the schema are the cause of the deterioration of the quality of functioning in both psychological and somatic aspects appear to have been confirmed in the presented studies. This is most evident in the correlation of depressive symptoms in GHQ. All coefficients are significant at $p < 0.01$. For schemas from the areas of disconnection and insufficient autonomy, the level of dependency is average. The higher the patterns from the area of disconnection, the more likely the people are to be described as being unable to create satisfactory relationships with others, enabling them to meet their basic needs, in particular with respect to stability, love and sense of belonging. Consequently, they feel lonely, unwanted and unloved, which reduces their positive self-esteem. In turn, the beliefs associated with the area of weakened autonomy describe the people lacking confidence in themselves and their abilities, helpless, often with anxiety and fear of the future, which appears difficult and unpredictable. Both these groups of schemas lead to the generation of beliefs that partially subscribe to Beck's

depressive triad (negative beliefs about oneself, the world and the future). Positive correlation assumes that as the intensity of the schemas increases, the severity of depressive symptoms increases.

Depressive symptoms correlate the strongest with the following schemas: Vulnerability to harm, Defectiveness, Dependence, Subjugation, and Negativity (see Table 2). Vulnerability to harm is associated with expectation of negative events, which generates greater aggravation. It may relate to health deterioration (this belief is also strongly correlated with somatic symptoms of GHQ), mental state (also a relatively strong correlation with the dimension of anxiety) or general expectation that everything will go wrong. In connection with Negativity, the tendency to focus on the negative aspects of life, and the Defectiveness and Dependence (beliefs about one's own inferiority, incompetence, helplessness and the need to rely on others) creates an image of a weak, helpless, pessimistic person. Such a way of functioning resembles people suffering with depression. This then can confirm the assumption that a higher severity of the described schemas will increase severity of depressive symptoms.

The regression analysis (see Table 6) also shows the schemas of Defectiveness, Vulnerability to Harm and Abandonment (also one of the higher correlation coefficients) as explanatory factors for depressive symptoms in this group of respondents. A greater intensification of only three of the 18 schemas explains almost 18% of the variance in depressive symptoms. Considering that in the non-clinical group, neither the patterns nor the symptoms of the disorder are very severe, this value is significant enough to conclude that the patterns are significant, even with other factors corresponding to the onset of depressive symptoms that were not controlled in this study.

The symptoms of anxiety

Anxiety is a group of symptoms considered as the second most powerful complex. Correlation coefficients are mostly interpreted as weak and only a few reach the level of the average strength of the compound (see Table 2). The following schemas have the highest value of correlation with anxiety: Abandonment, Dependence, Vulnerability to Harm, Subjugation and Negativity. They are, therefore, similar beliefs as in the case of depressive symptoms. They indicate that the level of anxiety increases when a person thinks of themselves in negative terms. In particular, the cognitive filter associated with the Negative cognitive filter, leading to excessive concentration on difficult aspects by neglecting positive and optimistic, which, by definition, can lead to increased anxiety. A pessimistic expectation of what may happen increases the alertness and anxiety associated with it, which is reflected in difficulty in sleeping, feeling tense and overwhelmed. The other schemas mentioned associated with beliefs about

inability to count on others, the feeling of loneliness and misunderstanding (Abandonment), while at the same time their helplessness and incompetence (Dependence) are also associated with the tendency to increase anxiety. As with depressive symptoms, it can be presumed that, with the further development of the strength of schemas, the intensity of anxiety symptoms will also increase, which can eventually lead to the development of anxiety or anxiety-depressive disorders.

Regression analysis (see Table 4) indicates that five schemas account for about 17% of the variance of anxiety symptoms: Abandonment, Emotional inhibition, Unrelenting standards, Negativity and Entitlement (the last schema is at the level of statistical tendency). It must be stressed that irrespective of the strength of the correlation, the increase in the severity of symptoms depends to a great extent also on Emotional inhibition and Unrelenting standards. Inhibition is associated with the suppression of their own emotions or the suppression of the reaction, fearing the disapproval of others or of losing control over emotions. On the one hand, persons with such a schema have difficulty in admitting their vulnerability and, on the other hand, they place great emphasis on the rationality of their actions, often neglecting emotions. Lack of venting of emotional states leads to increased psychophysiological tension, the physical symptoms of which can be reinterpreted according to pessimistic expectations, creating a vicious circle of anxiety. In turn, the schema of Unrelenting standards in the presented model is negative. This means that increasing the strength of this schema significantly reduces the level of anxiety. This belief is most likely to take the form of perfectionism, rigidity of rules and principles governing human life and behaviour as well as concentration on time and productivity. Therefore, this schema involves tension, an inability to rest, a constant feeling of pressure. As a result, it should be positively associated with fear and anxiety. The observed positive correlation is positive (Table 2), but small. Perhaps, however, because the severity of these schemas is not high and is not clinical, this control remains normal and is not dysfunctional. Therefore, concentration on the task, following and applying to the rules allows for greater predictability and a sense of control over life, which can reduce anxiety generated by, for example, the Pessimism schema. The Unrelenting expectations schema can therefore vary depending on its severity - when it becomes highly non-adaptive, it generates more pressure and tension, which usually translates into physical symptoms such as fatigue, which in turn is likely to be a symptom-enhancing factor and not protective. However, this requires further research, mainly in clinical groups.

Somatic symptoms

Here, as with the two previous symptom groups, most of the correlation is significant at the level of $p < 0.01$, but the strength of these complexes is weak; only in the case of Negativity and Vulnerability to Harm it is average. The somatic symptoms in GHQ relate primarily to a sense of physical fatigue and weakness and to physiological symptoms of tension, such as headaches. The beliefs related to the pessimistic attitude to the world, as already mentioned above, are associated with the accompanying anxiety, which in turn is associated with the symptoms arising from it. The conviction of the danger which cannot really be prevented (Vulnerability to Harm) is also connected with tension and its symptoms, as well as the belief that a person has failed and is not able to cope in the future, and so they are generally weaker and worse than others – the Failure schema. Similar beliefs from the area of Impaired Autonomy and Disconnection related to the perception of being a weaker, helpless person who is not accepted by others, can create a negative emotional atmosphere. It seems that, in general, patterns with increasing intensity become increasingly dysfunctional and lead to the emergence of tension and anxiety. However, as long as coping strategies appear to be effective and efficient and do not result in the person's decompensation, tension and anxiety - often suppressed - take the form of somatic symptoms.

The regression analysis indicated that the intensity of the symptoms experienced was influenced by five schemas, which together account for about 13% of the variance of somatic symptoms. Negativity (Beta = 0.200) plays the most important role, however the Unrelenting standards schema also has a strong influence, but acts as a security measure. The Self-sacrifice schema that appears in this model is characteristic for it (see Table 3). It is characterized by the belief that it is first and foremost to meet the needs of others around, even at the expense of one's own needs or satisfaction. According to Young, this is due to the need to avoid feeling guilty or to gain self-esteem. It is worth noting, however, that continuing to meet other needs at the expense of oneself also leads to the appearance of somatic symptoms, resulting in part from tension and frustration, but also in part from simple physical fatigue. In cases where the patterns are not very intense, somatic symptoms may be more discrete, but when they become stronger - feelings of tension and frustration are likely to increase, even more than physical fatigue.

Dysfunction symptoms

This scale indicates the difficulties of daily functioning related to undertaking and performing tasks or making decisions. The correlations with the schemas are weak and, despite their importance, it is difficult to talk about any dependencies. The strongest relationship ($r =$

0.202) refers to the Failure schema, that is, the person's belief that they are not coping and are incompetent, which seems to be consistent with the understanding of dysfunction.

The model obtained by a regression analysis explains only 5% of the variance of the symptoms. This points to the fact that the sense of coping and good functioning, or lack of that feeling, is influenced by factors other than schemas. If the coefficients relevant for this model (Abandonment, Emotional inhibition, Unrelenting standards) affect the depth of the symptoms, it is the same as in the other models. The convictions of a person that they cannot rely on others and experience support from them due to their unpredictability, that they must inhibit their spontaneous behaviour due to the possible disapproval of others or suppress emotions such as uncertainty, as a result lead to the deterioration of the effectiveness of functioning. Perhaps it could also be considered as a result of symptoms of depression or anxiety that also have the potential to disorganize behaviour. And here, as in the case of symptoms of anxiety, a certain degree of protection is provided by the Unrelenting standards schema, by controlling they give the sense of organization and effectiveness.

Discussion

Similar correlation coefficients as in the above-mentioned studies were also obtained in other studies. Bamber and McMahon investigated a group of adult medical workers and also obtained the highest correlations for symptoms of depression and anxiety, and clearly weaker correlations for somatic symptoms and functional disorders [24]. In turn, Bosmans et al evaluated the role of the patterns in the genesis of the severity of pathological symptoms (using SCL-90). The mediating influence of the patterns from the areas of Disconnection and Impaired Autonomy [25] has been most significant, as in the study presented above. Muris and others evaluated schematic relationships with psychopathological symptoms in the group of adolescents. They also received correlations of average strength with symptoms of depression and anxiety. They also indicate that in this group the severity of the pattern is related to eating disorders, but to a lesser extent with behavioural disorders or the use of psychoactive substances [26]. Camara and Calvete report that the patterns are related to symptoms of depression and anxiety, especially if they are mediated by ineffective coping strategies (including avoiding or denying) [5]. Correlations of mental and physical well-being with the schemas have also been confirmed in anxiety and depressive disorders [6]. Numerous studies conducted in clinical groups also confirm the relationships obtained in groups without diagnosed disorders. The research mentioned, as well as the one presented above, confirm Young's theory [3, 27]. Positive correlations between schemas and symptoms of disorders indicate their interdependence. This means that as the severity of schemas increases, the intensity of the

symptoms increases, but also the severity of the symptoms and the feeling of their rising may increase the intensity of negative beliefs about themselves. Thus, effective therapy should reach the therapy of schemas, especially because of the need to work on the emotional climate of early experiences; because emotion is often responsible for the symptoms, which is the genesis of emotional tension [3, 4, 28]. In a non-clinical group, the schemas explain only small percentage of the variability in the symptoms of the disorder. It should be borne in mind that the respondents are generally well-functioning individuals, and the difficulties they report may have many other causes. The results obtained must also be confirmed in clinical trials; such complementary studies are currently being conducted.

Conclusions

The above studies indicate that the role of the early non-adaptive schemas should not be overlooked, especially in a situation where people report symptoms from the areas of depression and anxiety. Both correlations and regression models suggest an important role of schemas in the genesis of symptoms. The relationships were obtained in a group of healthy people - in their case probably many other factors also contributed to the discussed symptoms of difficulty. While these individuals do not report the external situation that may be causing the symptoms, or if these symptoms persist despite the treatment used so far, it may be worth considering a treatment based on the schemas. On the other hand, working through the schemas may prevent future reoccurrences of disorders. The role of the Unrelenting standards schema is also worth mentioning, which in research appears as a compensation schema, but in the long run it may cause the appearance of fatigue. Cognitive restructuring focused on the modification of the schemas, and thus the way to interpret self in the world, will help to reduce tension arising from the expectations set for oneself. They lead to a functioning, which on the one hand allows to maintain a positive image of oneself and thereby avoid negative emotions, but on the other hand requires continuous tension and self-control, which does not serve to maintain well-being. This problem seems to be important not only for psychological therapy or counselling, but also as a psychological prophylaxis or health promotion. Adequate self-evaluation and deepening the insight into their behaviour can allow the person to capture some dependencies on their own. The construction of a positive real self can also be conducted in classes for young people and parents. Broadly understood schema therapy can thus limit the likelihood of development of cognitive disorders or symptoms.

An important limitation of this study is narrowing the research to people without disability and problems. However, if they appear in this group, it seems that they are also true in the group of people with problems. Studies of such people are currently under development.

Confirmation of the presence of depicted relationships in groups of people with disorders will be a factor strengthening the previously stated conclusions and additionally validating the sense of prevention, such as in-depth therapy that goes beyond the reduction of symptoms.

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