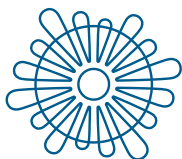




Anita Vulić-Prtorić

PSYCHOSOMATIC SYMPTOMS SCALE

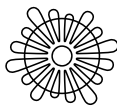
Manual, Normative Data
and Questionnaires



UNIVERSITY OF ZADAR

PSYCHOSOMATIC SYMPTOMS SCALE

Manual, Normative Data and Questionnaires



Sveučilište u Zadru
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FOREWORD

The PSS questionnaire is an instrument for assessing somatic symptoms in children, adolescents, and adults. It is intended for participants 10 years of age and older, although its simplicity allows it to be used with younger individuals, especially when used individually. The advantage of the PSS questionnaire is its ease of use and its response system acceptable even for younger children. The PSS can be used in clinical assessment, planning, monitoring and evaluation of psychological treatment and counselling, scientific research, etc. It consists of a list of 35 somatic symptoms from 7 body organ systems (pseudoneurological, cardiovascular, muscular, respiratory, gastrointestinal, dermatological, and pain/weakness) and questions about general health and the experience of painful symptoms, which is consistent with the new criteria and recommendations in the DSM-5 (APA, 2013).

Although the application time is relatively short (10-15 min), the PSS can provide a very wide range of information: about the number and frequency of somatic symptoms, about the nature of symptoms and their interference in daily life, about painful symptoms and their intensity about the assessment of general health status, etc.

The questionnaire is available in 3 identical versions, one recording the self-assessment of somatic symptoms by the child, adolescent or adult, and the other recording the assessment of symptoms by a parent or caregiver and another person (e.g. a doctor). In this way, it is possible to compare the perception of symptoms by different sources, their differences and similarities in the experience of somatic symptoms.

The PSS has evolved over a decade through numerous reviews and investigations. The diagnostic guidelines of the DSM classification system as well as questionnaires and rating scales used in the field of psychosomatics, somatization, and somatoform disorders served as the basic framework for the development of the PSS. In this questionnaire, the term psychosomatics is used, although similar scales and questionnaires also use the terms medically unexplained somatic symptoms (MUS), somatic complaints, functional somatic symptoms (FSS), somatoform symptoms, etc. for the symptoms mentioned.

The manual describes the basic psychometric properties of the PSS, which were determined on a sample of 1637 participants, children, adolescents and adults. The statistical indicators obtained in the normative and clinical samples are presented in the tables. The PSS questionnaire belongs to the A category of psychodiagnostic instruments and can be used by professionals from various fields - psychologists, psychiatrists, physicians, social workers, educators, rehabilitators, etc.

Conditions for online use:

This manual contains information on the description, administration, scoring, and interpretation of the PSS questionnaire, as well as tables, figures, and PSS questionnaires. It has been published on the website of the University of Zadar to provide free access to users and to assist them in their professional and scientific work. This book is the property of the University of Zadar and is protected by copyright, described on the Morepress website https://morepress.unizd.hr/index_hr.php. No part of this book may be modified, published or exploited in any way without the permission of the publisher.

Questionnaires that are part of this work may be downloaded and used free of charge for non-commercial purposes. Any use of this work requires that the source be acknowledged in the manner described below.

Source citation:

VULIĆ-PRTORIĆ, A. (2021) **Psychosomatic Symptoms Scale (PSS): Manual, Normative Data and Questionnaires**. University of Zadar: Department of Psychology, Croatia.

Annotation:

Terms used in this manual that have a gendered meaning, whether used in the masculine or feminine form, include the male and female gender equally.



The assessment of various somatic complaints is an integral part of many psychological procedures, from the assessment and treatment of people with symptoms of somatization or procedures in which somatic symptoms are the dominant source of additional distress, to psychological preparation for a medical procedure that causes tension and anxiety, or in the process of adjustment to a chronic illness. Somatic symptoms are part of various psychological problems and disorders, especially from the group of anxiety and depressive disorders, and they are a dominant feature of some psychological disorders that may appear already in childhood and adolescence (e.g., eating, sleeping, excretory, breathing disorders, etc.).

Various terms are used to describe these symptoms, e.g. medically unexplained physical symptoms (MUS), functional somatic symptoms (FSS), psychosomatic symptoms, somatoform symptoms, etc.

Psychosomatic symptoms are somatic symptoms that occur under the influence of emotional factors and affect the organ system of the body, which is normally under the control of the autonomic nervous system. In their mild intensity, these symptoms are an integral part of everyone's development, but when they become so unpleasant that they interfere with daily functioning, they can lead to organ damage and the development of mental disorders. In official classification systems, they are usually described in the category of various psychosomatic and somatoform disorders. The distinction between the two groups of disorders was based on the finding of organ damage: in somatoform disorders, negative psychological factors and somatic symptoms are present, but there is no general health condition to which this somatic symptom can be attributed; on the other hand, in psychosomatic disorders, negative psychological factors and somatic symptoms are present and there is a general health condition to which this somatic symptom can be attributed.

It is interesting to see the conceptual changes through the official classification systems that preceded the current definition and approach to somatic symptoms. The term "psychosomatic disorder" was introduced in the first edition of the American Diagnostic and Statistical Manual of Mental Disorders (DSM-I, 1952). There were a number of disorders in this group: allergic reactions, angina, angioneuritic edema, cardiac

arrhythmias, arterial hypertension, bronchial asthma, gastroduodenal ulcer, diabetes, dysmenorrhea, hyperinsulinism, hyperthyroidism, irritable bowel syndrome, cardio-spasm, arthritis, migraine, neurotonia, urticaria, etc. Today, psychosomatic disorders are generally described and classified according to the organic system of the body involved in the symptomatology: cardiovascular (hypertension, tachycardia, angina pectoris, etc.), respiratory (asthma, tuberculosis), endocrinological (diabetes, hypoglycemia), gastrointestinal (nausea, vomiting, gastritis, peptic ulcer), dermatological (acne, atopic dermatitis), etc. Consequently, the selection of symptoms for the various measurement instruments usually follows the classification into these body-organic systems. This was also done in the development of the PSS (see Table 1 on page 18).

In the second edition (DSM-II, 1968), this group of somatic symptoms was described as psychophysiological-autonomic and visceral disorders, and in subsequent editions of the manual (DSM-III, 1980; DSM-III-R, 1987; and DSM-IV, 1994), the term somatoform disorders was used. There were 7 disorders in the somatoform disorders group: somatization disorder, undifferentiated somatoform disorder, conversion disorder, pain disorder, hypochondriasis, body dysmorphic disorder, somatoform disorder not otherwise specified. These disorders have different etiological backgrounds and each of them has a specific set of symptoms and criteria for diagnosis. A main feature of **somatization** is physical or somatic complaints that cannot be fully explained by a general medical condition. There is also a suggestion that they are associated with psychological factors or unconscious conflicts that explain the presenting symptom. These complaints present such a problem for a person that they interfere with their functioning in social, academic and other important areas. Symptoms include pain in various parts of the body, gastrointestinal symptoms, sexual symptoms and pseudoneurological symptoms (Box 1).

Box 1 Somatization symptoms (according to DSM-IV)

Symptoms of pain in the area of	Pseudoneurological symptoms
<ul style="list-style-type: none"> • head, • abdomen, • back, • joints, • limbs, • chest, • rectum, • menstrual cramps, • pain during urination 	<ul style="list-style-type: none"> • impairment of balance or coordination, • localized weakness or paralysis, • difficulty in swallowing, • aphonia, • deafness, • retention of urine, • hallucinations, • double vision, blindness, • seizures, • loss of sensation of touch or pain • dissociative symptoms like amnesia or loss of consciousness
Sexual symptoms	Gastrointestinal symptoms
<ul style="list-style-type: none"> • lack of interest, • disturbance of erection, • irregular menstrual periods, • increased menstrual bleeding 	<ul style="list-style-type: none"> • nausea, • bloating, • vomiting, • diarrhoea, • a feeling of disgust towards various types of food

Somatoform disorder not otherwise specified is very similar to somatization, but a smaller number of symptoms are required to make a diagnosis. **Conversion disorder** includes symptoms that indicate an association with neurological damage, even though medical findings show that the body's organs and nervous system are functioning normally. These are usually specific sensory symptoms such as vision, smell, or hearing, or speech symptoms, difficulty swallowing, unpleasant skin sensations, etc. In the case of disorder, the dominant symptom is pain that significantly interferes with daily functioning, and there is no medical condition to explain it. **Hypochondriasis** is a form of somatoform disorder in which a person is overwhelmed by the fear of serious and severe illness. Individuals with **body dysmorphic disorder** deal with an imagined or exaggerated lack of their own appearance. The final group, **unspecified somatoform disorder**, includes symptoms that do not fully meet the criteria for any of the above disorders.

Although most of these terms are still used in clinical practice today, the DSM-5 classification reconceptualises the entire field and introduces a new category for this group of symptoms entitled *Somatic Symptom and Related Disorders* (APA, 2013, p. 311). This category includes the following disorders:

- Somatic symptom disorder
- Illness anxiety disorder

- Conversion disorder (functional neurological symptom disorder).
- Psychological factors affecting other medical conditions
- Factitious disorder
- Other specified somatic symptom and related disorder.
- Unspecified somatic symptom and related disorder.

A common feature of all these disorders are physical symptoms associated with clinically significant distress and impairment in daily functioning. The diagnosis of these disorders is based on somatic symptoms and disturbing thoughts, feelings, and behaviours that occur in response to those symptoms. This means that the focus is not so much on the (often medically unexplained) somatic symptoms themselves, but on how a person interprets, experiences, and copes with them. Clinical assessment is therefore expanded to include affective, cognitive, and behavioural aspects of somatic symptoms, and a multidimensional approach is usually required.

The major changes from DSM-IV to DSM-5 were made with the aim of emphasizing distressing somatic symptoms along with abnormal thoughts, feelings, and behaviours, rather than focusing on the lack of a medical explanation for these symptoms. The explanation for this reconceptualization is as follows: “The previous criteria over-emphasized the centrality of medically unexplained symptoms. Such symptoms are present to varying degrees, particularly in conversion disorder, but somatic symptom disturbances may also accompany diagnosed medical disorders. The reliability of determining that a somatic symptom is medically unexplained is limited, and basing a diagnosis on the absence of an explanation is problematic and reinforces mind-body dualism. It is not appropriate to give a person a diagnosis of a mental disorder simply because a medical cause cannot be established. Moreover, the presence of a medical diagnosis does not exclude the possibility of a comorbid mental disorder, including a somatic symptom and associated disorder.” (APA, 2013, P. 309).

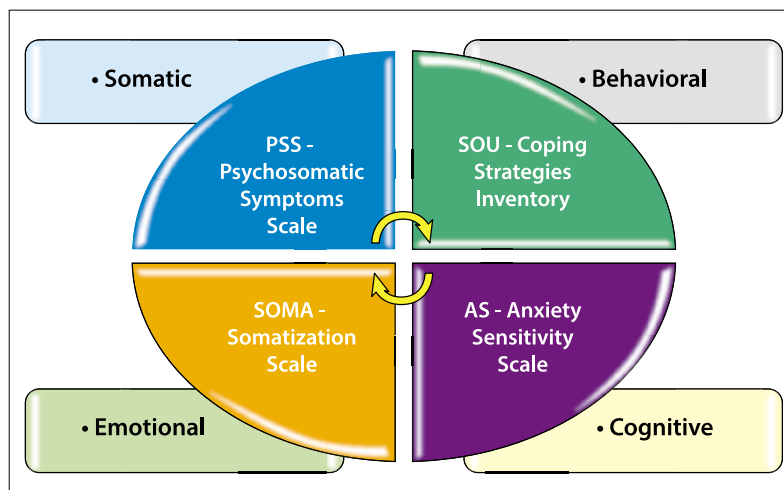
Because of the complexity of the field and in accordance with these new diagnostic recommendations in the DSM-5, we proposed the **somatic symptom algorithm** for diagnosing and assessing various somatic problems, which includes misattributions, excessive concern or preoccupation with symptoms, and increased health care utilization, in addition to the presence of these somatic symptoms. Box 2 presents four basic domains of somatic symptom experience with associated measurement instruments that focus largely on the aforementioned symptoms. The use of these or similar four measurement tools provides information about the somatic, emotional, cognitive and behavioural aspects of physical difficulties. In this example, the PSS is one of the 4 measurement tools in the algorithm.

1. The **somatic domain** is predominantly represented in questionnaires and scales that contain lists of somatic symptoms (for a review, see Zijlema et al. 2013; van Driel et al. 2018). The PSS is an example of this. It captures the number of somatic symptoms experienced by a child, adolescent or adult in the last 3 months, the frequency of their occurrence during this period and the extent to which they have affected daily life. It also provides information about the general state of health, i.e. the perception of one's own health, and the presence of other previously diagnosed conditions due to which a person frequently needs to see a doctor.

2. **Emotional domain** usually includes some measures of somatic consequences of emotional experiences, such as Somatization Scale - SOMA (one of the subscales of the Fear and Anxiety Scale, SKAD-62.; Vulić-Prtorić, 2004), which examines the somatic symptoms that occur in situations when the person experiences some emotional tension and discomfort. In this way, we obtain information about whether a person tends to respond predominantly with somatic symptoms in stressful situations and whether somatic symptoms are significantly associated with anxiety.

3. **Cognitive domain** involves the interpretation of somatic symptoms and, in this sense, the most useful scales are those that examine anxiety sensitivity. For example, Anxiety Sensitivity Scale, AS (one of the SKAD-62 subscales), examines somatic symptoms in relation to the cognitive interpretation of those somatic symptoms, which is particularly important for early identification of individuals prone to panic attacks and for planning therapeutic interventions.

4. **Behavioral domain** of experiencing physical symptoms includes all behaviors that show how a person copes with his symptoms and what he does in situations of



Box 2 An algorithm of self-reported somatic symptoms

tension and stress. These data can be obtained from stress management measures, such as the Coping Strategies Inventory, SUO (Vulić-Prtorić, 2002).

A number of children and adults experience various somatic symptoms that are an integral part of adolescence, maturation, or certain health conditions. For example, a number of somatic symptoms that occur during puberty are related to rapid growth, hormonal changes, and lifestyle changes in adolescents. In such cases, individuals may score high on the PSS scale while their scores on the other two scales are in or below the average range. In addition, the occurrence of somatic symptoms in some individuals may be related to stressful life events associated with a particular life stage or with some chronic or acute health conditions. For example, previous research using the PSS has shown that during adolescence there is an increasing frequency of back pain, fatigue, and lack of energy in both girls and boys (Vulić-Prtorić, 2016). It should be added that such a finding, in which only somatic domain scores are elevated, but they are average or below average in the other three domains, can be obtained in individuals with alexithymia or in individuals with functional somatic symptoms (for example - see more in Grgurić et al., 2008. on a diagnostic algorithm for distinguishing functional from psychogenic abdominal pain in children).

However, if the score on measures of the somatic and emotional aspect of experiencing somatic symptoms is elevated and the person states that he or she is not suffering from any illness, it should be investigated whether the person is feeling tense for some reason and whether emotional tension, anxiety or sadness are turning into somatic symptoms. Furthermore, if there is a tendency to interpret these symptoms catastrophically (as is evident from the results on measures of the cognitive aspect of experiencing somatic symptoms), there is a risk that a person will be hypersensitive to any experience of pain, that any ambiguous bodily change will be a source of anxiety, and that there may be impairment in daily life.

This means that the occurrence of somatic symptoms can only be properly understood by capturing the broader context of their occurrence and combining information gathered from multiple domains of functioning.

Detailed information on the contents of this chapter can be found in the following articles:

ATLAGA, M., ŠIMIĆ, N., VULIĆ-PRTORIĆ, A. (2021). **Somatic symptoms in children: Agreement between parents and children's assessment.** In: Pačić-Turk Lj. (Ed.) *Brain and Mind: Promoting Individual and Community Well-Being, Selected Proceedings. 2nd International Scientific Conference of the Department of Psychology at the*

Catholic University of Croatia (pp. 131-145). Zagreb, Croatia: Catholic University of Croatia.

VULIĆ-PRTORIĆ, A. (2016) **Somatic complaints in adolescence: prevalence patterns across gender and age.** *Psychological Topics*, 25, 1, 75-105.

https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=230450&lang=en

VULIĆ-PRTORIĆ A. (2013) **Self-assessment algorithm of somatic symptoms: the relationship between indicators.** In Kuterovac Jagodić G., Erceg Jugović I., Huić A. (eds.) *21st Days of Ramir and Zoran Bujas - Book of Abstracts*. Zagreb, April 11-13, 2013, p. 98.

<https://psihologija.unizd.hr/Portals/12/Nastavnici/Anita%20Vulic-Prtoric/Znanstveni%20radovi/1.%20Algoritam%20samoprocjene%20tjelesnih%20simptoma.pdf>

VULIĆ-PRTORIĆ A. (2011) **Somatization and psychosomatic symptoms;** in Vulić-Prtorić A., Cifrek-Kolarić M. (2012) *Child and Adolescent Clinical Psychology: Research Review*. LAP LAMBERT Academic Publishing, Saarbrücken, Germany <https://www.amazon.com/Child-Adolescent-Clinical-Psychology-Research/dp/3659263257>



2.1 Description

The Psychosomatic Symptoms Scale - PSS is an instrument consisting of a list of 35 somatic symptoms and complementary questions on some other relevant indicators of health status. In accordance with the new criteria and recommendations in the DSM-5, the PSS includes several questions about the experience of painful symptoms. Basic information can be found in Box 3.

Box 3 PSS basic information

List of 35 symptoms from the 7 body organ system syndromes:

1. pseudoneurological,
2. cardiovascular,
3. muscular,
4. respiratory,
5. gastrointestinal,
6. dermatological, and
7. pain / weakness.

8 questions on general health and pain experience.

3 identical versions:

1. **self-assessment** questionnaire for children, adolescents, and adults,
2. assessment of the child's/adolescent's symptoms by **parents** (or caregivers), and finally
3. assessment of the child's/adolescent's symptoms by **others** (e.g., physician, teacher, etc.).

Translations:

1. Croatian,
2. English,
3. German,
4. Slovenian

Although today there are several other measurement instruments that include an assessment of somatic symptoms, such as the Child Behavior Checklist (CBCL)

by Achenbach and Edelbrock (Achenbach and Rescola, 2018), the Children's Somatization Inventory (CSI) by Judy Garber (1991; 1998), the Pennebaker's Inventory of Limbic Languidness (PILL) by Pennebaker (1982), the Somatic Reactions by Children Questionnaire (Keresteš, Kuterovac-Jagodić and Vizek-Vidović, 1993) and the Scales of Psychosomatic Symptoms (Bezinović and Tkalčić, 2002), (for a review of instruments see Pennebaker, 1982; 2000; Zijlema et al, 2013; van Driel et al., 2018), the PSS was developed to capture symptoms from as broad a spectrum as possible and to provide information about their frequency and, in particular, the degree of impairment that the symptom has in a person's daily life. Furthermore, additional questions allow for the assessment of symptoms in individuals who have no proven health problems, but who nevertheless experience somatic symptoms to a greater extent.

2.2 Application

The PSS is an instrument designed to assess somatic symptoms in children, adolescents, and adults. It could be used with individuals aged 10 years and older, but as it is very quick and easy to administer, it can be used even with younger children, particularly on an individual basis.

Besides to the usual limitations that apply to all self-report measures, such as age and reading ability, the PSS is sensitive to the ability to self-observe and to detect changes in one's own body. Although doubts exist as to whether children are reliable sources of information when it comes to their internal processes, most empirical studies to date show that children as young as 7 years of age are able to reliably describe headaches, estimate their intensity, frequency, and duration. Moreover, by the age of 11, they can use cognitive methods in the treatment of somatic problems (Andrasik et al., 2005).

The PSS is suitable for clinical assessment, planning, monitoring and evaluation of psychological and medical treatments, as well as for counselling, scientific research, etc.

Although the PSS is very simple and easy to administer, its use can yield a large amount of data (Box 4).

Box 4 Information that can be obtained with the PSS

1. **number and frequency** of symptoms experienced by the person in the last 3 months
2. severity and degree of **impairment** of daily life due to that symptoms
3. **body domain** of symptoms (cardiovascular, gastrointestinal, dermatological, etc.)
4. **pain** experience
5. assessment of **general health**
6. when PSS is administered to parents and children or adolescents, information about:
 - a. **agreement** between the parent's and child's assessment of symptoms
 - b. **similarities** in the nature of the parent's self-reported symptoms and the child or adolescent's self-reported symptoms.

2.3 Administration

The PSS can be administered individually or in groups. Responses are written next to the items on the questionnaire. Response time is not limited and averages 10-15 minutes, depending on age and reading level.

When used in groups, participants should be instructed to write their name and other required information on the questionnaire. The examiner then reads aloud the instructions for participants to follow on the questionnaire. The instructions for answering the questionnaire are located at the top of the questionnaire and are brief and very easy to understand. The frequency of each symptom is rated first, followed by the assessment of severity.

2.4 Scoring

The scoring of the answers is done objectively: the total score is calculated by adding up the answer values next to each item. The meaning of the scoring is shown in Table 1 and Table B.1, with the item numbers of the corresponding symptoms for each symptom group/class.

Each symptom in the PSS is scored on two scales: frequency in the past 3 months and the degree to which that symptom interferes with daily activities (severity):

- **Frequency scale** (*How often have you had this problem within last 3 months?*) with 4-point scale: 1 = never, 2 = a few times a month, 3 = a few times a week, 4 = almost every day, and

- **Severity scale** (*How much does it bother you in daily activities*) with 3-point scale: 1 = not at all, 2 = a little, 3 = a lot.

Total scores on these two scales are converted to deciles according to the data in Tables C. The PSS is problem-oriented, i.e., the higher the score, the more somatic problems the person reports and/or the more distressed the person is.

TABLE 1 PSS symptom clusters / syndromes

	Symptom clusters / syndromes	Somatic symptoms by body organ area
1	pseudoneurological (9 symptoms)	vertigo, loss of balance, lump in throat, double vision, blurred vision, sudden vision loss, sudden hearing loss, fainting, sudden memory loss
2	cardiovascular (3 symptoms)	rapid heartbeat, chest pain, over-perspiration
3	muscular (2 symptoms)	muscle tenseness, muscle weakness
4	respiratory (3 symptoms)	difficulties breathing, sense of choking, cold (sore throat, cough, etc.)
5	gastrointestinal (9 symptoms)	nausea, abdominal cramps (except menstrual pain), diarrhoea, vomiting, bloated stomach, loss of appetite, intolerance of certain foods, constipation, heartburn
6	dermatological (3 symptoms)	skin rash, itchy / red skin, acne or pimples
7	pain / weakness (6 symptoms)	headache, back pain, lack of energy / fatigue, high body temperature, pain in joints, arm / leg pain.

8 additional questions:

- 1 the first question refers to the **assessment of one's health** (*How would you rate your health in general?*), to which the person answers on a 4-point scale (1 = bad, 2 = good, 3 = very good, 4 = excellent);
- 2 at the end of the list of symptoms is the question (item 36): "*Have you had to visit the doctor because of your health-related problems?*", which indicates the **severity** of these symptoms and is answered by ticking the answer Yes = 1 or No = 0;
- 3 the next question (item 37) gives an insight into the **ailments and diseases** a person may suffer from: *Do you have a disease such as asthma, allergies, diabetes etc.?* and is also answered by marking the answer Yes = 1 or No = 0. If the answer is yes, it is followed by the question what is the disease.
- 4 the question (item 38) about the use of **medication** in the treatment of this dis-

ease is as follows: *Do you have to take some medicine for those health problems?* and the answer is Yes = 1 or No = 0, followed by the question which medication it is if the answer was yes.

The following questions were added in new versions of the questionnaire and relate to the experience of pain. Two questions (39 and 40) refer to the **intensity of pain** experienced, asking the person to rate which pain (if any) was the most unpleasant and to rate its intensity.

- 5 *If you have been suffering from pain in the last 3 months, what would you describe as the most unpleasant? Name it:*
- 6 *How would you rate your pain intensity on the scale of 0 to 10? (circle the number).*
The answer is from No pain = 0 to 10 = Very intense pain.

The answers to the last two questions (item 41 and 42) provide information about the use of **painkillers / analgesics**. The questions are as follows:

- 7 *Do you take some painkillers? Answer is Yes = 1 or No = 0. If yes, which ones?*
- 8 *If your answer was YES, how often have you taken painkillers in the last 3 months?*
There are 5 answer categories for this question: from Every day = 4 to 1-2 times a month = 0.



The psychometric characteristics and normative data presented in this manual were collected from a sample of 1637 respondents (52.48% female) aged 11 to 25 years (mean age 15.79 years). Primary and secondary school students and university students participated in the study. A detailed description and basic characteristics of the sample are presented in Table 2. School grade was chosen as a categorical variable representing the developmental and educational level of the participants. Although this is not the most accurate indicator of the chronological age of a given group, it is the most common way of grouping participants in similar investigations, particularly those where participants are elementary and high school students.

The PSS was administered in groups during a regularly scheduled class period in a community sample. Prior to the use of the questionnaire, all participants were informed of the purpose of the survey and were then given instructions on how to complete the questionnaire.

3.1 Objectivity

Considering the way the responses obtained with this questionnaire are scored, the process of calculating the total score and the symptom cluster score by simply adding the numbers provided by the participants, it could be concluded that the PSS is an objective measurement tool that minimizes the influence of the investigators on the scoring process.

TABLE 2 PSS samples by age and gender

School grade / age groups	N (%)	Males	Females	Total
PRIMARY SCHOOL PUPILS $M_{age} = 12.81$; $SD_{age} = 1.21$		412	404	816
5th grade $M_{age} = 11.41$; $SD_{age} = 0.50$	N	107	112	219
	N%	48.86%	51.14%	100%
6th grade $M_{age} = 12.29$; $SD_{age} = 0.50$	N	100	92	192
	N%	52.08%	47.92%	100%
7th grade $M_{age} = 13.32$; $SD_{age} = 0.52$	N	106	98	204
	N%	51.96%	48.04%	100%
8th grade $M_{age} = 14.31$; $SD_{age} = 0.50$	N	99	102	201
	N%	49.25%	50.75%	100%
SECONDARY SCHOOL STUDENTS $M_{age} = 16.78$; $SD_{age} = 1.12$		209	285	494
1st grade $M_{age} = 15.03$; $SD_{age} = 0.46$	N	22	45	67
	N%	32.84%	67.16%	100%
2nd grade $M_{age} = 16.24$; $SD_{age} = 0.56$	N	64	99	163
	N%	39.26%	60.74%	100%
3rd grade $M_{age} = 17.13$; $SD_{age} = 0.59$	N	70	80	150
	N%	46.67%	53.33%	100%
4th grade $M_{age} = 18.12$; $SD_{age} = 0.52$	N	53	61	114
	N%	46.49%	53.51%	100%
UNIVERSITY STUDENTS				
Students $M_{age} = 22.08$; $SD_{age} = 3.36$	N	75	252	327
	N%	22.94%	77.06%	100%
	Total	696	941	1637
		42.52%	57.48%	100%

3.2 Validity

Content validity was established during scale construction. That is, somatic symptoms were selected in accordance with the original definition of the domain of somatic symptomatology and the description of symptoms in the DSM classifications.

Construct validity was tested by factor analysis conducted on the results from the entire sample of 1637 participants (Tables A.1 and A.2). Principal component factor analysis was conducted using Varimax rotation following the procedure used in previous factor analytic studies of somatic symptom questionnaires (see Meesters, Muris, Ghys, Reuerman, & Rooijmans, 2003). The assignment of each item to its respective factor was based on item-factor loadings that were above 0.30. The results of the factor analysis showed that somatic complaints in this sample are grouped in 7 factors (Guttman Kaiser factor extraction criterion with a characteristic root value greater than 1), which together explained 43.6% of the common variance (frequency subscale) and 50.1% of the common variance (severity subscale) (Tables A.1 and A.2). Varimax rotation was used in the transformation of the factor matrix to allow a more meaningful interpretation of the extracted factors. Given the affiliation of symptoms to individual body organ systems in the obtained factor structure of the frequency scale, it can be observed that some items show saturations on two or more factors. On the first factor, significant saturations show mainly pain symptoms / feelings of weakness and fatigue and muscular symptoms. The second factor is described by pseudoneurological symptoms and the third with gastrointestinal. The fourth and seventh factors are combinations of pain symptoms, pseudoneurological, cardiological and gastrointestinal symptoms. Dermatological symptoms have a significant loading on the fifth factor and gastrointestinal symptoms on the sixth.

Factor analysis of the severity scale scores yielded similar results (Table A2) with 7 factors identified (Guttman Kaiser factor extraction criterion with a characteristic root value greater than 1). The symptoms of pain/weakness and fatigue and muscular symptoms have significant loading on the first factor. On the second factor are pseudoneurological symptoms, on the third gastrointestinal and dermatological, and on the fourth factor a combination of pseudoneurological, cardiac, gastrointestinal and respiratory symptoms. On the fifth and seventh factors gastrointestinal symptoms had significant loadings and on the sixth factor pain symptoms, pseudoneurological and dermatological symptoms.

It should be noted that in previous studies, the PSS data also yielded ambiguous factor solutions. For example, in a previous work (Vulić-Prtorić, 2016), the five-factor structure of the PSS was presented, where pain symptoms and muscular symptoms were combined into one factor, as well as cardiovascular and respiratory symptoms. The other factors consist of symptoms that originally belonged to specific physical organ systems. The resulting factor solutions are statistically justified and may be useful for research purposes, but in clinical work there is a need to distinguish between individual groups of symptoms. For example, it is important to have information on cardiovascular and respiratory symptoms separately, although in the findings descri-

bed above these two groups of symptoms formed a cluster.

The results of the factor analyses conducted were to some extent expected, as most previous studies in this area also obtain inconsistent and unstable factor solutions (Pennebaker, 1982). Therefore, the authors of questionnaires such as the PSS, which consists of a list of somatic symptoms, recommend single factor solutions and the calculation of the total score or a qualitative analysis according to clusters formed by the symptoms belonging to the specific body organ systems (see Table 1).

In summary, the results obtained justify the calculation of the PSS total score, but also, if necessary, an analysis at the cluster/syndrome level can be performed.

3.3 Sensitivity

Tables A3 and A4 lists the descriptive parameters for **each PSS symptom**: mean and median, standard deviation, indicators of normality of distribution, and correlation of each symptom with the PSS total score. Range values are not given in the tables because maximum ranges were set for all items (from 1 to 4 in the frequency scale and from 1 to 3 in the severity scale).

Data on descriptive **cluster** parameters are presented in Tables B2 and B3 and also suggest good sensitivity. In all clusters, the scores had maximum ranges and the distributions are towards lower scores. The descriptive values for the **total scores** (Table 3) suggest good sensitivity of the PSS, both frequency and severity scale. As the study was conducted in the general population, the distributions of the scores were positively asymmetric, as expected, meaning that a larger number of participants scored lower. The results of the Kolmogorov-Smirnov test (d) indicate a significant deviation of the scores from the normal distribution. However, according to the criteria mentioned by Kline (2011) it can be concluded that the results obtained are acceptable in terms of distribution normality.

3.4 Reliability

The reliability of the PSS is discussed in terms of internal consistency, which is evaluated by Cronbach's alpha coefficient. According to the results obtained, the PSS is a questionnaire with high internal consistency with Cronbach's alpha of 0.89 for the frequency scale and 0.91 for the severity scale. The psychometric properties are shown in Table 3. In addition, tables A.3 and A.4 presented the correlations between each

item and the total score. It was found that they were significant and greater than $r_{it} = 0.50$ for 7 symptoms (frequency scale) (lack of energy/fatigue, pain in hands/legs, loss of balance, rapid heartbeat, nausea, difficulty breathing, and choking sensation) and for 11 symptoms (severity scale) (vertigo, loss of balance, muscle weakness, double vision, blurred vision, chest pain, nausea, abdominal cramps, bloating, difficulty breathing, choking sensation). Table A.5 lists the coefficients between the frequency and severity estimates for each symptom. The correlations range from 0.48 to 0.77 and are largest for experiencing stomach pain ($r = 0.77$), difficulties breathing ($r = 0.76$), choking sensation ($r = 0.75$), etc. Reliability coefficients for each cluster are presented in Tables B.2 and B.3 and range from $\alpha = 0.45$ to $\alpha = 0.74$ for the frequency scale (Table B.2) and from $\alpha = 0.54$ to $\alpha = 0.81$ for the severity scale (Table B.3). As expected, low internal consistency coefficients were found for the clusters consisting of a smaller number of items. This finding should be taken into account when analysing the results at the level of these clusters.

The obtained results indicate that when using the PSS as a unidimensional instrument, the psychometric indicators are acceptable and therefore its use can be recommended for children, adolescents and adults.

TABLE 3 PSS psychometric indicators (N = 1637).

	FREQUENCY	SEVERITY
Number of items	35	35
M Arithmetic Mean	51.46	48.82
C Median	49.58	47.92
D Mode	45	42
SD Standard Deviations	11.15	10.06
Min-Max	35-119	35-105
Kolmogrov-Smirnov test (d)	0.09; $p < 0.01$	0.08; $p < 0.01$
Skewness (Std.Err.)	1.60 (0.06)	1.38 (0.06)
Kurtosis (Std.Err.)	4.79 (0.12)	3.29 (0.12)
Average inter-item correlation	0.203	0.241
Cronbach's alfa	0.89	0.91
Correlation between Frequency and Severity	$r = 0.73$	



4.1 Symptom prevalence

This chapter presents the descriptive indicators obtained from a normative sample of 1637 participants. For example, from the mean values in Tables A.3 and A.4, it can be seen that the following symptoms were the **most common**: lack of energy/fatigue, cold, headache, back pain, and rapid heartbeat. Tables A.6 and A.7 showed the percentage of participants according to their rating of each PSS symptom. As expected, the **least common symptoms** are sudden vision loss, sudden hearing loss, and fainting. In this sample, over 90% of participants never experienced these symptoms in the past 3 months. Symptoms experienced by participants several times a month include colds, headaches, and stomach cramps, and lack of energy/fatigue, back pain, and heart palpitations several times a week. Daily occurrences were reported for lack of energy/fatigue and acne or pimples. **Particularly disturbing** in the last three months (Table A.7) were the following symptoms: lack of energy/fatigue (in as many as 23.07% of participants), acne or pimples and colds (in about 16% of participants), headaches (in 14.06% of participants), nausea and abdominal cramps (in about 13% of participants). It can be observed that in all the described cases, the mentioned symptoms belong to different body organ systems, which supports the need to analyse the results in PSS at the level of symptoms.

4.2 Age and gender differences

The results of previous research indicate that there are significant differences in the perception of somatic symptoms according to age and gender. This chapter presents some of the results of the statistical procedures carried out with the aim of identifying the differences in PSS. A more detailed review and interpretation of these differences can be found in Vulić-Prtorić (2016).

A sample of 1637 participants was used to test whether there was a significant difference in the PSS with respect to their gender and age. For this purpose, three age

groups were formed: 1st group of primary school students (5th to 8th grade); 2nd group of secondary school students (1st to 4th grade); and 3rd group of university students. The results obtained are shown in Figures 1 and 2.

Gender. Analysis of variance revealed statistically significant differences in the frequency of somatic symptoms: $F(1,1635) = 43.96$; $p = 0.00$; and for severity ratings: $F(1,1635) = 60.04$; $p = 0.00$.

Age. Analysis of variance revealed statistically significant differences in the frequency of somatic symptoms: $F(2, 1634) = 11.34$; $p = 0.00$; as for severity rating: $F(2,1634) = 12.98$; $p = 0.00$.

In all cases, male participants experience significantly fewer somatic symptoms and rate them significantly less distressing. By age, one group of high school students stands out as experiencing their symptoms more frequently and more disturbingly compared to the others (Figures 1 and 2). However, the interaction effect of gender and age on the assessment of the frequency of somatic symptoms and their severity proved not to be statistically significant (frequency scale: $F = 1.13$; $p = 0.32$; severity scale: $F = 0.91$; $p = 0.40$).

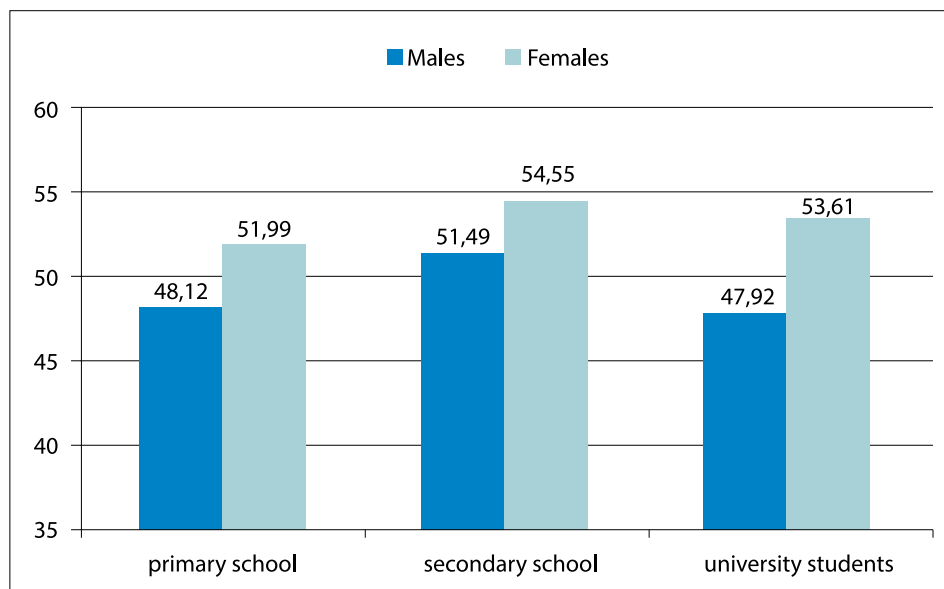


FIGURE 1 Mean scores in PSS **frequency scale** according to gender and age of the participants ($N=1637$; $N_{\text{males}}=696$; $N_{\text{females}}=941$)

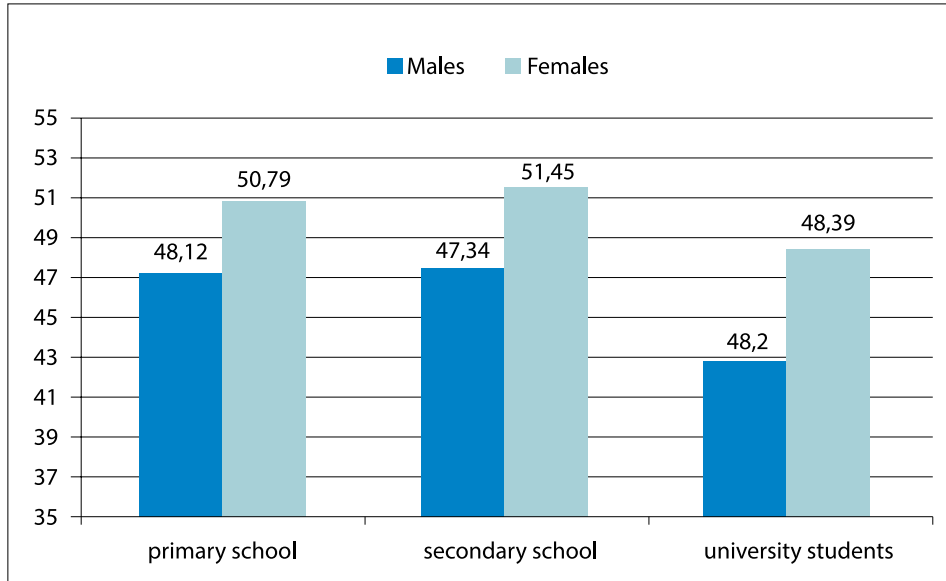


FIGURE 2 Mean scores in PSS **severity scale** according to gender and age of the participants (N=1637; N_{male}=696; N_{female}=941)

4.3 Clinical sample

When diagnosing somatic symptoms, the first step is to determine the participant's health status, i.e., whether the symptoms listed are related to health problems. In this regard, it has proven useful to identify in an early screening those individuals who already have some of the previously diagnosed health problems. Therefore, the 37th question in the PSS is designed to obtain this information. When asked if they had a medical condition, 266 (16.25%) participants in this sample answered "yes". The largest percentage of those who have health problems is among females: 4.34% university students, followed by primary (3.30%) and secondary school students (2.81%) (Table 4). The most commonly mentioned are: allergies, asthma, diabetes, migraine, thyroid disease, skin disease, kidney disease, etc.

The t-test for independent samples was used to test whether subjects suffering from a disease differed from healthy controls in terms of their PSS score. The results are presented in Table 5. As expected, the two groups of participants differed significantly in their ratings of PSS frequency and severity.

In addition to the need to distinguish individuals with diagnosed health problems from healthy individuals, the results in the PSS allow for the formation of different clin-

ical patterns based on responses in individual items. For example, in previous research, samples of children with recurrent abdominal pain (Vulić-Prtorić and Cifrek-Kolarić, 2011) were formed on the basis of responses to the item 21 in the PSS (abdominal cramps): “a few times a month or more” to the question *How often have you had this problem within last three months?* and “a lot” to the question *How much does it bother you in daily activities?*

In the same way, using a specific constellation of symptoms or based only on the answer to the question 37, it is possible to create other clinical samples, e.g. samples of children and adults who have some health problems, such as asthma (Jović et al., 2009a; Grubić et al., 2007) or headaches (Vulić-Prtorić et al. 2007; Jović et al., 2009b; Petričić et al. 2009) et al.

TABLE 4 Number of participants (%) in each response category to the question Do you have a disease such as asthma, allergies, diabetes, etc.?

	School / age groups	NO N (%)	YES N (%)	Total
Males (N=696)	Primary school	356 (86.41%)	56 (13.59%)	412
	Secondary school	187 (89.47%)	22 (10.53%)	209
	University	58 (77.33%)	17 (22.67%)	75
	Total:	601 (86.35%)	95 (13.65%)	696
Females (N=941)	Primary school	350 (86.63%)	54 (13.37%)	404
	Secondary school	239 (83.86%)	46 (16.14%)	285
	University	181 (71.83%)	71 (28.17%)	252
	Total:	770 (81.83%)	171 (18.17%)	941
	Total	1371	266	1637
		83.75%	16.25%	100%

TABLICA 5. Differences in PSS cores between participants with and without health problems

PSS	No health problems reported (N=1371)		Health problems reported (N=266)		df	t	p
	M	SD	M	SD			
frequency	50.68	10.65	55.51	12.74	1635	-6.55	0.000
severity	48.39	9.76	51.05	11.27	1635	-3.97	0.001



This chapter describes some guidelines for the analysis and interpretation of the results obtained with PSS. The level of analysis is determined by the aim of the assessment, so for research purposes the total result may be more interesting, while for clinical assessment it may be more important to perform an analysis at the level of a single symptom or cluster.

- Individual somatic symptoms / items
- Total score
- Symptom cluster / domain
- Health status
- Correlations between PSS and other constructs
- Case Report

5.1 Individual somatic symptoms / items

This level of analysis and interpretation is essential for clinical assessment and individual psychological interventions. The information obtained through the PSS takes on its full meaning through talking to the person about the symptoms they have marked as more frequent or more distressing than the others.

In interpreting the results at the symptom level, each of the 35 PSS items is considered and analysed separately. At this level of interpretation, it is recommended that the following questions be answered:

- **Does the individual's response represent a significant deviation compared to the average population, i.e.,** does the participant experience this symptom more frequently and more disturbing than the average? The data in Tables A.3 and A.4, which list the descriptive indicators for each symptom, and Tables A.6 and A.7, which present the proportion of participants in each response category, can serve as guidelines for symptom-level interpretation. Comparing the participant's score for each symptom to the normative score provides informa-

tion about whether the response is expected or whether it is below or above the expected. For example, if the participant marks 3 (several times a week) on the frequency scale and 2 (a little) on the severity scale when responding to the first item, we can say that this score is above average for the indicated symptom given the indicators in Table A.3 (arithmetic mean, median, and standard deviation). Looking at the data in Table A.6, we can see that only 11.97% of the participants in this sample experience headaches as frequent and 51.67% find these headaches as bothersome as the participant. Additional insight into the results obtained is provided by the responses to questions during the interview, such as: Do the symptoms listed last longer than 6 months? Duration of more than 6 months is the criterion listed in the DSM-5 for most disorders related to somatic symptoms. Are these symptoms a response to a recent stressful event? What aspects of daily life are affected by the symptoms?

- **What is relationship between symptom frequency and severity?** Although the correlation between frequency and severity estimates should be high at both the individual symptom level (Table A.5) and the total score level, in some cases the estimates on these two scales may be disproportionate. It means that a person may experience fewer symptoms, not as frequently, but they are still rated as very disturbing. Or conversely, a person may have a range of symptoms that are relatively common but with an unexpectedly low distress rating. In such cases, interview questions should focus on interceptive sensitivity, defence mechanisms (especially displacement), and so on.
- **Is there a symptom or group of symptoms that is particularly distressing to the participant and for which they need medical help?** This is indicated by answering question 36 (*Have you had to visit the doctor because of your health-related problems?*) and comparing the responses received with the results shown in Table 9.
- **Whether the symptoms have some gender specificity?** In this sense, the data in Table 6, which reports the most common symptoms, may be helpful in the interpretation. A more detailed review of all symptoms and interpretations of the findings can be found in Vulić -Prtorić (2016).
- **Whether the symptoms show stability at different ages, i.e. whether their frequency increases with age (pattern of increasing prevalence), decreases (pattern of decreasing prevalence), varies (curvilinear pattern) or does not change (stable pattern)?** The comparisons are interesting because of the finding that differences in the perception of somatic symptoms between males and females also increase with age. These are qualitative differences in the cli-

nical picture that are very relevant in clinical work and cannot be seen from the total score. As can be seen in Table 7, 12 symptoms in the male sample and 15 symptoms in the female sample show different patterns of prevalence according to age. However, it is also interesting to see that 17 symptoms show stable prevalence in different age groups in both males and females. Moreover, it can be observed that these symptoms belong to different organ systems and have different frequencies (some occur rarely, others frequently). This result shows the importance of an analysis at the level of symptoms and not only at the level of clusters or total score.

TABLE 6 The prevalence of the 10 most common somatic symptoms in the last 3 months (a few times a month, a few times a week and almost every day) (according to Vulić-Prtorić, 2016)

Rang	Males (N=557)	%	Females (N=679)	%
1.	Cold (sore throat, cough etc.)	75.2%	Lack of energy / Fatigue	83.4%
2.	Lack of energy / Fatigue	69.5%	Cold (sore throat, cough etc.)	79.4%
3.	Headaches	61.9%	Headaches	77.9%
4.	Back pain	50.8%	Nausea	65.4%
5.	Food intolerance	49.4%	Back pain	63.1%
6.	Heart beating too fast	46.8%	Acne and pimples	61.7%
7.	Pain in arms and/or legs	46.5%	Heart beating too fast	61.3%
8.	Nausea	45.8%	Pain in arms and/or legs	53%
9.	Over-perspiration	43.8%	Appetite loss	48.8%
10.	Pain in joints	43.3%	Food intolerance	47.9%

TABLE 7 The type of symptom prevalence pattern in males and females (according to Vulić-Prtorić, 2016)

Males (N=557)	Females (N=679)
Increasing prevalence pattern	
Back pain	Back pain
Lack of energy / Fatigue	Lack of energy / Fatigue
Lump in throat	Lump in throat
Bloated stomach	Bloated stomach

Muscle tenseness	Headaches
Muscle weakness	Heart beating too fast
Blurred vision	Constipation
Heartburn	
Acne and pimples	
Decreasing prevalence pattern	
None	Diarrhoea
	Food intolerance
Curvilinear prevalence pattern	
Double vision	Vertigo
Pain in chest	Muscle weakness
Food intolerance	Vomiting
	Heartburn
	Skin rash
	Acne and pimples
Stable prevalence pattern	
Headaches	Muscle tenseness,
Vertigo	Double vision,
Heart beating too fast	Blurred vision,
Diarrhoea	Pain in chest
Vomiting	
Constipation	
Skin rash	
Stable prevalence pattern across age and gender	
High body temperature, Pain in joints, Pain in arms and/or legs, Loss of balance, Sudden loss of sight, Sudden loss of voice, Fainting, Sudden memory loss, Nausea, Pain in stomach, Appetite loss, Breathing difficulties, Sense of choking, Skin rash, Skin itching/redness, Cold (sore throat, cough etc.), Over-perspiration	

5.2 Total score

Analysis and interpretation of the results at this level can be performed using 3 indicators: 1) total score on the frequency scale, 2) total score on the severity scale, and 3) total number of symptoms.

As described in Chapter 2, on the **frequency** scale, participants answer the question How often have you had this problem within the last 3 months with 1 = never, 2 = a few times a month, 3 = a few times a week, 4 = almost every day. The total score is the sum of the responses in all 35 items. On the **severity** scale, participants answered 1 = not at all, 2 = a little, 3 = very much to the question How much does it bother you during daily activities? The total score is the sum of the responses in all 35 items.

However, in addition to the indicators obtained by summing the scores on the PSS frequency and severity scales, the total **number of symptoms** experienced in the past 3 months may also be of clinical importance, regardless of their frequency and severity. These data are obtained by summing the responses where the person answered 2, 3 or 4 on the frequency scale. In the sample of 1637 participants studied, an analysis of the responses on the PSS was conducted in such a way that all responses where participants ticked that they had never experienced it in the last 3 months were scored 0 and all other responses were scored 1. Thus, it was found that of the 35 symptoms offered

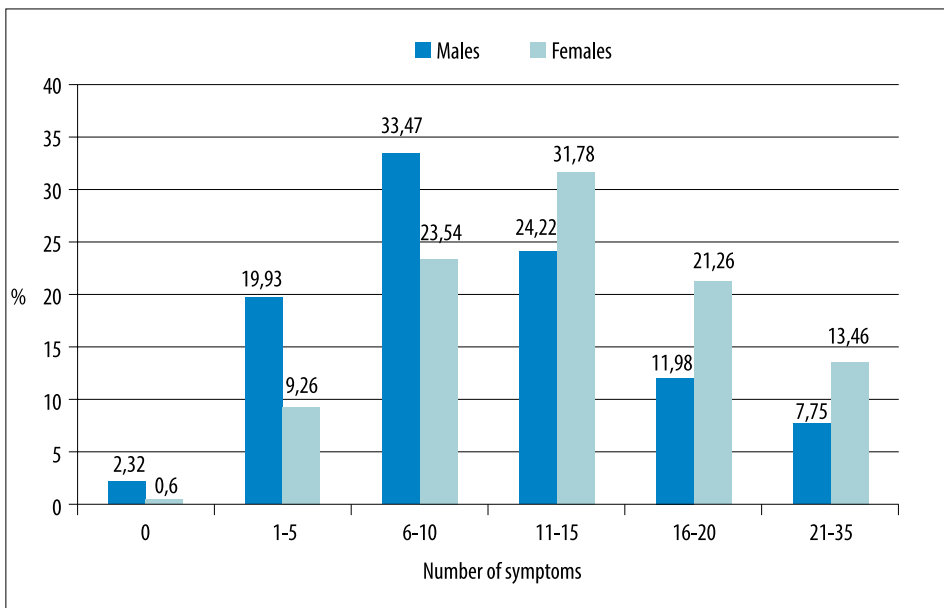


FIGURE 3 Number of subjects (%) in relation to total **number** of PSS symptoms (N = 1637)

from the list, participants experienced an average of 12 symptoms. As a significantly higher number of females experienced these symptoms, Figure 5 shows the above data separately for male and female participants. Pennebarker (1982) believed that the total number of symptoms could indicate interceptive sensitivity or a tendency to perceive and report more somatic symptoms (see more in Vulić-Prtorić, 2016).

The next step in the analysis and interpretation is the conversion of the obtained total results into deciles. This score is dimensional in that it examines a participant's problem across a continuum of frequency and severity levels. The higher the participant scores on the continuum, the higher the frequency and severity of the problem. The **decile** values of the total score can be found in Tables C.1 through C.7. For example, a 7th grade elementary school boy has the following PSS scores: he reports experiencing a total of 16 symptoms in the past 3 months (i.e., he has marked them with a number greater than 1). on the frequency scale he has a total score of 57 and on the severity scale he has a score of 55. According to Table C.2 these scores correspond to a decile 9 meaning that about 80% of students his age have lower scores and only 10% have higher scores. Given the guidelines in Box 5, these are clinically significant results that require additional professional attention.

The decile scores in Tables C.1 to C.7 were calculated from the normative group results. Guidelines for interpreting the results are provided in Box 6. Scores in **deciles 1, 2 and 3** are considered below average; scores in **deciles 4, 5, 6 and 7** are considered average. Although children and adults with higher scores within the average range are more likely to have somatic symptoms than children and adults with below-average scores, these differences are not sufficient to identify underlying problems that make them more vulnerable to developing somatic disorders. Scores in **deciles 8, 9, and 10** are considered above average and children and adults with scores in this range experience somatic symptoms to the extent that they may interfere with their daily functioning. Additionally, scores in **deciles 9 and 10** may be considered clinically significant and indicate an increased risk for somatic disorders. Because this score is largely empirically defined and it is an arbitrary determination, it cannot be considered sufficient to diagnose or predict future behaviour, but only to indicate that a person scoring at this level is at increased risk and require full clinician attention and additional clinical assessment. Given the increasing prevalence of Somatic Symptoms Disorder in children, adolescents and adults, the finding of high PSS scores is of particular importance as it may indicate risk for other psychosomatic difficulties and disorders.

Box 5 Interpretation guidelines for PSS results**GUIDELINES FOR THE INTERPRETATION OF DECILES**

- **decile 1, 2, 3 = below average**
 - **decile 4, 5, 6 decile = average**
 - **decile 7, 8, 9 and 10 decile = above average**
- **decile 9 and 10 = extremely elevated, clinically significant result**

!!! Remark:

In order to successfully interpret the PSS results, it is necessary to be informed about the process of developing the questionnaire and the scoring procedure.

For example, a participant may respond to a lower number of items by ticking the maximum number (4) and receive a below average or average total score. But, in reality, that person may be suffering from a low number but very intense symptoms and require full clinical attention.

It is important to remember that the PSS is a self-report measure that cannot be used to diagnose a specific disorder.

5.3 Symptom cluster / domain

Besides to analysis of results at the level of individual symptoms, analysis and interpretation at the level of clusters is often required. This involves forming clusters of somatic symptoms according to the needs of the clinical assessment. Here are some ways to form a cluster of symptoms in PSS:

- 1) Symptoms listed in PSS originally belong to 7 body organ systems (Table 1) and in this sense, the analysis of these clusters proved to be particularly informative. Tables B.2 and B.3 show the basic descriptive statistics of each cluster. For users wishing to analyse the results obtained in this way, the correlations between the clusters were calculated and presented in Tables B.4, B.5 and B.6. For frequency scale the correlations obtained range from 0.24 to 0.59 (Table B.4) and are highest between gastrointestinal symptoms and pseudoneurological ($r = 0.59$), pain ($r = 0.57$) and respiratory clusters ($r = 0.54$). The correlations for the severity scale (Table B.5) range from 0.30 to 0.62 and in this case the highest correlations are between the gastrointestinal symptoms and the same three clusters as mentioned above: pseudoneurological ($r = 0.62$), pain ($r = 0.58$) and respiratory ($r = 0.57$). Finally, the correlation matrix between the frequency scale and the

severity scale is presented in Table B.6. The correlations range from 0.63 to 0.72 meaning that participants who experience somatic symptoms more frequently also rate them as more distressing. The highest correlation between frequency and severity was for the gastrointestinal ($r = 0.72$), respiratory ($r = 0.68$) and dermatological ($r = 0.67$) symptoms. Since the symptom domain groups contain a different number of symptoms, the comparison requires dividing the total score for each cluster by the number of items in that cluster (see page 4 in Figure 5).

- 2) The second method is based on clusters obtained by factor analysis. This method of analysis is mainly needed for research purposes. Information on this form of clustering can be found in Chapter 3.2 of this manual and in Tables A.1 and A.2. However, grouping symptoms by factor solutions has its limitations, i.e. it can be inconsistent and sometimes does not contribute to better interpretability, especially in clinical assessment (see chapter 3.2).
- 3) The third method refers to specific somatic syndromes and disorders mainly related to stress, such as somatization, chronic fatigue syndrome, recurrent abdominal pain, muscle pain syndrome, anxiety related to health conditions and diseases, etc. In PSS, for example, there are three groups of symptoms that are crucial for the diagnosis of somatization according to the DSM-IV criteria: pseudoneurological, gastrointestinal symptoms, and pain symptoms/weakness. Furthermore, the most common symptoms of chronic fatigue syndrome (CFS) are sore throat, fever, muscle pain, joint pain, headache, abdominal pain, lack of energy, need for rest, multiple joint pain, impaired short-term memory, restless sleep, etc. (Farmer et al., 2004; Afari, 2003). This specific constellation of symptoms can be extracted from the PSS to provide information about whether the person suffers from or is even suspected of being at risk of developing CFS. Similarly, symptom clusters can be formed for some other clinical syndromes and disorders.

5.4 Health status

Two additional questions in the PSS relate to general health status:

The first refers to the **subjective experience of health**, i.e. the self-assessment of one's own health status (*How would you rate your health in general?*), to which the participant responds on a 4-point scale (1 = bad, 2 = good, 3 = very good, 4 = excellent). This question was answered by 1345 participants and most of them rated their own health status as very good or excellent ($M = 3.43$; $SD = 0.69$; range = 1-4). Specifically, 2.08% of the participants rated their health status as bad, 11.97% as good, 42.38% as

very good, and 43.57% as excellent (Table 8). Primary school students (14.8% boys and 13.61% girls) rated their health as excellent, followed by secondary school students (6.02% boys and 4.31% girls) and finally university students (1.56% males and 3.27% females). Analysis of variance revealed a statistically significant gender difference, $F(1,1340) = 16.21$; $p = 0.00$. Figure 4 shows a trend in the reported health status: with age, the estimation of health status decreases and this difference is also statistically significant: $F(2,1340) = 36.63$; $p = 0.00$. However, the interaction effects of gender and age was non-significant: $F(2,1340) = 0.84$; $p = 0.43$.

TABLE 8 Number of participants (%) in each response category to the question *How would you rate your health in general?* (N = 1345)

School / age groups	N (%)	1 bad	2 good	3 very good	4 excellent	Total
Males (N=554)						
Primary school	N	8	14	101	199	322
	N%	2.48%	4.35%	31.37%	61.80%	47.77%
Secondary school	N	3	21	68	81	173
	N%	1.73%	12.14%	39.31%	46.82%	44.82%
University students	N	2	10	26	21	59
	N%	3.39%	16.95%	44.07%	35.59%	20.70%
Total	N	13	45	195	301	554
	N%	2.35%	8.12%	35.20%	54.33%	100%
Females (N=791)						
Primary school	N	5	30	134	183	352
	N%	1.42%	8.52%	38.07%	51.99%	52.23%
Secondary school	N	5	30	120	58	213
	N%	2.35%	14.08%	56.34%	27.23%	55.18%
University students	N	5	56	121	44	226
	N%	2.21%	24.78%	53.54%	19.47%	79.30%
Total	N	15	116	375	285	791
	N%	1.90%	14.66%	47.41%	36.03%	100%
Total:		28	161	570	586	1345
		2.08%	11.97%	42.38%	43.57%	100%

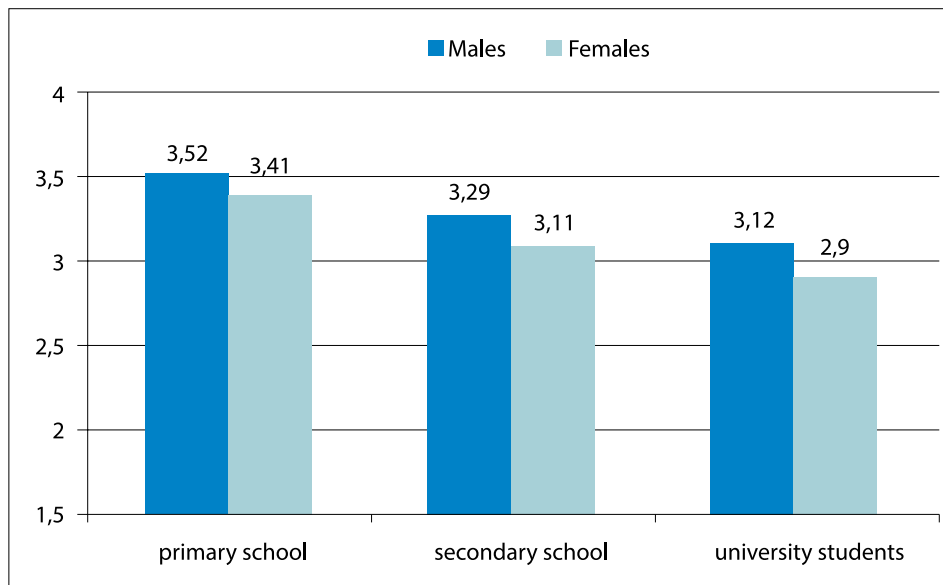


FIGURE 4 Mean scores of **health status** ratings in relation to participants' age and gender - N = 1345 (N_{males} = 696; N_{female} = 941)

Significant correlations ($p < .05$) were found between health status and frequency score ($r = -.36$) and severity score ($r = -.25$): participants who rated their health status as better had a lower number of symptoms, they occurred less frequently, and they interfered less with their daily life.

Second question (36) indicates the severity of the symptoms listed (*Have you had to visit the doctor because of your health-related problems?*) and is answered by ticking the answer YES or NO. This question was answered by 1580 participants. Its prevalence in each response category and in relation to age and gender are shown in Table 9. Responses to this question revealed that 66.52% of the participants did not need to see a doctor for their symptoms, while 33.48% asked a doctor for help. Table 10 shows the results of these two groups of participants in terms of number of symptoms, frequency and severity. Again, all differences were statistically significant: participants who needed medical help for their health problems also had a higher number of symptoms. These symptoms occurred more frequently and interfered more with their daily functioning. Also, as expected, significant correlations ($p < .05$) were found between seeing a doctor and the frequency of somatic symptoms ($r = 0.20$) and their severity ($r = 0.22$).

TABLE 9 Number of participants (%) in each category of responses to the question *Have you had to visit the doctor because of your health-related problems?* (N = 1580)

Age group	N (%)	0 No	1 Yes	Total
Males (N=661)				
Primary school	N	247	143	390
	N%	63.33%	36.67%	100%
Secondary school	N	141	55	196
	N%	71.94%	28.06%	100%
University students	N	61	14	75
	N%	81.33%	18.67%	100%
Total	N	449	212	661
	N%	67.93%	32.07%	100%
Females (N=919)				
Primary school	N	265	129	394
	N%	67.26%	32.74%	100%
Secondary school	N	164	109	273
	N%	60.07%	39.93%	100%
University students	N	173	79	252
	N%	68.65%	31.35%	100%
Total	N	602	317	919
	N%	65.51%	34.49%	100%
Total		1051	529	1580
		66.52%	33.48%	100%

TABLE 10 Somatic symptoms prevalence, frequency and severity related to the need for medical assistance (N=1580)

<i>Have you had to visit the doctor because of your health-related problems?</i>	Somatic symptoms						
	N	Number of symptoms		Frequency		Severity	
		M	SD	M	SD	M	SD
0 = NO	1051	11.4	6.17	49.89	9.97	47.27	9.18
1 = YES	529	14.0	6.80	54.72	12.69	51.96	11.03
t		-7.84		-8.26		-8.93	
df		1578		1578		1578	
p		0.00		0.00		0.00	

5.5 Correlations between PSS and other constructs

As mentioned earlier, the PSS has been used in a number of studies to date. Since these studies may provide useful information for future application and interpretation of the results, some findings from these studies are briefly mentioned here and the reader is referred to the original papers.

Table 11 provide the correlations of the PSS total score with some other constructs. As can be observed, the experience of somatic symptoms, both frequency and their severity, in samples of children and adolescents are significantly associated with health-related quality of life, symptoms of depression and anxiety sensitivity, hyperactivity and aggression. In samples of adults (mostly students), significant correlations are found with symptoms of depression and anxiety and related variables (rumination, stress, and mindfulness).

TABLE 11 Relationship between PSS total score and other constructs in samples of children, adolescents and adults

RESEARCHES IN THE SAMPLES OF CHILDREN AND ADOLESCENTS				
Construct	Sample	Correlations between PSS and other constructs		References
		frequency scale	severity scale	
School achievement	N=1240 (age 11-18)	$r=-0.09$	$r=-0.06$	Vulić-Prtorić & Cifrek Kolarić (2011)
Depression	N=315 (age 11-15)	$r=0.46$	$r=0.22$	Vulić-Prtorić & Macuka (2006)
Anxiety sensitivity	N=275 (age 11-15)	$r=0.36$	$r=0.33$	Vulić-Prtorić & Cifrek Kolarić (2011)
Anxiety in the situations of social evaluation	N=211 (age 16-19)	$r=0.24$	$r=0.24$	Gugić (2015)
Somatic symptoms of anxiety	N=275 (age 11-15)	$r=0.41$	$r=0.40$	Vulić-Prtorić & Cifrek Kolarić (2011)
Hyperactivity	N=219 (age 11-15)	$r=0.38$	No data available	Vulić-Prtorić & Cifrek Kolarić (2011)
Aggression	N=216 (age 11-15)	$r=0.48$ in girls; 0.61 in boys	No data available	Vulić-Prtorić & Cifrek Kolarić (2011)
Coping strategies	N=275 (age 11-15)	From $r=0.20$ to $r=0.43$ for each strategy	No data available	Vulić-Prtorić. Sorić & Penezić (2006)

Coping strategies	N=211 (age 16-19)	From r=0.26 to r=0.29 for each strategy	From r=0.28 to r=0.32 for each strategy	Gugić (2015)
Coping strategies	N=370 (age 12-14 i 16-18)	From r=0.15 to r=0.19 for each strategy	From r=0.18 to r=.035 for each strategy	Kozjak Mikić & Perinović (2008).
Family relationships	N=198 (age 11-15)	r=-0.16 Acceptance - father r=0.29 Control - mother; r=0.32 control - father	Correlations are nonsignificant	Vulić-Prtorić & Cifrek Kolarić (2011)
Health life quality	N=168 (age 11-15)	r=-0.68	No data available	Perasović. (2013)

RESEARCHES IN THE SAMPLES OF ADULTS

Construct	Sample	Correlations between PSS and other constructs		References
		frequency scale	severity scale	
Emotional adaptation to study	N=202 (M _{age} =22.43; SD _{age} =2.74)	r=-0.39	r=-0.51	Bužančić (2011)
Social adaptation to study		Correlations are nonsignificant	r=-0.18	
Depression	N=125 (M _{age} =21.44; SD _{age} =4.15)	r=0.48	r=0.50	Vulić-Prtorić (2016)
Depressive rumination		r=0.44	r=0.45	
Anxiety	N=202 (M _{age} =22.43; SD _{age} =2.74)	r=0.16	r=0.30	Bužančić (2011)
Anxiety	N=125 (M _{age} =21.44; SD _{age} =4.15)	r=0.57	r=0.57	Vulić-Prtorić (2016)
Stress		r=0.45	r=0.49	
Mindfulness		r=-0.51	r=-0.48	
Attention		r=0.55	r=0.54	
Anger rumination		r=0.46	r=0.40	

*only significant correlations are presented (p<0.05)

5.6 Case Report

In this chapter, a case is described to illustrate the analysis and interpretation of the results obtained with PSS.

Iva M. is a secondary school student in the 3rd grade. She filled in the PSS as part of the psychological evaluation because she has been irritable and had concentration and learning difficulties in recent months. From the interview, it is learned that her boyfriend left her during this time and she had a conflict with her best friend.

Iva has no diagnosed diseases (answer to question 37, Figure 5), nor has she consulted a doctor for her somatic symptoms so far, nor has she taken any medication (answer to questions 36 and 38, Figure 5). Scoring the PSS and converting the results into deciles (Table C.5) revealed that Iva experiences a total of 10 of the 35 listed symptoms (decile 3), the frequency of these symptoms is 55 (decile 7), and she rates them as less bothersome (the score of 46 is in decile 4). This means that Iva experiences a smaller number of symptoms that she does not consider to be significantly disruptive to her daily life (or she have mechanisms to successfully cope with them), but her symptoms appear very frequently, higher than average. Analysis of responses to each item shows that they are predominantly gastrointestinal, along with two cardiovascular and three pain symptoms (PSS profile on page 4, Figure 5). The most distressing symptoms are: back pain, lack of energy and fatigue and palpitations. These symptoms should be at the forefront of treatment goal setting. It should also not be overlooked that she reports headache as the most unpleasant pain. Its intensity is average, but because of the headache she takes analgesics 1-2 times per week (responses to questions 39-42 page 3, Figure 5).

Since other results from the somatic symptom assessment algorithm indicate that Iva has elevated scores for social anxiety and anxiety sensitivity (SKAD-62) and frequently uses avoidance and distraction strategies when coping with stressful situations (SUO), the results suggest that the somatic symptoms are part of heightened anxiety responses to a recent stressful event.

FIGURE 5A 1st page of Questionnaires PSS

PSS

With this questionnaire we would like to find more about health problems in children and adults. For the beginning: **How would you rate your health in general?** (Mark your answer with ☒)

excellent
 very good
 good
 bad

Listed below are different health problems that occasionally bothered each of us. Please, beside each problem mark your answer on two questions on the right side:

1. How often have you had this problem within last 3 months? and
2. How much does it bother you in daily activities?

		1. How often have you had this problem?				2. How much does it bother you?		
		Never	A few times a month	A few times a week	Almost every day	Not at all	A little	A lot
1.	Headaches	1	2	3	4	1	2	3
2.	Vertigo	1	2	3	4	1	2	3
3.	Back pain	1	2	3	4	1	2	3
4.	Lack of energy / Fatigue	1	2	3	4	1	2	3
5.	High body temperature	1	2	3	4	1	2	3
6.	Pain in joints	1	2	3	4	1	2	3
7.	Pain in arms or /and legs	1	2	3	4	1	2	3
8.	Loss of balance	1	2	3	4	1	2	3
9.	Muscle tenseness	1	2	3	4	1	2	3
10.	Muscle weakness	1	2	3	4	1	2	3
11.	Lump in throat	1	2	3	4	1	2	3
12.	Double vision	1	2	3	4	1	2	3
13.	Blurred vision	1	2	3	4	1	2	3
14.	Sudden loss of sight	1	2	3	4	1	2	3
15.	Sudden loss of hearing	1	2	3	4	1	2	3

1

FIGURE 5b 2nd page of Questionnaires PSS

PSS

		1. How often have you had this problem?				2. How much does it bother you?		
		Never	A few times a month	A few times a week	Almost every day	Not at all	A little	A lot
16.	Fainting	1	2	3	4	1	2	3
17.	Sudden memory loss	1	2	3	4	1	2	3
18.	Heart beating too fast	1	2	3	4	1	2	3
19.	Pain in chest	1	2	3	4	1	2	3
20.	Nausea	1	2	3	4	1	2	3
21.	Pain in stomach	1	2	3	4	1	2	3
22.	Diarrhea	1	2	3	4	1	2	3
23.	Vomiting	1	2	3	4	1	2	3
24.	Bloated stomach	1	2	3	4	1	2	3
25.	Appetite loss	1	2	3	4	1	2	3
26.	Food intolerance	1	2	3	4	1	2	3
27.	Constipation	1	2	3	4	1	2	3
28.	Heart - burn	1	2	3	4	1	2	3
29.	Breathing difficulties	1	2	3	4	1	2	3
30.	Sense of choking	1	2	3	4	1	2	3
31.	Skin rash	1	2	3	4	1	2	3
32.	Skin itching / redness	1	2	3	4	1	2	3
33.	Acne and pimples	1	2	3	4	1	2	3
34.	Cold (sore throat, cough, etc.)	1	2	3	4	1	2	3
35.	Over - perspiration	1	2	3	4	1	2	3

gastro!

FIGURE 5c 3rd page of Questionnaires PSS

PSS

36. Have you had to visit the doctor because of your health-related problems?
 No Yes

37. Do you have a disease such as asthma, allergies, diabetes etc.?
 No Yes Which one? _____

38. Do you have to take some medicine for those health problems?
 No Yes What pills? _____

39. If you have been suffering from pain in the last 3 months, what would you describe as the most unpleasant? Name them: headaches

40. How would you rate your pain intensity on the scale from 0 to 10? (circle the number).

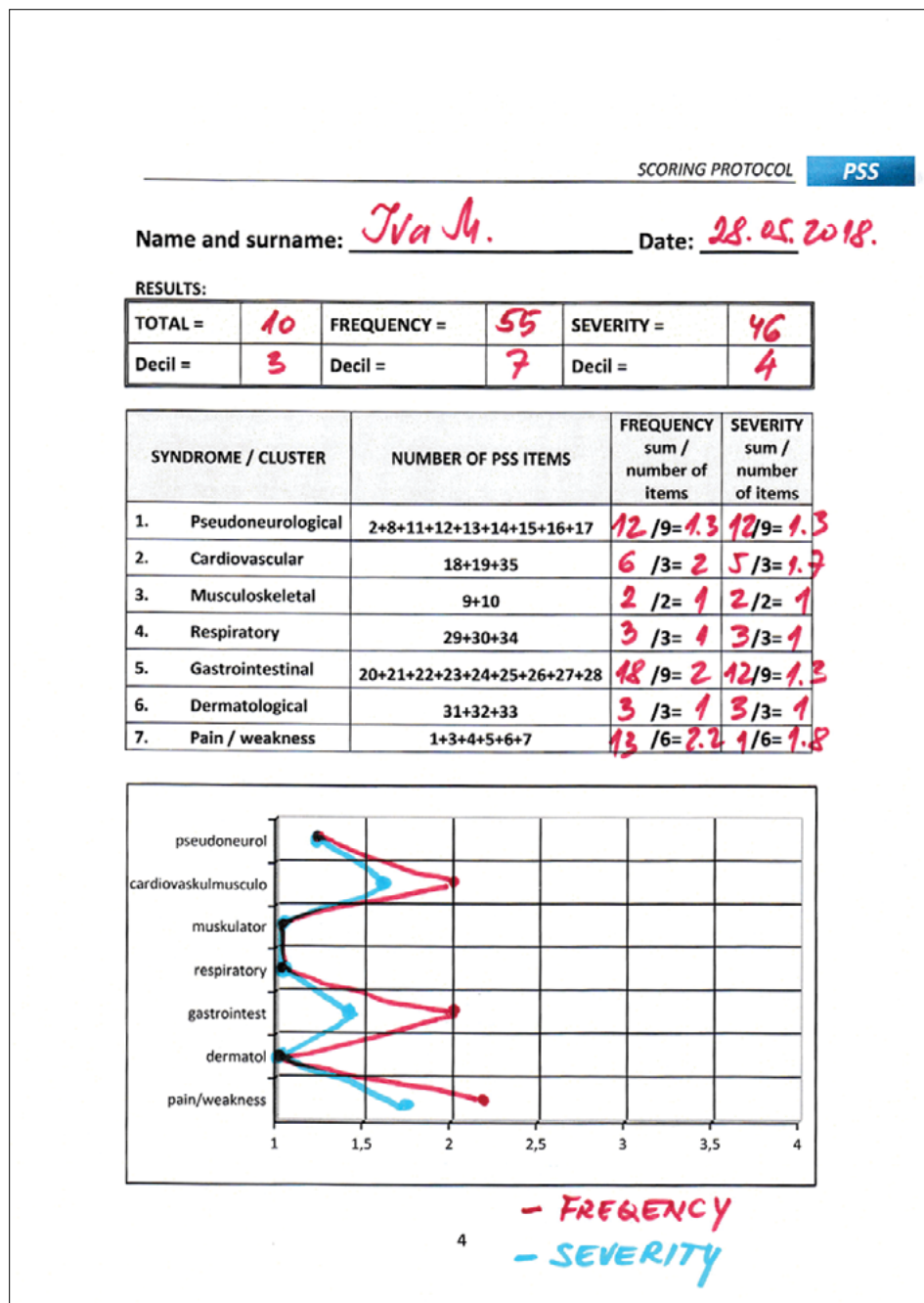
0	1	2	3	4	5	6	7	8	9	10
No pain	Very mild pain			Moderate pain			Intense pain	Very intense pain		

41. Do you take some painkillers?
 No Yes Which one? Lupocet

42. If your answer is YES, how often did you take painkillers in the last 3 months?
 everyday
 few times a week
 1-2 times a week
 several times a month
 1-2 times a month

3

FIGURE 5b 4th page of Questionnaires PSS





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- A Item statistics
- B Syndrome / cluster statistics
- C Deciles

A - ITEM STATISTICS

Table A.1 Factor loadings (Varimax rotated) obtained with principal-components factor analysis of the PSS results - **Frequency** (N=1637)

Table A.2 Factor loadings (Varimax rotated) obtained with principal-components factor analysis of the PSS results - **Severity** (N=1637)

Table A.3 Descriptive statistics - **Frequency** (N=1637)

Table A.4 Descriptive statistics - **Severity** (N=1637)

Table A.5 Intercorrelations between item frequency and severity (N=1637)

Table A.6 Number of participants (%) in each response category to the question *How often have you had this problem within last 3 months?* (N=1637)

Table A.7 Number of participants (%) in each response category to the question *How much does it bother you in daily activities?* (N=1637)

B SYNDROME / CLUSTER STATISTICS

Table B.1 Somatic symptoms by body organ area and item number of these symptoms

Table B.2 Descriptive statistics - **Frequency** (N=1637)

Table B.3 Descriptive statistics - **Severity** (N=1637)

Table B.4 Correlations between clusters **Frequency** (N=1637)

Table B.5 Correlations between clusters - **Severity** (N=1637)

Table B.6 Ccorrelations between clusters - **Frequency and Severity** (N=1637)

C DECILES

Table C.1 Decile equivalents for PSS raw scores – **whole sample** (N=1637)

Table C.2 Decile equivalents for PSS raw scores – **primary school - boys** (N=412)

Table C.3 Decile equivalents for PSS raw scores – **primary school – girls** (N=404)

Table C.4 Decile equivalents for PSS raw scores – **secondary school - boys** (N=209)

Table C.5 Decile equivalents for PSS raw scores – **secondary school – girls** (N=285)

Table C.6 Decile equivalents for PSS raw scores – **university students - males (N=75)**

Table C.7 Decile equivalents for PSS raw scores – **university students - females (N=252)**

A - ITEM STATISTICS

TABLE A.1 Factor loadings (Varimax rotated) obtained with principal-components factor analysis of the PSS results - **Frequency** (N= 1637)

		F1	F2	F3	F4	F5	F6	F7	h ²
1.	Headaches	0.141	0.097	0.211	0.471	-0.184	0.141	0.227	0.401
2.	Vertigo	0.142	0.351	0.022	0.480	-0.057	0.117	0.233	0.445
3.	Back pain	0.511	0.061	-0.130	0.249	0.031	-0.023	0.330	0.454
4.	Lack of energy / Fatigue	0.453	0.120	0.013	0.469	-0.000	0.085	0.134	0.466
5.	High body temperature	0.045	0.176	0.600	0.104	0.007	0.121	-0.048	0.420
6.	Pain in joints	0.728	0.145	0.129	-0.087	0.076	0.085	0.048	0.591
7.	Pain in arms and/or legs	0.749	0.140	0.117	0.066	0.106	0.108	0.070	0.626
8.	Loss of balance	0.250	0.502	0.062	0.248	0.032	0.126	0.181	0.430
9.	Muscle tenseness	0.618	0.033	0.136	0.152	0.057	0.072	0.087	0.441
10.	Muscle weakness	0.560	0.114	0.101	0.220	0.029	0.083	0.172	0.423
11.	Lump in throat	0.149	0.132	0.110	0.316	0.037	0.074	0.401	0.319
12.	Double vision	0.118	0.608	0.084	0.175	0.102	0.027	0.216	0.479
13.	Blurred vision	0.239	0.521	0.032	0.265	0.062	-0.064	0.207	0.450
14.	Sudden loss of sight	0.088	0.672	0.049	-0.007	0.025	0.052	-0.002	0.465
15.	Sudden loss of hearing	-0.007	0.486	0.190	-0.087	0.120	-0.057	0.189	0.334
16.	Fainting	0.001	0.619	0.187	0.023	-0.003	0.139	0.116	0.452
17.	Sudden memory loss	0.090	0.436	0.066	0.197	0.367	-0.079	-0.005	0.382
18.	Heart beating too fast	0.204	0.184	0.030	0.434	0.161	0.146	0.307	0.406
19.	Pain in chest	0.160	0.137	-0.073	0.321	0.033	0.231	0.464	0.423
20.	Nausea	0.183	0.142	0.388	0.431	-0.031	0.196	0.245	0.489
21.	Pain in stomach	0.175	0.015	0.299	0.317	0.052	0.071	0.398	0.387
22.	Diarrhoea	0.125	0.080	0.627	0.055	0.157	-0.017	0.245	0.503
23.	Vomiting	0.093	0.272	0.624	0.008	0.025	0.139	0.075	0.498
24.	Bloated stomach	0.131	0.069	0.210	0.416	0.109	-0.285	0.419	0.507

25.	Appetite loss	0.164	0.077	0.116	0.253	-0.009	0.646	0.155	0.552
26.	Food intolerance	0.150	0.096	0.215	0.086	0.139	0.670	0.017	0.555
27.	Constipation	0.044	0.084	0.228	0.158	0.184	-0.162	0.461	0.359
28.	Heartburn	0.196	0.127	0.298	0.106	0.039	-0.181	0.495	0.434
29.	Breathing difficulties	0.125	0.256	0.042	-0.029	0.114	0.249	0.700	0.649
30.	Sense of choking	0.074	0.345	0.031	0.011	0.115	0.218	0.680	0.649
31.	Skin rash	0.091	0.152	0.049	0.050	0.733	0.080	0.187	0.615
32.	Skin itching/redness	0.101	0.092	0.119	0.085	0.765	0.072	0.146	0.651
33.	Acne and pimples	-0.031	-0.006	-0.003	0.626	0.301	0.027	-0.035	0.485
34.	Cold (sore throat, cough etc.)	0.127	-0.074	0.377	0.081	0.181	0.303	0.216	0.341
35.	Over-perspiration	0.230	0.011	0.163	0.343	0.245	0.135	-0.035	0.277
	Eigenvalue	2.840	2.827	2.045	2.526	1.679	1.522	2.921	
	Percentage of variance	8.1	8.1	5.8	7.2	4.8	4.3	8.3	

TABLE A.2 Factor loadings (Varimax rotated) obtained with principal-components factor analysis of the PSS results - **Severity** (N=1637)

		F1	F2	F3	F4	F5	F6	F7	h ²
1.	Headaches	0.288	0.043	-0.168	0.273	0.292	0.263	0.256	0.408
2.	Vertigo	0.153	0.269	-0.149	0.282	0.201	0.153	0.380	0.406
3.	Back pain	0.587	0.032	0.054	0.283	-0.027	0.085	0.144	0.457
4.	Lack of energy / Fatigue	0.418	0.031	-0.094	0.251	-0.034	0.401	0.160	0.435
5.	High body temperature	0.185	0.170	-0.006	0.089	0.587	0.116	0.040	0.431
6.	Pain in joints	0.643	0.167	0.198	-0.076	0.183	-0.090	0.138	0.547
7.	Pain in arms and/or legs	0.701	0.133	0.183	0.029	0.142	0.033	0.079	0.571
8.	Loss of balance	0.199	0.490	-0.039	0.168	0.181	0.057	0.283	0.425
9.	Muscle tenseness	0.595	0.178	-0.005	0.064	0.234	0.169	0.014	0.474
10.	Muscle weakness	0.480	0.264	-0.004	0.119	0.162	0.238	0.188	0.432
11.	Lump in throat	0.262	0.164	-0.001	0.213	0.017	0.326	0.339	0.363
12.	Double vision	0.187	0.663	-0.014	0.101	0.128	0.090	0.227	0.561
13.	Blurred vision	0.211	0.561	0.012	0.199	0.025	0.205	0.196	0.480
14.	Sudden loss of sight	0.100	0.781	0.131	0.001	0.091	0.074	0.055	0.654
15.	Sudden loss of hearing	0.064	0.754	0.166	0.093	0.115	-0.016	0.001	0.622
16.	Fainting	0.037	0.714	0.019	0.053	0.150	0.004	0.221	0.585
17.	Sudden memory loss	0.086	0.526	0.204	0.179	0.102	0.132	0.093	0.395
18.	Heart beating too fast	0.210	0.126	-0.034	0.233	0.017	0.243	0.554	0.482
19.	Pain in chest	0.197	0.136	0.025	0.157	0.089	0.214	0.579	0.471
20.	Nausea	0.165	0.083	-0.112	0.372	0.457	0.187	0.237	0.485
21.	Pain in stomach	0.162	0.079	0.043	0.514	0.378	0.148	0.174	0.493
22.	Diarrhoea	0.089	0.118	0.143	0.375	0.546	0.037	0.051	0.486
23.	Vomiting	0.029	0.200	0.118	0.113	0.697	0.012	0.123	0.569
24.	Bloated stomach	0.084	0.146	0.098	0.609	0.107	0.216	0.216	0.514
25.	Appetite loss	0.199	0.143	0.119	-0.073	0.364	0.258	0.321	0.382
26.	Food intolerance	0.191	0.116	0.240	-0.211	0.473	0.274	0.156	0.475
27.	Constipation	0.047	0.299	0.287	0.608	0.029	0.066	0.090	0.557
28.	Heartburn	0.150	0.219	0.311	0.427	0.156	0.013	0.178	0.406

29.	Breathing difficulties	0.042	0.215	0.282	0.055	0.182	0.013	0.695	0.647
30.	Sense of choking	0.035	0.277	0.247	0.135	0.169	-0.057	0.680	0.650
31.	Skin rash	0.154	0.138	0.733	0.145	0.062	0.146	0.139	0.645
32.	Skin itching/redness	0.098	0.141	0.680	0.152	0.134	0.239	0.085	0.598
33.	Acne and pimples	-0.013	0.105	0.100	0.089	0.053	0.710	0.089	0.543
34.	Cold (sore throat, cough etc.)	0.103	-0.015	0.121	0.082	0.297	0.555	0.077	0.434
35.	Over-perspiration	0.117	0.126	0.177	0.096	0.097	0.621	0.079	0.471
	Eigenvalue	2.673	3.722	1.731	2.193	2.433	2.187	2.616	
	Percentage of variance	7.6	10.6	4.9	6.3	7.0	6.2	7.5	

TABLE A.3 Descriptive statistics - Frequency (N=1637)

		M	C	SD	K-S d p<0,01	A (0,06)	S (0,12)	r _{it}
1.	Headaches	1.94	2.00	0.76	0.29	0.74	0.64	0.43
2.	Vertigo	1.46	1.00	0.71	0.39	1.60	2.26	0.49
3.	Back pain	1.91	2.00	0.94	0.24	0.83	-0.21	0.44
4.	Lack of energy / Fatigue	2.32	2.00	0.96	0.23	0.26	-0.85	0.51
5.	High body temperature	1.37	1.00	0.55	0.41	1.26	1.38	0.29
6.	Pain in joints	1.55	1.00	0.78	0.36	1.41	1.39	0.41
7.	Pain in arms and/or legs	1.68	2.00	0.81	0.29	1.10	0.71	0.51
8.	Loss of balance	1.23	1.00	0.57	0.48	2.86	8.72	0.51
9.	Muscle tenseness	1.55	1.00	0.76	0.35	1.37	1.46	0.43
10.	Muscle weakness	1.35	1.00	0.61	0.42	1.87	3.64	0.49
11.	Lump in throat	1.49	1.00	0.72	0.37	1.45	1.69	0.46
12.	Double vision	1.19	1.00	0.54	0.49	3.31	11.53	0.48
13.	Blurred vision	1.37	1.00	0.72	0.43	2.08	3.84	0.49
14.	Sudden loss of sight	1.09	1.00	0.40	0.52	5.41	31.71	0.29
15.	Sudden loss of hearing	1.05	1.00	0.29	0.53	6.78	53.74	0.28
16.	Fainting	1.06	1.00	0.29	0.53	5.27	32.07	0.35
17.	Sudden memory loss	1.17	1.00	0.50	0.50	3.49	13.48	0.34
18.	Heart beating too fast	1.80	2.00	0.84	0.25	0.90	0.22	0.53
19.	Pain in chest	1.48	1.00	0.71	0.37	1.51	1.96	0.48
20.	Nausea	1.69	2.00	0.71	0.26	0.94	1.01	0.56
21.	Pain in stomach	1.47	1.00	0.68	0.37	1.53	2.26	0.49
22.	Diarrhoea	1.35	1.00	0.55	0.41	1.66	3.45	0.41
23.	Vomiting	1.25	1.00	0.50	0.46	2.17	5.67	0.37
24.	Bloated stomach	1.39	1.00	0.67	0.40	1.92	3.77	0.45
25.	Appetite loss	1.55	1.00	0.74	0.34	1.35	1.48	0.43
26.	Food intolerance	1.68	1.00	0.87	0.31	1.22	0.74	0.35
27.	Constipation	1.23	1.00	0.58	0.48	2.88	8.75	0.37
28.	Heartburn	1.29	1.00	0.61	0.45	2.40	6.04	0.44

29.	Breathing difficulties	1.33	1.00	0.63	0.44	2.12	4.50	0.52
30.	Sense of choking	1.18	1.00	0.50	0.49	3.31	11.85	0.53
31.	Skin rash	1.16	1.00	0.48	0.49	3.74	16.00	0.37
32.	Skin itching/redness	1.28	1.00	0.62	0.46	2.60	7.02	0.37
33.	Acne and pimples	1.81	2.00	0.97	0.28	1.06	0.07	0.28
34.	Cold (sore throat, cough etc.)	1.97	2.00	0.71	0.34	0.86	1.42	0.35
35.	Over-perspiration	1.74	1.00	0.96	0.32	1.11	0.11	0.34

Note. M = mean, C = median, SD = standard deviation, **K-S d** Kolmogorov – Smirnov test;, A = Skewness (Std.Err.), S = Kurtosis (Std.Err.), r_{it} = correlation of each item with the PSS total score.

TABLE A.4 Descriptive statistics - **Severity** (N=1637)

		M	C	SD	K-S d p<0,01	A (0,06)	S (0,12)	r _{it}
1.	Headaches	1.80	2.00	0.65	0.25	0.26	-0.67	0.47
2.	Vertigo	1.44	1.00	0.63	0.35	1.29	0.60	0.50
3.	Back pain	1.65	1.60	0.65	0.26	0.60	-0.54	0.41
4.	Lack of energy / Fatigue	1.95	2.00	0.69	0.25	0.11	-0.86	0.41
5.	High body temperature	1.45	1.00	0.63	0.35	1.24	0.51	0.43
6.	Pain in joints	1.46	1.00	0.61	0.34	1.10	0.31	0.41
7.	Pain in arms and/or legs	1.55	1.49	0.62	0.30	0.80	-0.22	0.46
8.	Loss of balance	1.21	1.00	0.46	0.40	2.43	5.42	0.52
9.	Muscle tenseness	1.40	1.00	0.56	0.35	1.26	0.80	0.46
10.	Muscle weakness	1.31	1.00	0.51	0.37	1.63	1.97	0.54
11.	Lump in throat	1.43	1.00	0.61	0.34	1.30	0.68	0.48
12.	Double vision	1.19	1.00	0.46	0.41	2.77	7.09	0.54
13.	Blurred vision	1.34	1.00	0.58	0.38	1.75	2.03	0.53
14.	Sudden loss of sight	1.13	1.00	0.41	0.42	3.83	13.81	0.46
15.	Sudden loss of hearing	1.10	1.00	0.35	0.41	4.34	18.81	0.43
16.	Fainting	1.11	1.00	0.38	0.42	4.03	15.98	0.47
17.	Sudden memory loss	1.21	1.00	0.50	0.42	2.73	6.53	0.46
18.	Heart beating too fast	1.48	1.00	0.61	0.33	1.03	0.14	0.49
19.	Pain in chest	1.42	1.00	0.60	0.34	1.30	0.76	0.51
20.	Nausea	1.65	1.67	0.66	0.27	0.61	-0.59	0.52
21.	Pain in stomach	1.51	1.00	0.67	0.33	1.11	0.02	0.52
22.	Diarrhoea	1.33	1.00	0.56	0.38	1.70	2.03	0.46
23.	Vomiting	1.29	1.00	0.55	0.39	2.02	3.15	0.45
24.	Bloated stomach	1.31	1.00	0.54	0.36	1.80	2.42	0.50
25.	Appetite loss	1.34	1.00	0.55	0.37	1.59	1.72	0.47
26.	Food intolerance	1.47	1.00	0.64	0.35	1.18	0.31	0.41
27.	Constipation	1.19	1.00	0.45	0.39	2.74	6.99	0.46
28.	Heartburn	1.26	1.00	0.52	0.38	2.16	4.01	0.47

29.	Breathing difficulties	1.34	1.00	0.58	0.37	1.75	2.04	0.52
30.	Sense of choking	1.22	1.00	0.51	0.39	2.60	5.81	0.52
31.	Skin rash	1.18	1.00	0.45	0.41	2.95	8.22	0.43
32.	Skin itching/redness	1.25	1.00	0.50	0.39	2.27	4.47	0.43
33.	Acne and pimples	1.55	1.00	0.71	0.32	1.02	-0.31	0.36
34.	Cold (sore throat, cough etc.)	1.80	2.00	0.68	0.23	0.32	-0.78	0.39
35.	Over-perspiration	1.51	1.00	0.67	0.34	1.07	-0.03	0.43

Note. M = mean, C = median, SD = standard deviation, **K-S d** Kolmogorov – Smirnov test;, A = Skewness (Std.Err.), S = Kurtosis (Std.Err.), r_{it} = correlation of each item with the PSS total score.

TABLE A.5 Intercorrelations between item frequency and severity (N=1637)

		r
1.	Headaches	0.55
2.	Vertigo	0.65
3.	Back pain	0.59
4.	Lack of energy / Fatigue	0.51
5.	High body temperature	0.64
6.	Pain in joints	0.69
7.	Pain in arms and/or legs	0.62
8.	Loss of balance	0.66
9.	Muscle tenseness	0.63
10.	Muscle weakness	0.70
11.	Lump in throat	0.67
12.	Double vision	0.67
13.	Blurred vision	0.69
14.	Sudden loss of sight	0.58
15.	Sudden loss of hearing	0.48
16.	Fainting	0.61
17.	Sudden memory loss	0.66
18.	Heart beating too fast	0.51
19.	Pain in chest	0.70
20.	Nausea	0.65
21.	Pain in stomach	0.77
22.	Diarrhoea	0.66
23.	Vomiting	0.66
24.	Bloated stomach	0.67
25.	Appetite loss	0.55
26.	Food intolerance	0.58
27.	Constipation	0.66
28.	Heartburn	0.70

29.	Breathing difficulties	0.76
30.	Sense of choking	0.75
31.	Skin rash	0.70
32.	Skin itching/redness	0.68
33.	Acne and pimples	0.56
34.	Cold (sore throat, cough etc.)	0.50
35.	Over-perspiration	0.62

Note. All correlations are significant $p < 0,05$

TABLE A.6 Number of participants (%) in each response category to the question *How often have you had this problem within last 3 months?* (N=1637)

	Symptom	Never	A few times a month	A few times a week	Almost every day
1.	Headaches	27.55	55.83	11.97	4.64
2.	Vertigo	65.06	26.63	6.11	2.20
3.	Back pain	40.26	37.63	13.13	8.98
4.	Lack of energy / Fatigue	20.95	39.65	25.59	13.81
5.	High body temperature	65.79	31.52	2.32	0.37
6.	Pain in joints	60.72	27.61	8.31	3.35
7.	Pain in arms and/or legs	49.48	36.89	9.59	4.03
8.	Loss of balance	82.59	13.19	2.57	1.64
9.	Muscle tenseness	58.52	31.03	7.45	2.99
10.	Muscle weakness	71.11	24.00	3.67	1.22
11.	Lump in throat	62.55	28.28	7.14	2.02
12.	Double vision	86.50	9.53	2.44	1.53
13.	Blurred vision	74.34	17.29	5.44	2.93
14.	Sudden loss of sight	94.19	3.85	0.92	1.04
15.	Sudden loss of hearing	95.91	3.24	0.43	0.43
16.	Fainting	94.75	4.34	0.79	0.12
17.	Sudden memory loss	87.05	10.01	1.71	1.22
18.	Heart beating too fast	42.94	39.77	12.34	4.95
19.	Pain in chest	62.98	28.41	6.41	2.20
20.	Nausea	43.98	46.43	7.21	2.38
21.	Pain in stomach	62.98	29.87	5.19	1.95
22.	Diarrhoea	68.97	28.71	1.47	0.86
23.	Vomiting	77.64	20.40	1.34	0.61
24.	Bloated stomach	69.58	24.37	3.79	2.26
25.	Appetite loss	58.22	31.83	7.21	2.75
26.	Food intolerance	53.57	31.52	8.86	6.05
27.	Constipation	82.89	12.71	2.69	1.71

28.	Heartburn	77.64	17.41	3.18	1.77
29.	Breathing difficulties	74.83	19.36	4.22	1.59
30.	Sense of choking	86.81	9.84	2.38	0.98
31.	Skin rash	87.72	10.02	0.98	1.28
32.	Skin itching/redness	79.35	15.69	2.69	2.26
33.	Acne and pimples	49.18	31.58	9.22	10.02
34.	Cold (sore throat, cough etc.)	22.48	63.53	9.10	4.89
35.	Over-perspiration	54.86	25.41	11.42	8.31

TABLE A.7 Number of participants (%) in each response category to the question *How much does it bother you in daily activities?* (N=1637)

		Not at all	A little	A lot
1.	Headaches	34.27	51.67	14.06
2.	Vertigo	65.81	24.61	9.58
3.	Back pain	46.21	41.85	11.94
4.	Lack of energy / Fatigue	27.29	49.64	23.07
5.	High body temperature	65.31	25.03	9.66
6.	Pain in joints	62.60	29.51	7.88
7.	Pain in arms and/or legs	54.31	36.93	8.76
8.	Loss of balance	82.36	13.89	3.75
9.	Muscle tenseness	65.60	28.86	5.54
10.	Muscle weakness	72.59	23.53	3.88
11.	Lump in throat	64.99	26.05	8.96
12.	Double vision	85.40	10.11	4.49
13.	Blurred vision	74.34	17.50	8.16
14.	Sudden loss of sight	91.99	3.65	4.36
15.	Sudden loss of hearing	93.08	4.09	2.82
16.	Fainting	92.19	4.57	3.23
17.	Sudden memory loss	86.12	7.81	6.07
18.	Heart beating too fast	59.37	32.66	7.97
19.	Pain in chest	65.59	26.46	7.95
20.	Nausea	47.34	40.15	12.51
21.	Pain in stomach	62.15	25.05	12.79
22.	Diarrhoea	73.32	20.45	6.22
23.	Vomiting	78.75	14.19	7.05
24.	Bloated stomach	73.78	20.37	5.85
25.	Appetite loss	71.49	22.97	5.54
26.	Food intolerance	64.51	25.17	10.32
27.	Constipation	84.64	11.56	3.81

28.	Heartburn	78.88	15.66	5.44
29.	Breathing difficulties	74.13	17.71	8.15
30.	Sense of choking	84.37	9.34	6.29
31.	Skin rash	87.16	8.44	4.5
32.	Skin itching/redness	80.98	13.85	5.17
33.	Acne and pimples	61.05	22.92	16.03
34.	Cold (sore throat, cough etc.)	36.53	47.46	16.11
35.	Over-perspiration	61.75	25.79	12.46

B - SYNDROME / CLUSTER STATISTICS

TABLE B.1 Somatic symptoms by body organ area and item number of these symptoms

	Clusters of symptoms by body organ area	PSS symptoms	Item numbers
1.	Pseudoneurological (9 symptoms)	vertigo, loss of balance, lump in throat, double vision, blurred vision, sudden vision loss, sudden hearing loss, fainting, sudden memory loss	2 + 8 + 11 + 12 + 13 + 14 + 15 + 16 + 17
2.	Cardiovascular (3 symptoms)	rapid heartbeat, chest pain, over-perspiration	18 + 19 + 35
3.	Muscular (2 symptoms)	muscle tenseness, muscle weakness	9 + 10
4.	Respiratory (3 symptoms)	difficulties breathing, sense of choking, cold (sore throat, cough, etc.)	29 + 30 + 34
5.	Gastrointestinal (9 symptoms)	nausea, abdominal cramps (except menstrual pain), diarrhoea, vomiting, bloated stomach, loss of appetite, intolerance of certain foods, constipation, heartburn	20 + 21 + 22 + 23 + 24 + 25 + 26 + 27 + 28
6.	Dermatological (3 symptoms)	skin rash, itchy / red skin, acne or pimples	31 + 32 + 33
7.	Pain / weakness (6 symptoms)	headache, back pain, lack of energy / fatigue, high body temperature, pain in joints, arm / leg pain	1 + 3 + 4 + 5 + 6 + 7

TABLE B.2 Descriptive statistics - Frequency (N=1637)

	CLUSTER	Min-max	M	C	SD	K-S d $p < 0,01$	A (0,06)	S (0,12)	r_{it}	α
1.	Pseudoneurological	9-34	11.12	10	2.81	0.23	2.62	10.33	0.26	0.74
2.	Cardiovascular	3-12	5.02	5	1.79	0.17	0.99	0.90	0.27	0.50
3.	Muscular	2-8	2.90	3	1.16	0.28	1.50	2.47	0.43	0.59
4.	Respiratory	3-12	4.47	4	1.38	0.30	1.87	4.79	0.37	0.59
5.	Gastrointestinal	9-32	12.91	12	3.36	0.14	1.58	4.05	0.24	0.73
6.	Dermatological	3-12	4.25	4	1.49	0.25	1.70	3.71	0.29	0.45
7.	Pain / weakness	6-22	10.78	10	2.99	0.13	0.85	0.75	0.25	0.67

Note. M = mean, C = median, SD = standard deviation, **K-S d** Kolmogorov – Smirnov test;, A = Skewness (Std.Err.), S = Kurtosis (Std.Err.), r_{it} = correlation with the PSS total score, α = Cronbach alpha

TABLE B.3 Descriptive statistics - **Severity** (N=1637)

	CLUSTER	Min-max	M	C	SD	K-S d p<0,01	A (0,06)	S (0,12)	r _{it}	α
1.	Pseudoneurological	9-27	11.17	10	2.82	0.22	2.44	7.85	0.35	0.81
2.	Cardiovascular	3-9	4.41	4	1.38	0.16	1.06	0.88	0.31	0.57
3.	Muscular	2-6	2.71	2	0.91	0.28	1.37	1.68	0.46	0.62
4.	Respiratory	3-9	4.35	4	1.29	0.20	1.33	1.95	0.34	0.56
5.	Gastrointestinal	9-27	12.35	12	3.08	0.14	1.31	2.37	0.29	0.77
6.	Dermatological	3-9	3.97	4	1.23	0.24	1.62	2.82	0.34	0.54
7.	Pain / weakness	6-18	9.86	10	2.37	0.08	0.41	-0.05	0.26	0.67

Note. M = mean, C = median, SD = standard deviation, **K-S d** Kolmogorov – Smirnov test;, A = Skewness (Std.Err.), S = Kurtosis (Std.Err.), r_{it} = correlation with the PSS total score, α = Cronbach alpha

TABLE B.4 Correlations between clusters **Frequency** (N=1637)

		Frequency							
		1.	2.	3.	4.	5.	6.	7.	8.
1.	Total	1.00							
2.	Pseudoneurological	0.80	1.00						
3.	Cardiovascular	0.71	0.48	1.00					
4.	Muscular	0.60	0.39	0.37	1.00				
5.	Respiratory	0.67	0.50	0.44	0.32	1.00			
6.	Gastrointestinal	0.84	0.59	0.50	0.42	0.54	1.00		
7.	Dermatological	0.53	0.35	0.35	0.24	0.29	0.37	1.00	
8.	Pain / weakness	0.80	0.53	0.50	0.52	0.41	0.57	0.30	1.00

Note. All correlations are significant p<0,05

TABLE B.5 Correlations between clusters - **Severity** (N=1637)

		Severity							
		1.	2.	3.	4.	5.	6.	7.	8.
1.	Total	1.00							
2.	Pseudoneurological	0.82	1.00						
3.	Cardiovascular	0.72	0.51	1.00					
4.	Muscular	0.63	0.47	0.40	1.00				
5.	Respiratory	0.70	0.52	0.49	0.35	1.00			
6.	Gastrointestinal	0.86	0.62	0.55	0.47	0.57	1.00		
7.	Dermatological	0.61	0.41	0.42	0.30	0.41	0.47	1.00	
8.	Pain / weakness	0.78	0.53	0.49	0.53	0.45	0.58	0.37	1.00

Note. All correlations are significant $p < 0,05$

Table B.6 Correlations between clusters - **Frequency and Severity** (N=1637)

	Frequency	Severity							
		1.	2.	3.	4.	5.	6.	7.	8.
1.	Total	0.73	0.57	0.54	0.48	0.53	0.63	0.44	0.59
2.	Pseudoneurological	0.58	0.63	0.40	0.34	0.40	0.46	0.31	0.39
3.	Cardiovascular	0.52	0.38	0.65	0.28	0.38	0.39	0.31	0.37
4.	Muscular	0.41	0.28	0.26	0.65	0.25	0.30	0.22	0.38
5.	Respiratory	0.49	0.36	0.35	0.26	0.68	0.40	0.24	0.33
6.	Gastrointestinal	0.64	0.46	0.40	0.37	0.44	0.72	0.32	0.46
7.	Dermatological	0.39	0.26	0.30	0.21	0.23	0.28	0.67	0.25
8.	Pain / weakness	0.56	0.38	0.39	0.40	0.34	0.44	0.27	0.66

Note. All correlations are significant $p < 0,05$

C - DECILES

GUIDELINES FOR THE INTERPRETATION OF DECILES

- decile 1, 2, 3 = below average
- decile 4, 5, 6 decile = average
- decile 7, 8, 9 and 10 decile = above average

→ decile 9 and 10 = extremely elevated, clinically significant result

TABLE C.1 Decile equivalents for PSS raw scores – whole sample (N=1637)

<i>DECILE</i>	<i>NUMBER OF SYMPTOMS</i>	<i>FREQUENCY</i>	<i>SEVERITY</i>
1.	≤ 3	≤ 39	≤ 37
2.	4-5	40-42	38-39
3.	6-7	43-44	40-42
4.	8-9	45-46	43-44
5.	10-11	47-49	45-47
6.	12-13	50-51	48-49
7.	14-15	52-55	50-51
8.	16-17	56-58	52-55
9.	18-20	59-65	56-61
10.	≥ 21	≥ 66	≥ 62
<i>M</i>	12.28	51.46	48.82
<i>SD</i>	6.59	11.15	10.06
<i>C</i>	12	49.58	47.92
<i>Min-Max</i>	0-35	35-119	35-105

TABLE C.2 Decile equivalents for PSS raw scores – primary school - boys (N=412)

DECILE	NUMBER OF SYMPTOMS	FREQUENCY	SEVERITY
1.	≤ 1	≤ 37	≤ 36
2.	2-3	38-39	37-38
3.	4-5	40-41	39-41
4.	6	42-43	42-43
5.	7-8	44-45	44-46
6.	9	46-47	47-48
7.	10-11	48-49	49
8.	12-14	50-54	50-52
9.	15-17	55-60	53-57
10.	≥ 18	≥ 61	≥ 58
M	9.70	48.11	47.18
SD	6.26	10.98	9.57
C	9	45.88	46.34
Min-Max	0-31	35-119	35-105

TABLE C.3 Decile equivalents for PSS raw scores – primary school – girls (N=404)

DECILE	NUMBER OF SYMPTOMS	FREQUENCY	SEVERITY
1.	≤ 4	≤ 39	≤ 38
2.	5-6	40-42	39-41
3.	7-8	43-45	42-44
4.	9-10	46-47	45-47
5.	11	48-49	48-49
6.	12-13	50-52	50-52
7.	14	53-55	53-54
8.	15-16	56-58	55-57
9.	17-20	59-65	58-62
10.	≥ 21	≥ 66	≥ 63
<i>M</i>	<i>12.39</i>	<i>51.99</i>	<i>50.79</i>
<i>SD</i>	<i>6.39</i>	<i>11.08</i>	<i>10.55</i>
<i>C</i>	<i>12</i>	<i>50</i>	<i>49.51</i>
<i>Min-Max</i>	<i>0-34</i>	<i>35-118</i>	<i>35-98</i>

TABLE C.4 Decile equivalents for PSS raw scores – **secondary school - boys (N=209)**

DECILE	NUMBER OF SYMPTOMS	FREQUENCY	SEVERITY
1.	≤ 3	≤ 39	≤ 36
2.	4-6	40-42	37-38
3.	7-8	43-44	39-40
4.	9	45-46	41-42
5.	10	47-48	43-44
6.	11-12	49-50	45-47
7.	13-14	51-53	48-49
8.	15-17	54-57	50-52
9.	18-21	58-65	53-59
10.	≥ 22	≥ 66	≥ 60
<i>M</i>	<i>12.30</i>	<i>51.48</i>	<i>47.34</i>
<i>SD</i>	<i>6.71</i>	<i>12.08</i>	<i>9.57</i>
<i>C</i>	<i>11</i>	<i>49</i>	<i>45</i>
<i>Min-Max</i>	<i>0-32</i>	<i>35-119</i>	<i>35-105</i>

TABLE C.5 Decile equivalents for PSS raw scores – **secondary school – girls (N=285)**

DECILE	NUMBER OF SYMPTOMS	FREQUENCY	SEVERITY
1.	≤ 6	≤ 43	≤ 40
2.	7-8	44	41-42
3.	9-10	45-47	43-44
4.	11	48-49	45-47
5.	12-13	50-52	48-49
6.	14-15	53-54	50-51
7.	16	55-57	52-54
8.	17-19	58-61	55-58
9.	20-22	62-67	59-64
10.	≥ 23	≥ 68	≥ 65
<i>M</i>	<i>14.53</i>	<i>54.55</i>	<i>51.44</i>
<i>SD</i>	<i>6.11</i>	<i>10.21</i>	<i>9.66</i>
<i>C</i>	<i>14</i>	<i>53</i>	<i>49.10</i>
<i>Min-Max</i>	<i>3-32</i>	<i>38-93</i>	<i>35-90</i>

TABLE C.6 Decile equivalents for PSS raw scores – university students - males (N=75)

DECILE	NUMBER OF SYMPTOMS	FREQUENCY	SEVERITY
1.	≤ 3	≤ 39	35
2.	5	40	36
3.	6	41	37
4.	7	42	38-39
5.	8	43-45	40
6.	9-11	46-47	41
7.	12-13	48-49	42-43
8.	14-15	50-53	44-47
9.	16-18	54-59	48-53
10.	≥ 19	≥ 60	≥ 54
M	<i>10.93</i>	<i>47.92</i>	<i>42.8</i>
SD	<i>6.26</i>	<i>8.59</i>	<i>7.14</i>
C	<i>9</i>	<i>46</i>	<i>41</i>
Min-Max	<i>0-35</i>	<i>35-74</i>	<i>35-63</i>

TABLE C.7 Decile equivalents for PSS raw scores – **university students - females (N=252)**

DECILE	NUMBER OF SYMPTOMS	FREQUENCY	SEVERITY
1.	≤ 5	≤ 40	≤ 37
2.	6-7	41-44	38-40
3.	8-10	45-46	41
4.	11	47-50	42-44
5.	12-13	51	45-46
6.	14-15	52-54	47-48
7.	16	55-56	49-51
8.	17-18	57-60	52-53
9.	19-21	61-66	54-59
10.	≥ 22	≥ 67	≥ 60
<i>M</i>	<i>14.17</i>	<i>53.61</i>	<i>48.39</i>
<i>SD</i>	<i>6.43</i>	<i>10.85</i>	<i>9.69</i>
<i>C</i>	<i>14</i>	<i>52</i>	<i>47</i>
<i>Min-Max</i>	<i>1-32</i>	<i>36-112</i>	<i>35-92</i>



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A – PSS QUESTIONNAIRES ON CROATIAN

PSS Upitnik samoprocjene za djecu, adolescente i odrasle

PSS-R Upitnik kojim roditelji ili skrbnici procjenjuju djetetove simptome

PSS-D Upitnik kojim druge osobe procjenjuju djetetove simptome

PSS Obrazac za bodovanje

B – PSS QUESTIONNAIRES ON FOREIGN LANGUAGES

PSS Psychosomatic symptoms scale for children, adolescents and adults

PSS Psychosomatische Symptomskala für Kinder, Jugendliche und Erwachsene

PSS Lestvica psihosomatskih simptoma za otroke, mladostnike in odrasle

PSS Scoring sheet

Note. Since the PSS is translating on some other languages in this moment, these translations will be available on the author's web page.

PSS Upitnik samoprocjene za djecu, adolescente i odrasle

Ovim upitnikom želimo saznati nešto više o zdravlju djece i odraslih. Za početak – **što mislite, kakvo je vaše zdravlje općenito?** (Označite svoj odgovor križićem ☒)

izvrsno vrlo dobro osrednje loše

U tablici dolje nalazi se lista različitih zdravstvenih problema koji ponekad muče svakog od nas. Molimo vas da uz svaki navedeni zdravstveni problem označite svoj odgovor na dva pitanja:

1. Koliko ste ga često doživjeli u posljednja 3 mjeseca? i

2. Koliko vas je to ometalo u svakodnevnim aktivnostima?

		1. Koliko ste često to doživjeli?				2. Koliko vas je to ometalo?		
		Nikada	Nekoliko puta mjesečno	Nekoliko puta tjedno	Gotovo svaki dan	Nimalo	Osrednje	Jako
1.	Glavobolje	1	2	3	4	1	2	3
2.	Vrtoglavica	1	2	3	4	1	2	3
3.	Bol u leđima	1	2	3	4	1	2	3
4.	Manjak energije / umor	1	2	3	4	1	2	3
5.	Povišena tjelesna temperatura	1	2	3	4	1	2	3
6.	Bol u zglobovima	1	2	3	4	1	2	3
7.	Bol u rukama / nogama	1	2	3	4	1	2	3
8.	Gubitak ravnoteže	1	2	3	4	1	2	3
9.	Mišićna napetost	1	2	3	4	1	2	3
10.	Slabost mišića	1	2	3	4	1	2	3
11.	“Knedla“ u grlu	1	2	3	4	1	2	3
12.	Dvostruka slika	1	2	3	4	1	2	3
13.	Zamućeni vid	1	2	3	4	1	2	3
14.	Iznenadni gubitak vida	1	2	3	4	1	2	3
15.	Iznenadni gubitak sluha	1	2	3	4	1	2	3

		1. Koliko ste često to doživjeli?				2. Koliko vas je to ometalo?		
		Nikada	Nekoliko puta mjesečno	Nekoliko puta tjedno	Gotovo svaki dan	Nimalo	Osrednje	Jako
16.	Nesvjestica	1	2	3	4	1	2	3
17.	Iznenadni gubitak pamćenja	1	2	3	4	1	2	3
18.	Ubrzano lupanje srca	1	2	3	4	1	2	3
19.	Bol u grudima	1	2	3	4	1	2	3
20.	Mučnina	1	2	3	4	1	2	3
21.	Grčevi u trbuhu	1	2	3	4	1	2	3
22.	Proljevi	1	2	3	4	1	2	3
23.	Povraćanje	1	2	3	4	1	2	3
24.	Nadutost	1	2	3	4	1	2	3
25.	Gubitak apetita	1	2	3	4	1	2	3
26.	Nepodnošenje nekih vrsta hrane	1	2	3	4	1	2	3
27.	Opstipacija ili neredovita stolica	1	2	3	4	1	2	3
28.	Žgaravica	1	2	3	4	1	2	3
29.	Teškoće disanja	1	2	3	4	1	2	3
30.	Osjećaj gušenja	1	2	3	4	1	2	3
31.	Kožni osip	1	2	3	4	1	2	3
32.	Svrbež / crvenilo kože	1	2	3	4	1	2	3
33.	Akne ili bubuljice	1	2	3	4	1	2	3
34.	Prehlada (začepljen nos, kašalj i sl.)	1	2	3	4	1	2	3
35.	Prekomjerno znojenje	1	2	3	4	1	2	3

36. Jeste li se zbog navedenih zdravstvenih problema morali obratiti liječniku?

Ne Da

37. Bolujete li od neke bolesti poput npr. astme, alergija, dijabetesa i sl.?

Ne Da Od koje? _____

38. Upotrebljavate li zbog toga neke lijekove?

Ne Da Koje? _____

39. Ako ste u posljednja 3 mjeseca trpjeli bolove, koje biste izdvojili kao najneugodnije? Navedite: _____

40. Kako biste, na skali od 0 do 10, procijenili intenzitet tih bolova? (Zaokružite odgovarajući broj.)

0	1	2	3	4	5	6	7	8	9	10
Nema boli	Blagi simptomi boli			Umjerena bol			Jaka bol		Vrlo jaka bol	

41. Upotrebljavate li neke lijekove protiv bolova?

Ne Da Koje? _____

42. Ako DA, koliko ste često upotrebljavali lijekove protiv bolova u posljednja 3 mjeseca?

- svakodnevno
- nekoliko puta tjedno
- 1-2 puta tjedno
- nekoliko puta mjesečno
- 1-2 puta mjesečno

PSS-R Upitnik kojim roditelji ili skrbnici procjenjuju djetetove simptome

Ovim upitnikom želimo saznati nešto više o zdravstvenim problemima učenika u našim školama. Za početak – **procijenite kakvo je zdravlje Vašeg djeteta općenito** (označite svoj odgovor križićem ☒).

izvrsno **vrlo dobro** **osrednje** **loše**

U tablici dolje nalazi se lista različitih zdravstvenih problema koji ponekad muče svako dijete. Molimo Vas da uz svaki navedeni zdravstveni problem označite svoj odgovor na 2 pitanja:

1. Koliko je često dijete doživjelo navedeni simptom u posljednja 3 mjeseca? i

2. Koliko ga je to ometalo u svakodnevnim aktivnostima?

	1. Koliko je često to doživjelo?				2. Koliko ga je to ometalo?		
	Nikada	Nekoliko puta mjesečno	Nekoliko puta tjedno	Gotovo svaki dan	Nimalo	Osrednje	Jako
1. Glavobolje	1	2	3	4	1	2	3
2. Vrtoglavica	1	2	3	4	1	2	3
3. Bol u leđima	1	2	3	4	1	2	3
4. Manjak energije / umor	1	2	3	4	1	2	3
5. Povišena tjelesna temperatura	1	2	3	4	1	2	3
6. Bol u zglobovima	1	2	3	4	1	2	3
7. Bol u rukama / nogama	1	2	3	4	1	2	3
8. Gubitak ravnoteže	1	2	3	4	1	2	3
9. Mišićna napetost	1	2	3	4	1	2	3
10. Slabost mišića	1	2	3	4	1	2	3
11. "Knedla" u grlu	1	2	3	4	1	2	3
12. Dvostruka slika	1	2	3	4	1	2	3
13. Zamućeni vid	1	2	3	4	1	2	3
14. Iznenadni gubitak vida	1	2	3	4	1	2	3
15. Iznenadni gubitak sluha	1	2	3	4	1	2	3

		1. Koliko je često to doživjelo?				2. Koliko ga je to ometalo?		
		Nikada	Nekoliko puta mjesečno	Nekoliko puta tjedno	Gotovo svaki dan	Nimalo	Osrednje	Jako
16.	Nesvjestica	1	2	3	4	1	2	3
17.	Iznenadni gubitak pamćenja	1	2	3	4	1	2	3
18.	Ubrzano lupanje srca	1	2	3	4	1	2	3
19.	Boj u grudima	1	2	3	4	1	2	3
20.	Mučnina	1	2	3	4	1	2	3
21.	Grčevi u trbuhu	1	2	3	4	1	2	3
22.	Proljevi	1	2	3	4	1	2	3
23.	Povraćanje	1	2	3	4	1	2	3
24.	Nadutost	1	2	3	4	1	2	3
25.	Gubitak apetita	1	2	3	4	1	2	3
26.	Nepodnošenje nekih vrsta hrane	1	2	3	4	1	2	3
27.	Opstipacija ili neredovita stolica	1	2	3	4	1	2	3
28.	Žgaravica	1	2	3	4	1	2	3
29.	Teškoće disanja	1	2	3	4	1	2	3
30.	Osjećaj gušenja	1	2	3	4	1	2	3
31.	Kožni osip	1	2	3	4	1	2	3
32.	Svrbež / crvenilo kože	1	2	3	4	1	2	3
33.	Akne ili bubuljice	1	2	3	4	1	2	3
34.	Prehlada (začepljen nos, kašalj i sl.)	1	2	3	4	1	2	3
35.	Prekomjerno znojenje	1	2	3	4	1	2	3

36. Je li dijete zbog navedenih zdravstvenih problema moralo ići k liječniku?

Ne Da

37. Boluje li dijete od neke bolesti poput npr. astme, alergija, dijabetesa i sl.?

Ne Da Od koje? _____

38. Upotrebljava li zbog toga neke lijekove?

Ne Da Koje? _____

39. Ako je dijete u posljednja 3 mjeseca trpjelo bolove, koje biste izdvojili kao najneugodnije? Navedite: _____

40. Kako biste, na skali od 0 do 10, procijenili intenzitet tih bolova? (Zaokružite odgovarajući broj.)

0	1	2	3	4	5	6	7	8	9	10
Nema boli	Blagi simptomi boli			Umjerena bol			Jaka bol		Vrlo jaka bol	

41. Upotrebljava li dijete neke lijekove protiv bolova?

Ne Da Koje? _____

42. Ako DA, koliko je često upotrebljavalo lijekove protiv bolova u posljednja 3 mjeseca?

- svakodnevno
 nekoliko puta tjedno
 1-2 puta tjedno
 nekoliko puta mjesečno
 1-2 puta mjesečno

Upitnik ispunjava: majka otac netko drugi (tko?) _____

PSS-D Upitnik kojim druge osobe procjenjuju djetetove simptome

Ovim upitnikom želimo saznati nešto više o zdravstvenim problemima učenika u našim školama. Za početak – **procijenite kakvo je zdravlje djeteta općenito** (označite svoj odgovor križicom ☒).

izvrsno **vrlo dobro** **osrednje** **loše**

U tablici dolje nalazi se lista različitih zdravstvenih problema koji ponekad muče svako dijete. Molimo Vas da uz svaki navedeni zdravstveni problem označite svoj odgovor na 2 pitanja:

1. Koliko je često dijete doživjelo navedeni simptom u posljednja 3 mjeseca? i

2. Koliko ga je to ometalo u svakodnevnim aktivnostima?

	1. Koliko je često to doživjelo?				2. Koliko ga je to ometalo?		
	Nikada	Nekoliko puta mjesečno	Nekoliko puta tjedno	Gotovo svaki dan	Nimalo	Osrednje	Jako
1. Glavobolje	1	2	3	4	1	2	3
2. Vrtoglavica	1	2	3	4	1	2	3
3. Bol u leđima	1	2	3	4	1	2	3
4. Manjak energije / umor	1	2	3	4	1	2	3
5. Povišena tjelesna temperatura	1	2	3	4	1	2	3
6. Bol u zglobovima	1	2	3	4	1	2	3
7. Bol u rukama / nogama	1	2	3	4	1	2	3
8. Gubitak ravnoteže	1	2	3	4	1	2	3
9. Mišićna napetost	1	2	3	4	1	2	3
10. Slabost mišića	1	2	3	4	1	2	3
11. "Knedla" u grlu	1	2	3	4	1	2	3
12. Dvostruka slika	1	2	3	4	1	2	3
13. Zamućeni vid	1	2	3	4	1	2	3
14. Iznenadni gubitak vida	1	2	3	4	1	2	3
15. Iznenadni gubitak sluha	1	2	3	4	1	2	3

		1. Koliko je često to doživjelo?				2. Koliko ga je to ometalo?		
		Nikada	Nekoliko puta mjesечно	Nekoliko puta tjedno	Gotovo svaki dan	Nimalo	Osrednje	Jako
16.	Nesvjestica	1	2	3	4	1	2	3
17.	Iznenadni gubitak pamćenja	1	2	3	4	1	2	3
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20.	Mučnina	1	2	3	4	1	2	3
21.	Grčevi u trbuhu	1	2	3	4	1	2	3
22.	Proljevi	1	2	3	4	1	2	3
23.	Povraćanje	1	2	3	4	1	2	3
24.	Nadutost	1	2	3	4	1	2	3
25.	Gubitak apetita	1	2	3	4	1	2	3
26.	Nepodnošenje nekih vrsta hrane	1	2	3	4	1	2	3
27.	Opstipacija ili neredovita stolica	1	2	3	4	1	2	3
28.	Žgaravica	1	2	3	4	1	2	3
29.	Teškoće disanja	1	2	3	4	1	2	3
30.	Osjećaj gušenja	1	2	3	4	1	2	3
31.	Kožni osip	1	2	3	4	1	2	3
32.	Svrbež / crvenilo kože	1	2	3	4	1	2	3
33.	Akne ili bubuljice	1	2	3	4	1	2	3
34.	Prehlada (začepljen nos, kašalj i sl.)	1	2	3	4	1	2	3
35.	Prekomjerno znojenje	1	2	3	4	1	2	3

36. Je li dijete zbog navedenih zdravstvenih problema moralo ići k liječniku?

Ne Da

37. Boluje li dijete od neke bolesti poput npr. astme, alergija, dijabetesa i sl.?

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38. Upotrebljava li zbog toga neke lijekove?

Ne Da Koje? _____

39. Ako je dijete u posljednja 3 mjeseca trpjelo bolove, koje biste izdvojili kao najneugodnije? Navedite: _____

40. Kako biste, na skali od 0 do 10, procijenili intenzitet tih bolova? (Zaokružite odgovarajući broj.)

0	1	2	3	4	5	6	7	8	9	10
Nema boli	Blagi simptomi boli			Umjerena bol			Jaka bol		Vrlo jaka bol	

41. Upotrebljava li dijete neke lijekove protiv bolova?

Ne Da Koje? _____

42. Ako DA, koliko je često upotrebljavalo lijekove protiv bolova u posljednja 3 mjeseca?

- svakodnevno
- nekoliko puta tjedno
- 1-2 puta tjedno
- nekoliko puta mjesečno
- 1-2 puta mjesečno

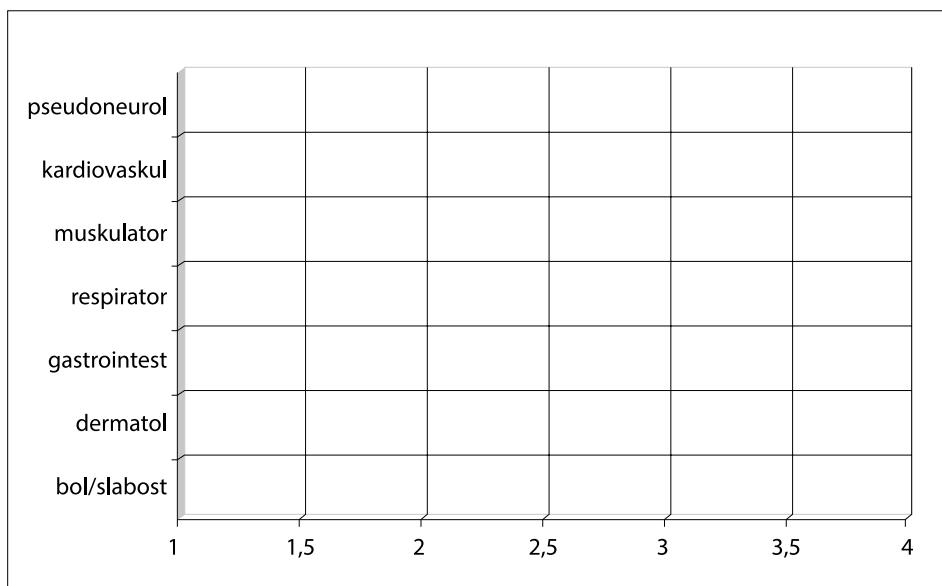
Upitnik ispunjava: _____

Ime i prezime: _____ Datum: _____

REZULTATI - UKUPNO:

BROJ =		FREKVENCIJA =		OMETANJE =	
Decil =		Decil =		Decil =	

SINDROM	ČESTICE u PSS-u	FREKVENCIJA zbroj / broj čestica	OMETANJE zbroj / broj čestica
Pseudoneurološki	2 + 8 + 11 + 12 + 13 + 14 + 15 + 16 + 17	/9 =	/9 =
Kardiovaskularni	18 + 19 + 35	/3 =	/3 =
Muskulatorni	9 + 10	/2 =	/2 =
Respiratorni	29 + 30 + 34	/3 =	/3 =
Gastrointestinalni	20 + 21 + 22 + 23 + 24 + 25 + 26 + 27 + 28	/9 =	/9 =
Dermatološki	31 + 32 + 33	/3 =	/3 =
Bol / osjećaj slabosti	1 + 3 + 4 + 5 + 6 + 7	/6 =	/6 =



PSS Psychosomatic symptoms scale for children, adolescents and adults

With this questionnaire we would like to find more about health problems in children and adults. For the beginning: **How would you rate your health in general?** (Mark your answer with ☒)

excellent **very good** **good** **bad**

Listed below are different health problems that occasionally bothered each of us. Please, beside each problem mark your answer on two questions on the right side:

- 1. How often have you had this problem within last 3 months?** and
- 2. How much does it bother you in daily activities?**

		1. How often have you had this problem?				2. How much does it bother you?		
		Never	A few times a month	A few times a week	Almost every day	Not at all	A little	A lot
1.	Headaches	1	2	3	4	1	2	3
2.	Vertigo	1	2	3	4	1	2	3
3.	Back pain	1	2	3	4	1	2	3
4.	Lack of energy / Fatigue	1	2	3	4	1	2	3
5.	High body temperature	1	2	3	4	1	2	3
6.	Pain in joints	1	2	3	4	1	2	3
7.	Pain in arms or / and legs	1	2	3	4	1	2	3
8.	Loss of balance	1	2	3	4	1	2	3
9.	Muscle tenseness	1	2	3	4	1	2	3
10.	Muscle weakness	1	2	3	4	1	2	3
11.	Lump in throat	1	2	3	4	1	2	3
12.	Double vision	1	2	3	4	1	2	3
13.	Blurred vision	1	2	3	4	1	2	3
14.	Sudden loss of sight	1	2	3	4	1	2	3
15.	Sudden loss of hearing	1	2	3	4	1	2	3

		1. How often have you had this problem?				2. How much does it bother you?		
		Never	A few times a month	A few times a week	Almost every day	Not at all	A little	A lot
16.	Fainting	1	2	3	4	1	2	3
17.	Sudden memory loss	1	2	3	4	1	2	3
18.	Heart beating too fast	1	2	3	4	1	2	3
19.	Pain in chest	1	2	3	4	1	2	3
20.	Nausea	1	2	3	4	1	2	3
21.	Pain in stomach	1	2	3	4	1	2	3
22.	Diarrhea	1	2	3	4	1	2	3
23.	Vomiting	1	2	3	4	1	2	3
24.	Bloated stomach	1	2	3	4	1	2	3
25.	Appetite loss	1	2	3	4	1	2	3
26.	Food intolerance	1	2	3	4	1	2	3
27.	Constipation	1	2	3	4	1	2	3
28.	Heart - burn	1	2	3	4	1	2	3
29.	Breathing difficulties	1	2	3	4	1	2	3
30.	Sense of choking	1	2	3	4	1	2	3
31.	Skin rash	1	2	3	4	1	2	3
32.	Skin itching / redness	1	2	3	4	1	2	3
33.	Acne and pimples	1	2	3	4	1	2	3
34.	Cold (sore throat, cough, etc.)	1	2	3	4	1	2	3
35.	Over - perspiration	1	2	3	4	1	2	3

36. Have you had to visit the doctor because of your health-related problems?

No Yes

37. Do you have a disease such as asthma, allergies, diabetes etc.?

No Yes Which one? _____

38. Do you have to take some medicine for those health problems?

No Yes What pills? _____

39. If you have been suffering from pain in the last 3 months, what would you describe as the most unpleasant? Name them: _____

40. How would you rate your pain intensity on the scale from 0 to 10? (circle the number).

0	1	2	3	4	5	6	7	8	9	10
No pain	Very mild pain			Moderate pain			Intense pain		Very intense pain	

41. Do you take some painkillers?

No Yes Which one? _____

42. If your answer is YES, how often did you take painkillers in the last 3 months?

everyday

few times a week

1-2 times a week

several times a month

1-2 times a month

PSS Psychosomatische Symptomskala für Kinder, Jugendliche und Erwachsene

Mit diesem Fragebogen würden wir gerne mehr über die gesundheitlichen Probleme der Schüler in unseren Schulen wissen. Für den Anfang – wie empfindest Du Deine Gesundheit im Allgemeinen? (Bitte die ausgewählte Antwort ankreuzen ☒).

Ausgezeichnet **Sehr gut** **Mittelmässig** **Schlecht**

In der folgenden Tabelle findest Du gesundheitliche Probleme, die jeden von uns mal stören. Bitte kreuze Deine Antwort, bei folgender Aufzählung der gesundheitlichen Probleme (siehe Tabelle), unter folgenden zwei Fragen an:

1. Wie oft hast Du in den letzten 3 Monaten dieses Problem gehabt?

2. Wie sehr hat Dich das im Alltag gestört?

	1. Wie oft hast Du dieses Problem gehabt?				2. Wie sehr hat Dich das gestört?		
	Niemals	Ein paar mal pro Monat	Ein paar mal pro Woche	Fast jeden Tag	Nie	Ein bißchen	Sehr
1. Kopfschmerzen	1	2	3	4	1	2	3
2. Schwindel	1	2	3	4	1	2	3
3. Rückenschmerzen	1	2	3	4	1	2	3
4. Schwächegefühl / fatigue	1	2	3	4	1	2	3
5. Erhöhte Temperatur	1	2	3	4	1	2	3
6. Gelenkschmerzen	1	2	3	4	1	2	3
7. Schmerzen in Armen und/oder Beinen	1	2	3	4	1	2	3
8. Gleichgewichtsstörung	1	2	3	4	1	2	3
9. Muskel-anspannung	1	2	3	4	1	2	3
10. Muskelschwäche	1	2	3	4	1	2	3
11. Kloß im Hals	1	2	3	4	1	2	3
12. Doppelbilder	1	2	3	4	1	2	3
13. Verschwommene Sicht	1	2	3	4	1	2	3
14. Plötzlicher Verlust des Sehvermögens	1	2	3	4	1	2	3
15. Plötzlicher Verlust des Hörvermögens	1	2	3	4	1	2	3

		1. Wie oft hast Du dieses Problem gehabt?				2. Wie sehr hat Dich das gestört?		
		Niemals	Ein paar mal pro Monat	Ein paar mal pro Woche	Fast jeden Tag	Nie	Ein bißchen	Sehr
16.	Ohnmacht	1	2	3	4	1	2	3
17.	Plötzlicher Gedächtnisverlust	1	2	3	4	1	2	3
18.	Herzrasen	1	2	3	4	1	2	3
19.	Schmerzen im Brustkorb	1	2	3	4	1	2	3
20.	Brechreiz	1	2	3	4	1	2	3
21.	Magenkrämpfe	1	2	3	4	1	2	3
22.	Durchfall	1	2	3	4	1	2	3
23.	Erbrechen	1	2	3	4	1	2	3
24.	Aufgeblasener Bauch	1	2	3	4	1	2	3
25.	Appetitsverlust	1	2	3	4	1	2	3
26.	Lebensmittel-intolleranz	1	2	3	4	1	2	3
27.	Verstopfung oder unregelmäßiger Stuhlgang	1	2	3	4	1	2	3
28.	Magen-übersäuerung	1	2	3	4	1	2	3
29.	Atem-beschwerden	1	2	3	4	1	2	3
30.	Würgegefühl	1	2	3	4	1	2	3
31.	Hautausschlag	1	2	3	4	1	2	3
32.	Hautjucken / hautrötung	1	2	3	4	1	2	3
33.	Akne oder Pickel	1	2	3	4	1	2	3
34.	Erkältung (Schnupfen, Husten etc.)	1	2	3	4	1	2	3
35.	Übermässiges Schwitzen	1	2	3	4	1	2	3

36. Musstest Du einen Arzt aufsuchen wegen der obengenannten gesundheitlichen Probleme?

- Ja
- Nein

37. Hast Du eine Krankheit wie Asthma, Allergien, Diabetes etc. ?

- Ja Welche Krankheit? _____
- Nein

38. Bekommst Du wegen dieser Krankheit Medikamente?

- Nein Ja Welche? _____

39. Wenn Du in den letzten 3 Monaten unter Schmerzen gelitten hast, welche waren für Dich die unangenehmsten von allem?

40. Was war die Stärke dieser Schmezen (bitte kreuz die Nummer unter dem Emoi):

0	1	2	3	4	5	6	7	8	9	10
Kein symptome	Leichte Schmerz			Massige Schmerz			Starker schmerz		Sehr starker Schmerz	

41. Bekommst Du Schmerz lindende Arzneimittel ?

- Nein Ja Welche? _____

42. Wenn JA, wie oft in den letzten 3 Monaten hastu Du diese Schmerzmittel genommen ?

- jeden Tag
- mehrere male in einer Woche
- 1-2 mal wöchentlich
- mehrere mal in einem Monat
- 1-2 mal monatlich

PSS Lestvica psihosomatskih simptomov za otroke, mladostnike in odrasle

Z tem vprašalnikom bi radi več zvedeli o zdravstvenih problemih učencev v naših šolah. Najprej – kakšno je nasplošno tvoje zdravlje? (označi svoj odgovor z križcem ☒)

odlično zelo dobro ne ravno dobro slabo

V sledeči tabeli je lista raznih zdravstvenih problemov kateri včasih vsakega mučijo. Prosimo te, da ob vsakemu zdravstvenem problemu označis svoj odgovor na dva vprašanja. Predvsem:

1. Koliko krat si v zadnja 3 meseca doživel ta problem?

2. Koliko te je ta problem v vsakodnevnih ativnostih motil?

	1. Koliko si doživel ta problem?				2. Koliko te je ta problem motil?		
	Nikoli	Nekekrat mesečno	Nekekrat tedno	Skoraj vsak dan	Nič	Malo	Zelo
1. Glavobol	1	2	3	4	1	2	3
2. Vrtoglavica	1	2	3	4	1	2	3
3. Križobol	1	2	3	4	1	2	3
4. Pomanjkanje energije / fatigue	1	2	3	4	1	2	3
5. Povečana telesna temperatura	1	2	3	4	1	2	3
6. Bolečine v sklepih	1	2	3	4	1	2	3
7. Bolečine v rokah / v nogah	1	2	3	4	1	2	3
8. Pomanjkanje ravnoteže	1	2	3	4	1	2	3
9. Napetost v mišicah	1	2	3	4	1	2	3
10. Mišična slabost	1	2	3	4	1	2	3
11. Kepa v grlu	1	2	3	4	1	2	3
12. Podvojena slika	1	2	3	4	1	2	3
13. Nejasen vid	1	2	3	4	1	2	3
14. Trenotna izguba vida	1	2	3	4	1	2	3
15. Trenotna izguba sluha	1	2	3	4	1	2	3

		1. Koliko si doživel ta problem?				2. Koliko te je ta problem motil?		
		Nikoli	Nekekrat mesečno	Nekekrat tedno	Skoraj vsak dan	Nič	Malo	Zelo
16.	Nezavest	1	2	3	4	1	2	3
17.	Trenotna izguba spomina	1	2	3	4	1	2	3
18.	Pospešeno bitje srca	1	2	3	4	1	2	3
19.	Bolečine v prsih	1	2	3	4	1	2	3
20.	Slabost	1	2	3	4	1	2	3
21.	Trebušni krči	1	2	3	4	1	2	3
22.	Driska	1	2	3	4	1	2	3
23.	Bruhanje	1	2	3	4	1	2	3
24.	Napihljen trebuh	1	2	3	4	1	2	3
25.	Izguba apetita	1	2	3	4	1	2	3
26.	Neprenašanje nekaterih živil	1	2	3	4	1	2	3
27.	Opstipacija ali neredna prebava	1	2	3	4	1	2	3
28.	Višek želodčne kisline	1	2	3	4	1	2	3
29.	Otežano dihanje	1	2	3	4	1	2	3
30.	Občutek davljenja	1	2	3	4	1	2	3
31.	Kožni ispuščaj	1	2	3	4	1	2	3
32.	Srbenje / rdeča koža	1	2	3	4	1	2	3
33.	Akne / mozolji	1	2	3	4	1	2	3
34.	Prehlad	1	2	3	4	1	2	3
35.	Prekomerno potenje	1	2	3	4	1	2	3

36. Ali si se zaradi naštetih zdravstvenih problemov obrnil na zdravnika?

- Ja
 Ne

37. Ali imas neko bolezen kot npr. astma, alergije, diabetes itd.?

- Ja Katero bolezen? _____
 Ne

38. Ali uporabljaš zaradi tega kakšna zdravila?

- Ne Ja Katera? _____

39. Če si v zadnjih treh mesecih trpel bolečine, katere bi izdvojil kot najhujše?

Navedite: _____

40. Kako bi, na skali od 0 do 10 precenil intenzitet bolečin (zaokrožite število)

0	1	2	3	4	5	6	7	8	9	10
Brez bolečin	Blagi simptomi bolečine			Zmerna bolečina			Močna bolečina		Zelo močna bolečina	

41. Ali uporabljaš kakšna zdravila proti bolečinam?

- Ne Ja Katera? _____

42. Če JA, koliko pogosto si uporabljal zdravila proti bolečinam v zadnja 3 meseca?

- vsak dan
 večkrat tedensko
 1-2 krat tedensko
 večkrat mesečno
 1-2 krat mesečno

Name and surname: _____ Date: _____

RESULTS:

TOTAL =		FREQUENCY =		SEVERITY =	
Decil =		Decil =		Decil =	

SYNDROME / CLUSTER	NUMBER OF PSS ITEMS	FREQUENCY sum / number of items	SEVERITY sum / number of items
Pseudoneurological	2+8+11+12+13+14+15+16+17	/9=	/9=
Cardiovascular	18+19+35	/3=	/3=
Musculoskeletal	9+10	/2=	/2=
Respiratory	29+30+34	/3=	/3=
Gastrointestinal	20+21+22+23+24+25+26+27+28	/9=	/9=
Dermatological	31+32+33	/3=	/3=
Pain / weakness	1+3+4+5+6+7	/6=	/6=

