

Marta Wiśniewska, Dorota Mącik

**PERFECTIONISM, YOUNG'S EARLY MALADAPTIVE SCHEMAS
AND CHRONIC FATIGUE AMONG YOUNG WOMEN**

Catholic University of Lublin

perfectionism

chronic fatigue

early maladaptive schemas

Summary: The aim of the study was to assess whether the unexplained chronic fatigue, observed among young women, is associated with perfectionism and Young's early maladaptive schemas. This would allow to propose a hypothesis for the therapeutic practice, to wit, whether the therapy focused on schemas and maladaptive perfectionism might indeed bring a reduction of such fatigue.

Methods: 156 women (19–24 years) were examined. None of them had a family of her own, they were somatically healthy and without mental disorders. For the measurement the following questionnaires were used: 1) schema questionnaire YSQ-S3, 2) fatigue questionnaire (KBPZ) , and 3) perfectionism questionnaire (PAD).

Results: The women were characterized by a relatively high level of fatigue. Strong correlations were perceived between the fatigue and the maladaptive perfectionism, and between fatigue and schemas, especially related to the area of rejection/disconnection and insufficient autonomy. It was also noted that women of the maladaptive perfectionism type were characterized by a significantly higher intensity of all schemas and dimensions of fatigue. Adaptive perfectionism appears not to have any strong correlation with any of the above variables.

Conclusions: These studies provide a first basis for the conclusion that the chronic fatigue may be the result of repeated attempts to cope with the negative beliefs about oneself and of the perception of the lack of effectiveness of those attempts. This may constitute a therapeutic indication for the work with the patients reporting fatigue problems.

Introduction

In recent years, medical practice and psychotherapy more often encounter the problem of chronic fatigue. Many studies focus on the search for its conditions heading for physiology and hygiene of life, as well as analyzing a variety of psychological factors [1–4]. The present studies refer precisely to psychological factors, however, referring to psychotherapeutic

practice, they focus on the concept of early maladaptive schemas and perfectionism, which is relatively new in Poland.

There are a lot of different concepts of fatigue, its mechanisms and the role it plays for the patient [1, 2, 4–11]. For the purposes of this paper we assumed understanding of fatigue dependent on its mechanisms. There is fatigue, the mechanism of which is very clearly defined (illness-related fatigue, post-infectious, uncontrolled and chronic fatigue) and fatigue whose pathomechanism cannot be determined unambiguously [3, 7, 9, 11]. In the above-mentioned concept chronic fatigue is a kind of fatigue caused by a prolonged and disproportionate effort, psychological burden, lack of achievements, presence of somatic illness, lack of a sense of purpose in life, and inadequate interpersonal relationships; chronic fatigue often involves the occurrence of a disease, the effects of which are cumulative over time [1, 3, 4].

In turn, unexplained chronic fatigue is a type of fatigue that lasts more than a month and it is impossible to find any specific reasons for its occurrence during specialist examination. It proves to be difficult to control due to unknown mechanism; it is not life-threatening, but significantly reduces quality of life [11, 12]. This type of fatigue is the subject of this study.

In psychotherapeutic practice patients often report such fatigue, while not reporting any burdensome situations. There are also no comorbid disorders, e.g., depressive, anxiety or other disorders, which could translate to fatigue. This raises a question what mechanisms may lie behind it.

The concept of early maladaptive schemas and perfectionism was used to explain one of the possible mechanisms of fatigue.

Early maladaptive Schemas (EMS) are a construct developed by Jeffrey Young, based on his experience and therapeutic observations that the cause of patient's difficulties is often deeply rooted in his psyche as a key beliefs concerning the definition of oneself [13–15]. Young believed that some of the schemas, especially those developed as a result of negative, toxic experiences from childhood, may constitute the core of personality disorders, minor personality problems, and many axis I chronic disorders, like, e.g., anxiety and depressive disorders, substance abuse [13]. Schemas as such are understood as negatively assessed part of self-knowledge. Most people strive to deny schemas through the use of specific strategies (compensatory strategies). They are relatively effective; outside such persons present themselves as well-coping. However, usually the effort put into maintaining this image is large enough to lead to fatigue and the occurrence of a variety of psychosomatic disorders, including chronic unexplained fatigue [13, 15, 16]. It also appears that trait perfectionism may be one of the mechanisms supporting this tendency to compensation.

According to Antony and Swinson, the formation of trait perfectionism can be affected by biological, psychological and social factors (experience of punishment, modeling, cognitive factors through contact with information) [17, 18]. It is also indicated that parents and their expectations of and requirements for children can significantly influence the development of perfectionism. In case of those feeling pressure of others to function perfectly, the family becomes one of the sources of pressure through its standards and requirements. Parental criticism of children when they do not meet their expectations and standards is also of great importance [13]. Moreover, moods at home, words, gestures and touch, through

which parents pass a very significant messages that children perceive as information whether they are loved and accepted or not, are also very important [16, 18]. Excessive parental criticism is very strongly associated with creating a child's social anxiety and fear of negative evaluation by others [17]. Such understanding of perfectionism is close to the origin of EMS development, which is why it was decided to analyze these two variables. For the purposes of this paper division into adaptive perfectionism AP (characterized by the acceptance of differences related to the level of action performance and internal standards, flexibility in action and adjusting purposes, permission to make mistakes, and a sense of excitement associated with actions or implementation of intended purposes) and maladaptive perfectionism MP, developed by Katarzyna Szczucka, was used [18]. In this case, maladaptive perfectionism describes people for whom very high standards apply to every aspect of life. It is often related to accompanying sense that actions they take are never good enough; they set themselves goals impossible to achieve, they cannot get satisfaction from their own actions, and before the implementation of the undertaken objectives they are accompanied by a strong fear of failure [18].

On the basis of the general assumptions above presented the following research question was formulated: *What is the relation between perfectionism, early maladaptive schemas and fatigue?*

In accordance with the question the following hypotheses were formulated:

H.1. More severe maladaptive perfectionism is associated with greater fatigue. In case of adaptive perfectionism these relations will be weaker.

H.2. There are relationships between schemas and severity of fatigue. The higher the intensity of schemas, the greater the fatigue.

H3. There are links between maladaptive perfectionism and early maladaptive schemas.

H3a. People with maladaptive perfectionism as a dominant type significantly differ in EMS intensity from people with the adaptive type.

Material and method

To achieve the goals of this study, 156 young women aged 19–24 years were examined. The study included physically and mentally healthy women; they did not have children and were not pregnant; the women did not experience any significant stressful situations (e.g., job loss, death of a loved one etc.). The occurrence of any of the above-mentioned situation was the premise for exclusion from the study. During the study the authors applied to the requirements and principles of psychological research. The examined women filled three questionnaires:

1. Fatigue Questionnaire developed by R. Kosugo, in adaptation by Kulik and Szewczyk [2].

This tool allows to specify the level of chronic fatigue and the severity of individual symptoms. The questionnaire has satisfactory psychometric indicators [12]. It consists of 30 items and the respondents select one of possible responses: “never,” “sometimes,” “often”. The higher the result, the greater the severity of symptoms of chronic fatigue. The range of possible results in the general dimension is 0–60 points.

This method consists of a total score and 6 dimensions:

GF — general fatigue, sleepiness, morning fatigue, general sense of weakness, feeling exhausted, difficulty with sleep, irritability, physical break down, anxiety and decrease in motivation to work; WV scale — weakened vitality; lack of energy, lowered mood and avoidance of effort; MO scale — mental overload, tendency to be irritable, nervous tension, problems controlling emotions and stimulation, chronic dissatisfaction, and hypersensitivity to stimuli; PS scale — physical symptoms, it refers to somatic symptoms, e.g., impairment of appetite, sleepiness, tense muscles/joints; AoA scale — anxiety about one's own abilities; (sense of lowered self-esteem, tendency to worry, lack of self-confidence, difficulty concentrating); D scale — discouragement, manifested by a reduced motivation to make the effort.

2. “Adaptive and maladaptive perfectionism” questionnaire developed by Katarzyna Szczucka [18].

This tool consists of 35 test items. It contains two main scales: Adaptive Perfectionism (AP) — 13 items, Maladaptive Perfectionism (MP) — 22 items that are scored on 7-point scale [18].

3. Young Schema Questionnaire 3 Short Form (YSQ-S3), Polish adaptation in preparation. The questionnaire consists of 90 items that are scored on 6-point scale from 1 (completely untrue of me) to 6 (describes me perfectly). The questionnaire diagnoses the severity of 18 EMS highlighted in previous studies. Schemas are organized in five domains:

- Disconnection and rejection — a typical family of origin is cold and cut off from feelings, unpredictable, abusing (schemas: abandonment, mistrust, emotional deprivation, defectiveness/shame, social isolation);
- Impaired autonomy and insufficient achievements — a family weakens the child's self-confidence; does not strengthen the success; is overprotective; relationships can be fused (schemas: dependence/incompetence, vulnerability to harm/illness, enmeshment, failure to achieve);
- Impaired limits — a family without rules and limits, excessively strengthening the uniqueness of the child, avoiding frustration and confrontation with stress (schemas: entitlement, insufficient self-control);
- Other-directedness — a family uses conditional love, children give up their own needs to gain attention and acceptance (schemas: subjugation, self-sacrifice, approval-seeking);
- Overvigilance and inhibition — a typical family of origin is punishing, success and principles are in the center, emotions are seen as undesirable (schemas: negativity/pessimism, emotional inhibition, unrelenting standards, self-punitiveness [13].

Reliability of the method in this study is calculated using Cronbach's alpha = 0.942. The analyzes used: descriptive statistics and normality tests, tests of differences between means (Student's t-test), k-means cluster analysis and Pearson's r correlation coefficients.

Results

In order to verify the hypotheses, in the first step correlations between perfectionism and dimensions of fatigue were calculated. The results of Pearson's r correlation are shown in Table 1.

Table 1. Correlations between perfectionism and fatigue (N = 156)

| Perfectionism | Fatigue | | | | | | |
|---------------|---------|---------|---------|---------|---------|---------|---------|
| | TS | GF | WV | MO | PS | AoA | D |
| AP | -0.047 | 0.021 | 0.015 | -0.109 | 0.108 | -0.163* | -0.096 |
| MP | 0.554** | 0.402** | 0.470** | 0.461** | 0.274** | 0.590** | 0.413** |

Notes: AP – adaptive perfectionism; MP – maladaptive perfectionism; TS – total score on fatigue scale; GF – general fatigue; WV – weakened vitality; MO – mental overload; PS – physical symptoms; AoA – anxiety about one's own abilities; D – discouragement, *— correlation significant at the level of 0.05; ** — correlation significant at the level of 0.01

These results support the hypothesis H1 — there are strong positive relationships between fatigue and maladaptive perfectionism, while relationships with adaptive perfectionism are few in number and they are weaker.

Table 2 shows relationships between fatigue and maladaptive schemas. The obtained correlation coefficients confirm the validity of the hypothesis H2 — positive coefficients indicate that the feeling of fatigue increases along with increasing severity of schemas.

Table 2. Correlations between schemas, perfectionism and fatigue (N = 156)

| Schemas | Perfectionism | | Fatigue | | | | | | |
|---------------------------|---------------|---------|---------|---------|---------|---------|---------|---------|---------|
| | AP | MP | TS | GF | WV | MO | PS | AoA | D |
| Emotional deprivation | -0.020 | 0.537** | 0.383** | 0.245** | 0.324** | 0.318** | 0.125 | 0.451** | 0.341** |
| Abandonment | 0.042 | 0.658** | 0.588** | 0.449** | 0.496** | 0.521** | 0.290** | 0.576** | 0.438** |
| Mistrust/Abused | 0.006 | 0.624** | 0.627** | 0.470** | 0.505** | 0.530** | 0.324** | 0.619** | 0.504** |
| Social isolation | 0.070 | 0.656** | 0.548** | 0.389** | 0.426** | 0.440** | 0.297** | 0.553** | 0.478** |
| Defectiveness | -0.065 | 0.608** | 0.434** | 0.302** | 0.346** | 0.338** | 0.198* | 0.519** | 0.339** |
| Failure to achieve | -0.141 | 0.763** | 0.499** | 0.366** | 0.399** | 0.340** | 0.173* | 0.649** | 0.415** |
| Dependence | -0.137 | 0.632** | 0.491** | 0.309** | 0.381** | 0.412** | 0.166* | 0.603** | 0.442** |
| Vulnerability to harm | 0.019 | 0.547** | 0.521** | 0.420** | 0.371** | 0.449** | 0.324** | 0.488** | 0.400** |
| Enmeshment | 0.080 | 0.547** | 0.325** | 0.184* | 0.254** | 0.196* | 0.181* | 0.432** | 0.284** |
| Entitlement | -0.009 | 0.688** | 0.558** | 0.395** | 0.445** | 0.409** | 0.300** | 0.587** | 0.491** |
| Insufficient self-control | 0.367** | 0.328** | 0.326** | 0.301** | 0.257** | 0.200* | 0.284** | 0.332** | 0.160* |
| Subjugation | 0.172* | 0.499** | 0.474** | 0.430** | 0.375** | 0.366** | 0.283** | 0.406** | 0.366** |
| Self-sacrifice | 0.242** | 0.289** | 0.172* | 0.219** | 0.133 | 0.112 | 0.136 | 0.105 | 0.099 |
| Approval-seeking | -0.063 | 0.601** | 0.420** | 0.328** | 0.380** | 0.355** | 0.178* | 0.417** | 0.318** |
| Emotional inhibition | -0.017 | 0.561** | 0.460** | 0.301** | 0.387** | 0.373** | 0.210** | 0.513** | 0.383** |
| Unrelenting standards | 0.470** | 0.417** | 0.286** | 0.232** | 0.255** | 0.159* | 0.265** | 0.250** | 0.186* |
| Pessimism/worrying | 0.048 | 0.670** | 0.563** | 0.420** | 0.423** | 0.459** | 0.353** | 0.554** | 0.445** |
| Self-punitiveness | 0.157 | 0.576** | 0.404** | 0.356** | 0.318** | 0.273** | 0.276** | 0.372** | 0.300** |

Notes: as in Table 1

These results support the hypothesis H3 — one can observe positive relationships between schemas and maladaptive perfectionism: many strong, positive correlations; in case of adaptive perfectionism such relationships are hardly observed.

In the next step, group of people with high and low level of maladaptive perfectionism were identified using k-means cluster analysis. In the well-adapting group (N = 93), mean score on AP scale was 58 and on MP scale was 53, while in the poorly adaptive group (N = 63), mean score on AP scale was also 58 and on MP scale was 99. The groups differed significantly in terms of perfectionism ($p < 0.000$), as illustrated in Figure 1.

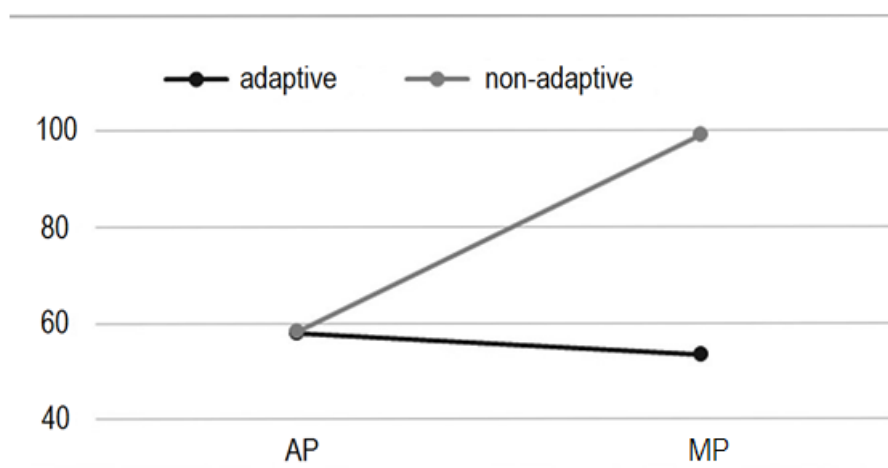


Figure 1. Intensity of perfectionism in adaptive and non-adaptive group

The groups identified in this way were compared in terms of schemas and fatigue. Differences in the early maladaptive schemas are presented graphically in Figure 2. In case of all schemas all groups differ significantly at the level of $p < 0.000$, only in case of Self-sacrifice and Entitlement the difference was $p < 0.01$ for the Student's t test for independent groups.

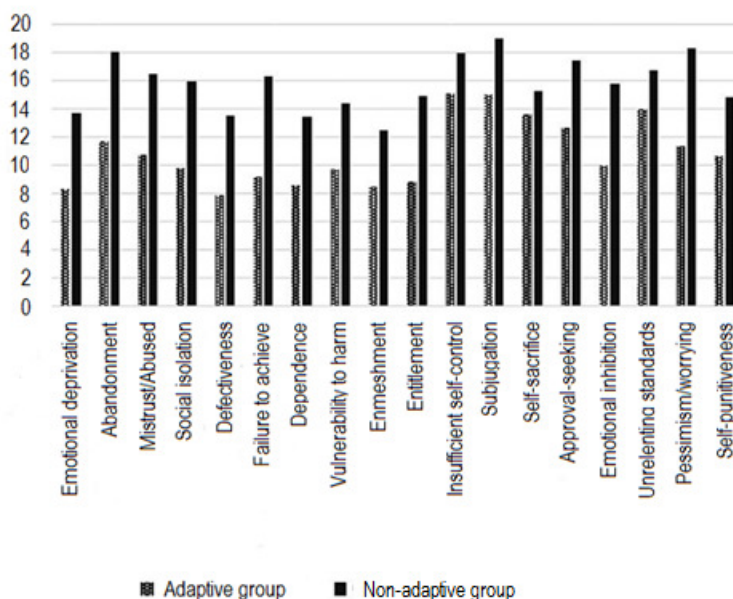


Figure 2. Intensity of schemas in groups with different types of perfectionism

Table 3. **Significance of differences in terms of fatigue between groups with different types of perfectionism**

| Fatigue | Adaptive group | | Non-adaptive group | | Test of differences | |
|-----------------------------------|----------------|------|--------------------|------|---------------------|-------|
| | M | SD | M | SD | t | p |
| Total score | 19.75 | 8.57 | 29.76 | 9.60 | -6.81 | 0.000 |
| General fatigue | 9.29 | 2.15 | 11.13 | 2.18 | -5.20 | 0.000 |
| Weakened vitality | 8.91 | 1.79 | 10.71 | 2.23 | -5.57 | 0.000 |
| Mental overload | 8.02 | 1.90 | 9.68 | 1.88 | -5.37 | 0.000 |
| Physical symptoms | 7.71 | 1.92 | 8.68 | 2.22 | -2.90 | 0.004 |
| Anxiety about one's own abilities | 8.49 | 1.77 | 10.76 | 2.03 | -7.36 | 0.000 |
| Discouragement | 7.32 | 2.01 | 8.79 | 2.14 | -4.36 | 0.000 |

Table 3 shows differences in fatigue in the identified groups. They are also statistically significant. These data support the hypothesis H1 and H3a — people with dominant maladaptive type of perfectionism not only have greater severity of schemas, but also feel greater fatigue associated with it.

Discussion

Perfectionism and schemas

The results shown in Table 2 indicate interesting relationships between early maladaptive schemas and perfectionism. It should be noted that these correlations refer mainly to maladaptive perfectionism. The correlation coefficients indicate a fairly strong correlation between these variables, and it is a positive correlation indicating that higher severity of EMS is associated with increased tendency for such type of perfectionism. According to Szczucka [18], on one hand maladaptive perfectionism is a specific tendency of people to set themselves high, exorbitant goal in almost all areas of functioning and, on the other hand, concentrating on mistakes and shortcomings, which in turn is reflected in the level of acceptance/non-acceptance of themselves.

Striving to a kind of perfection, understood in such a way, is related to a sense of distress and experiencing negative emotions. It is not possible to meet high demands in every situation; maladaptive perfectionists are characterized by rigidity and repeatability not only in terms of beliefs, but also in terms of behaviours related to them. Referring to the theory of self-discrepancy — there is still a large discrepancy between the actual self and ought self, which in return leads to increased effort in overcoming this discrepancy.

In this studies, the question: what is the cause of this striving to perfection? remains open. It seems that one of the answers may be hypotheses about the family environment and its requirements assessed on the basis of prevailing schemas that are included in these correlations.

The largest number of important and strong (over 0.60) correlations of schemas are observed in the domain of disconnection and rejection, which groups the schemas developed mostly in families that do not satisfy the needs of care and acceptance of the child, and at the same time with a large distance and emotional coldness, rejection and explosiveness. It also seems that the domain of impaired autonomy and lack of achievements indicate a family

which undermines the child's self-confidence and do not support him/her to live independently. In families of this type children have a strong sense of being inferior and weak and a sense that they can do nothing themselves. If a child, seeking acceptance and satisfaction of deprived needs, chooses the strategy of overcompensation [13] and thus increases his/her efforts to function better and have greater achievements, he/she could develop a trait of perfectionism. However, since in such families the chance of positive reinforcement is rather small [13], the discrepancy between the actual self and ought self will continue.

It is worth noting that the strongest correlation is between maladaptive perfectionism and a schema of failure to achieve, which indicates a belief of oneself as basically incompetent and weaker than others, a person who failed, and will fail in the future. Further beliefs associated with the domain of rejection are related to the above-mentioned issue: others are not able to provide support and stability, especially emotional ones (schema of abandonment), they often hurt and abuse, and therefore one needs to put greater effort and be vigilant (schema of mistrust). Strong correlations also apply to relationships with a conviction of being worse, weaker, inferior (schema of defectiveness), of failing to cope with everyday life (lack of competence) and conviction about their otherness (social isolation). This gives a picture of a person focused on his/her own weaknesses, convinced of his/her failure to cope, but also, on the other hand, a person who is constantly trying to change that image. In fact, strong correlations with schemas of: entitlement and admiration-seeking that indicate a desire to show one's best side, to overcome one's weaknesses, but also attempts to maintain and control the outside image of oneself as better, coping and independent (schema of entitlement), are also characteristic. At the same time, a strong correlation with the schema of pessimism indicates a strong concern that all the efforts will not change anything. In their research, Klibert, Lamis, Naufel, Yancey and Lohr also indicate to the role of perfectionism and schemas in the development of trait of anxiety, which interacts with the presented results [20].

In a situation where we deal with adaptive perfectionism, there is a small number of observed correlations with schemas, and they are related to the area of control and adherence to set standards, however, there are no convictions associated with being worse when the implementation of one's assumptions is not complete.

These relationships are confirmed by another analysis. The group of non-adaptive people (see Figure 1), identified in the cluster analysis, achieves significantly higher intensity of schemas than the group defined as adaptive (Figure 2). Although the arrangement of the schemas and their intensity is similar in both groups, it should be noted that in the non-adaptive group up to 11 maladaptive schemas reach diagnostically significant value (≥ 15), which indicates the strength of their impact on daily functioning of a person. It can therefore be assumed that the level of perfectionism determines not only the strength of the relationship of this variable with schemas, but also significantly differentiate people with high/low level of maladaptive perfectionism in terms of the power of schemas.

Perfectionism and fatigue

Further analyzes indicate numerous and fairly strong relationships between maladaptive perfectionism and fatigue (Table 1). As in previous studies [e.g., 21, 22], the results indicate that the greater the severity of this type of perfectionism, the greater the

fatigue, especially in the general dimension but also in terms of anxiety about one's own abilities ($r = 0.590$). This confirms that people who set themselves a number of high standards, often impossible to implement, are plagued by fear of their own limitations. Referring to the studies [23], it can be assumed that it affects the level of self-acceptance which may be important for moderating the level of fatigue. At the same time, such people at all costs strive to meet the requirements they set themselves; it is associated, however, with a great effort, both physical and mental. Therefore, the higher the maladaptive perfectionism, the greater the feeling of discouragement and experienced mental overload; These, in turn, cause asthenia and a general feeling of fatigue, although the examined women report relatively few physical symptoms (weak correlations). Perhaps this is due to the young age of the respondents. This thesis is also supported by the analysis of differences between mean values in the groups with high and low levels of maladaptive perfectionism (see Table 3) where the women from non-adaptive group obtained significantly higher scores on all scales of fatigue. These relationships are consistent with reports of, e.g., Dittner [24], Deary [25] or Kempke [26].

Fatigue and maladaptive schemas

Relationships between fatigue and schemas are also noteworthy (see Table 2). The strongest relationships are also observed for anxiety about one's own abilities, mainly for schemas in the area of disconnection and rejection and impaired autonomy which are strongly associated with anxiety. These areas indicate to people who are convinced that their needs, especially emotional ones, will not be satisfied by others, but they also feel worse, weaker, and they feel they fail to cope. Such a way of self-perception naturally leads to concerns about the assessment of their own abilities to meet the demands set to themselves; at the same time, however, there is a specific type of coercion to cope, to avoid rejection. Constant tension associated with these beliefs, perhaps also related to experiencing failures in changing one's own thinking and overcoming weaknesses, seems to lead to discouragement (the stronger — and thus also more fixed schemas, the harder it is to see facts that do not support the associated beliefs). Schemas are also associated with experiencing mental overload. Other correlations, though important, have somewhat weaker coefficients, especially those related to more somatic aspects of fatigue; However, their occurrence in young women, mostly not burdened with too many responsibilities, may be considered as a risk factor for psychosomatic disorders.

Conclusions

Summarizing these results, we can conclude that:

1. High level of maladaptive perfectionism is associated with an increased feeling of fatigue in young women; it can be assumed that it constitutes the basic cause, primarily due to stronger relationships with mental aspects of fatigue.
2. Early maladaptive schemas, especially in the areas of rejection and insufficient achievements also play an important role for fatigue. The strength and number of positive correlation coefficients indicate that the more negative beliefs about oneself and the greater is their power, the more effort is put in to deal with them.

3. Strong positive correlations between early schemas and maladaptive perfectionism indicate that both of these characteristics can reinforce each other. This in turn also strengthens symptoms of fatigue.

4. These conclusions allow us to assume a hypothesis that one of the causes of unexplained chronic fatigue can be psychological burden associated with the attempt to cope with the negative beliefs about oneself and a small observed effect of these efforts, reasonable. This can be a starting point for the exploration of therapeutic interventions in patients reporting chronic fatigue.

Limitations

These studies are mainly exploratory. As preliminary studies, including relatively small group of respondents in convenient selection, they can provide first and foremost suggestion for further researches. One problem is the use of research methods that have not underwent the full normalization procedure in Poland. Reliability and validity indicators of these tools evaluated in other studies indicate, however, that these tools allow to conclude on their basis, especially if they are supported by clinical experience. After completion of the schemas questionnaire adaptation, it is worth to conduct in-depth analysis extended to other populations which will allow to verify the results. It should be noted, however, that the methods used for statistical analysis are adequate for the size of the group which increases confidence in the obtained data, and both correlation coefficients and tests of differences are significant enough that there is no randomness of the results.

References

1. Kulik A. Kulturowe uwarunkowania zespołów medycznie niewyjaśnianych na przykładzie przewlekłego zmęczenia. *Sztuka Leczenia* 2013; 1(2): 33–40.
2. Kulik A, Szewczyk L. Kwestionariusz do badania zmęczenia. Psychometryczne właściwości. W: Oleś M, red. Wybrane zagadnienia z psychologii klinicznej i osobowości. Metody diagnostyczne w badaniach dzieci i młodzieży. Lublin: KUL; 2002, s. 41–61.
3. Kulik A. Zmęczenie przewlekłe u nastolatków. Charakterystyka psychologiczna. Lublin, KUL, 2011.
4. Kulik A. Psychogenne, neurohormonalne i immunologiczne przyczyny przewlekłego zmęczenia u nastolatków. *Endokrynol. Ped.* 2011; 1(34): 67–74.
5. Misiuro W. Znużenie. O fizjologicznych podstawach racjonalizacji pracy. Warszawa: Wydawnictwo „Książka”; 1947.
6. Biegeleisen-Żelazowski B. Zmęczenie psychiczne, monotonia, automatyzacja. W: Biegeleisen-Żelazowski B, red. Zarys psychologii pracy. Warszawa: PWN; 1967, s. 145–158.
7. Krawczyński M. Propedeutyka pediatrii. Warszawa: PZWL; 2002.
8. Chabowski M. Zmęczenie jako kategoria definicyjna w badaniach psychologicznych. W: Koc R, Mazur Ł, red. Zmęczenie — psychospołeczny punkt widzenia. Bydgoszcz: WSKNPS; 2005.

9. Orth JP. Dlaczego jestem zmęczona? Warszawa: W.A.B; 1994.
10. Hansen A. O sztuce wypoczynku. Warszawa: Instytut Wydawniczy Pax, 1983.
11. Krawczyk A. Osobowościowe uwarunkowania zmęczenia przewlekłego. Badania empiryczne dzieci chorych i zdrowych. Kraków: Wydawnictwo WAM; 2012.
12. Kulik A. Asertywność, wsparcie społeczne a przewlekłe zmęczenie u nastolatków. *Przegl. Psychol.* 2012; 55(1): 79–95.
13. Young JE, Klosko JS, Weishaar ME. *Terapia Schematów*. Sopot: GWP; 2014.
14. Hawke LD, Provencher MD. Schema theory and schema therapy in mood and anxiety disorders. A review. *J. Cogn. Psychother.* 2011; 25 (4): 257–276.
15. Mącik D, Schehelska K. Związki wczesnych nieadaptacyjnych schematów Younga z samopoczuciem i sensem życia w zaburzeniu lękowym i depresyjnym. *Post. Psych. Neur.* 2015; 24(4): 208–216, [doi:10.1016/j.pin.2015.10.003](https://doi.org/10.1016/j.pin.2015.10.003)
16. Young JE, Klosko JS. *Program zmiany sposobu życia: uwalnianie się z pułapek psychologicznych*. Warszawa: Instytut Psychologii Zdrowia; 2012.
17. Antony MM, Swinson RP. *Kiedy doskonałość nie wystarcza*. Warszawa: Jacek Santorski & Co Agencja Wydawnicza; 2008.
18. Szczucka K. Polski Kwestionariusz Perfekcjonizmu Adaptacyjnego i Nieadaptacyjnego. *Psychol. Społ.* 2010; 1 (13): 71–95.
19. Winter R. *W pułapce perfekcjonizmu. Prosta droga do porażki*. Kraków: Wydawnictwo WAM; 2013.
20. Klibert J, Lamis DA, Naufel K, Yancey CT, Lohr S. Associations between perfectionism and generalized anxiety: Examining cognitive schemas and gender. *J. Rat-Emot. Cognitive-Behav. Ther.* 2015; 33(2):160–178.
21. Magnusson AE, Nias DK, White PD. Is perfectionism associated with fatigue? *J. Psychosom. Res.* 1996; 41(4): 377–383.
22. Kheiroddin JB, Esmaeilpour K, Dehghani SS. The role of perfectionism in predicting feeling of cognitive, physical and social fatigue. *J. Psychol.* 2015; 19(2): 163–174.
23. Brooks SK, Rimes KA, Chalder T. The role of acceptance in chronic fatigue syndrome. *J. Psychosom. Res.* 2011; 71(6): 411–415.
24. Dittner AJ, Rimes K, Thorpe S. Negative perfectionism increases the risk of fatigue following a period of stress. *Psychol. Health* 2011; 26 (3): 253–268.
25. Deary V, Chalder T. Personality and perfectionism in chronic fatigue syndrome: A closer look. *Psychol. Health* 2010; Vol. 25(4): 465–475.

26. Kempke S, Van Houdenhove B, Luyten P, Goossens L, Bekaert P, Van Wambeke P. Unraveling the role of perfectionism in chronic fatigue syndrome: Is there a distinction between adaptive and maladaptive perfectionism? *Psychiatry Res.* 2011; 186 (2–3): 373–377.

address: dmacik@kul.lublin.pl