Ryszard Kościelak*
University of Finance and Management in Warsaw, Poland

**Individual Health Resources in Patients with Functional Disorders of the Masticatory Organ**

**Abstract**

Functional disorders of the masticatory organ are a chronic disease, which causes physical discomfort, creates a psychological burden for patients and negatively affects their functioning. The aim of this study was to determine whether there are any correlations between self-efficacy, health locus of control, a sense of coherence (SOC) and health behaviour in individuals with functional disorders of the masticatory organ. The study involved 61 patients suffering from this disease. The Multidimensional Health Locus of Control Scale (MHLC) developed by Kenneth A. Walltson, Barbara S. Wallston and Robert DeVillis (1978) and adapted by Zygfryd Juczyński (2001) was used to determine their locus of control beliefs. Generalized self-efficacy was measured using the Generalized Self-Efficacy Scale (GSES) whose Polish version was developed by Ralf Schwartzer, Michael Jerusalem and Zygfryd Juczyński (2001). A sense of coherence was studied using the Life Orientation Questionnaire (The Sense of Coherence Questionnaire SOC-29) developed by Aaron Antonovsky (2005) and the Health Behaviour Inventory (IZZ) by Zygfryd Juczyński (2001).

Patients with functional disorders of the masticatory organ in the studied group were characterized by elevated levels of self-efficacy. The subjects revealed decreased levels of SOC and reduced levels of all categories of health behaviour, so it can be concluded that they do not care about their own health. Determining the level of SOC and health behaviour in patients with functional disorders of the masticatory organ should serve as an indicator in their rehabilitation.

**Keywords**

functional disorders of the masticatory organ, health behaviour, health locus of control, self-efficacy, sense of coherence

---

* Corresponding author: Ryszard Kościelak, Faculty of Psychology, University of Finance and Management in Warsaw, 55 Pawia St., 01–030 Warsaw, Poland; e-mail: koscielakryszard@gmail.com.
Introduction

Functional disorders of the masticatory organ are a very insidious disease. Suffering affects primarily the facial area. From a medical point of view, the problem relates to temporomandibular joints and impairs mandibular movements. According to the International Classification of Headache Disorders (HIS), since 1988, the diagnostic criteria have been including symptoms such as popping or crackling sounds in the temporomandibular joints during mandibular movements, limited mandibular movement, pain and difficulty in opening the mouth, teeth grinding (bruxism) and other oral parafunctional activity (biting or pressing the tongue, lips and cheeks) (Okeson, 2013; Gerber, 2008 Kaspo & Dubojska, 2011; Kares, 2010).

Worldwide epidemiological studies show that functional disorders of the masticatory organ range from 60 to 80%, and about 15% of those affected suffer from accompanying facial pain and headaches. The symptoms of musculo-articular disorders of the masticatory organ affect both sexes in equal proportions. The conviction that women suffer more often from functional disorders of the masticatory organ stems from the fact that they seek medical care more often than men (Baron et al.; 2008; Gilles & Six-Aksornprai, 2009). Abnormal posturing can be one of the symptoms of functional disorders of the masticatory organ (Gilles & Six-Aksornprai, 2009; Okeson, 2013; Sawrasewicz-Rybak et al., 2006).

Functional disorders of the masticatory organ have a complex origin. Psychological stress is one of its most common causes (Okeson, 2013). Spontaneous, most commonly tension-type headache is the first symptom of somatic disorders caused by stress. All forms of tension-type headache may be associated with impaired cranial muscles. Internal conflicts and struggle, suppression of feelings and desires or a sense of hopelessness lead to unbalanced muscle tension. Psychogenic stress may cause parafunctions of the locomotor system and lead to muscle hyperfunction and myofascial pain. This is followed by dysfunction of a muscle, which during systole is like a taut band full of very sensitive points, from which pain (acute or chronic pain) is projected onto those parts of the face that correspond to these particular points (Sawrasewicz-Rybak et al., 2006). Like in the saying “your face is the reflection of your soul”, muscles of the face, neck and the nape of the neck are the first to become excessively tense. If this occurs too often, the muscles become overactive, i.e., they are often excessively tense and eventually never relax. Such muscle tension leads to a faulty position of the mandible.
in the temporomandibular joints. As these joints are anatomically located in the vicinity of the ears, eyes, throat and temples, pain is felt to varying degrees in these areas.

In recent years, there has been a sharp increase in the number of patients with functional disorders of the masticatory organ. In addition to dental caries and periodontal diseases, these disorders are among the main social problems of modern dentistry. Psychological stress is one of the most common causes of functional disorders of the masticatory system. It is a universal phenomenon in modern life conditions, and therefore seems to predetermine the formation of any health problems. Mental stress can cause parafunctions of the masticatory system and lead to muscle hyperfunction, which in turn leads to oromandibular dysfunction. It is characterized by pain and popping sounds in the temporomandibular joint, as well as limited joint movement. In about 15% of cases, the dysfunction is accompanied by tension-type headache (Kaspo & Dubojska, 2011; Okeson, 2013).

As the disease is insidious, located in the face and head and has a wide social range, it is necessary to examine more deeply the psychological functioning of individuals suffering from this disease, their perceptions of the disease, health behaviours and methods of dealing with accumulating ailments.

## Material and methods

(This section has been drawn up on the basis of the research work written by Helena Dobrzańska (2014), the Faculty of Psychology, WSFiZ in Warsaw).

The aim of this study was to verify whether there are any correlations between selected aspects of the functioning of patients with functional disorders of the masticatory organ, i.e., health determinants. In connection with the intended objective and the theoretical background of this study, the main research problem has been defined in the question: Are there any correlations between individual health resources and health behaviours in patients with functional disorders of the masticatory organ?

Generalized self-efficacy is a powerful determinant of behaviour, which argues for the inclusion of this dimension to the theory of health behaviour (Schwarzer, 1997). Self-efficacy influences the formation of intentions, action control, as well as the effectiveness and persistence of health behaviours (Bandura, 1991). The stronger people's efficacy beliefs, the higher the goals
they set for themselves, and the firmer their commitment to engage in the intended behaviour, even in the face of failures. Self-efficacy is a good predictor of intention to engage in health-related behaviours and prevent the consequences of functional disorders of the masticatory organ.

Multiple studies conducted using the Health Locus of Control (MHLC) Scale have showed that, in general, people who have an internal health locus of control tend to control their health, seek information (Wallston et al., 1982; Heszen-Niejodek, 1992), more frequently engage in health activities and have a greater sense of responsibility for their health (Allison, 1991; Norman, Bennett, 1996). The belief in having control over one’s health increases the likelihood of adopting healthy behaviours (Juczyński, 2001).

High scores on the external health locus of control scale correlated significantly with a greater search for medical information on health (Wallston et al., 1982; Heszen-Niejodek, 1992). Juczyński (1997) has found that health behaviours such as health check-ups or patient compliance are associated with a higher external health locus of control. Those who prefer a healthy lifestyle assign less importance to chance in the area of health control (Weiss, Larsen, 1990; Bennett et al., 1995).

The following research questions have been formulated:

Question 1: What health locus of control is characteristic of individuals with functional disorders of the masticatory organ?

Question 2: What sense of self-efficacy is characteristic of individuals with functional disorders of the masticatory organ?

Question 3: Is there a statistically significant correlation between health locus of control and self-efficacy in the studied group?

Question 4: Is there a statistically significant correlation between health locus of control and self-efficacy in individuals with functional disorders of the masticatory organ?

Question 5: Is there a statistically significant correlation between health locus of control and a sense of coherence in individuals with functional disorders of the masticatory organ?

Question 6: Is there a statistically significant correlation between self-efficacy and a sense of coherence in individuals with functional disorders of the masticatory organ?

The Multidimensional Health Locus of Control (MHLC) Scale by Kenneth A. Walltson, Barbara S. Wallston and Robert DeVillis, (1978), adapted by Zygfryd Juczyński (2001), was used to measure health locus of control beliefs. Generalized self-efficacy was measured using the Generalized Self-Efficacy
Individual Health Resources in Patients …

Scale – (GSES in Polish) developed by Ralf Schwartzer, Michael Jerusalem and Zygfryd Juczyński (2001). The Multidimensional Health Locus of Control Scale is one of the most popular research tools (Norman et al., 1996). It is a development of the earlier version of a one-dimensional scale created by the authors of the School of Nursing, Vanderbilt University (Wallston, Wallston, 1982, 1981; Wallston et al., 1978). The new version of the scale corresponds to the locus of control by Levenson (1973), who has distinguished internal and external loci of control, and has divided the latter into ‘powerful others’ and ‘fate or chance’. The results made it possible to determine the discrimination power of each of the statements. All items were correlated with the overall score on the scale at above 0.35 (Juczyński, 2001). The MHLC scale in the Polish version contains 18 items and locates beliefs about generalized expectancies in the three dimensions of locus of control:

- Internality (W) – I am capable of controlling my health.
- Powerful others externality (I) – my health is determined by powerful others, especially medical personnel.
- Chance externality (P) – the state of my health is determined by chance or other external factors.

The scale is a tool of self-description, and it is based on the assumption that an internal locus of control is conducive to health behaviours, and therefore the tool is sometimes used in prevention programs. It turns out, however, that the relationships are more complex and it is also important to take into account other dimensions, such as self-efficacy and health behaviours. Respondents are recommended to express their attitudes to the statements on a six-point scale, from ‘strongly disagree’ (1 point) to ‘strongly agree’ (6 points).

There is a belief that an internal locus of control is more beneficial to health-related behaviours. Internals are more autonomous in decision making, more often engage in health-related activities and have a greater sense of responsibility for their health. It can be otherwise in patients for whom a mixed locus of control may be more beneficial. It is easier to implement medical recommendations about changing one’s behaviour if a strong belief in powerful others, such as medical personnel, is combined with an internal locus of control mobilizing for effective action (Juczyński, 2001).

The Generalized Self Efficacy Scale (GSES) by Schwarzer and Jerusalem of the Freie Universitat Berlin (Schwarzer, 1993) refers to the concepts of expectancies and self-efficacy developed by Bandura (1977b). Expecting efficacy is associated with control of one’s own actions. Perceived efficacy may relate to
specific areas of activity taken by an individual or may refer to a general belief about a special role in new or problematic situations. This scale is a brief instrument and contains 10 items. The German version was developed by Jerusalem and Schwarzer in 1992 and translated into English in 1993. By 1998, it was adopted into 21 languages, including Polish. Standardization studies have shown that the adjusted correlation coefficients between statements and the whole scale are high and range from 0.47 to 0.63 (Juczyński, 2001). The scale is used to measure the intensity of patients and healthy subjects' general beliefs about their self-efficacy in coping with difficult situations and obstacles. The total number of scores is the overall result. The indicator of self-efficacy is the sum of scores, ranging from 10 to 40 (Juczyński, 2001).

The Life Orientation Questionnaire (The Sense of Coherence Questionnaire – SOC-29), developed by Aaron Antonovsky, was released in 1983. The research tool consists of 29 items, to which subjects respond by circling one of the answers on the seven-point scale. Answers 1 and 7 represent extreme responses. For instance, in the first question of the questionnaire, subjects are able to choose from 1 – *Never have this feeling* to 7 – *Always have this feeling*. The questionnaire examines the global sense of coherence, but there is a clear division into items concerning comprehensibility (11), manageability (10) and meaningfulness (8) (Antonovsky A., 2005; Koniarek, J., Dudek, B. and Makowska, Z., 1993). The Polish adaptation of the Sense of Coherence Questionnaire was made at the Department of Clinical Psychology of the Institute of Psychiatry and Neurology in Warsaw, Department of Mental Health of the Institute of Psychology, Adam Mickiewicz University in Poznan and the Department of Work Psychology of the Institute of Occupational Medicine in Łódź (1993). The indicator for the global sense of coherence is the sum of all points giving an overall score gained in the questionnaire – the higher it is, the higher the sense of coherence of the respondent (Koniarek, J. Dudek, B. and Makowska, Z. (1993).

The Health Behaviour Inventory (IZZ) developed by Zygfryd Juczyński contains 24 statements which describe various types of health behaviours. Based on the frequency of individual behaviours indicated by those surveyed, the overall incidence of these health behaviours is determined and the intensity of the four categories of health is defined: healthy eating habits, prophylactics, health practices and positive mental attitude. The inventory is designed to test both healthy and ill adults. Tests can be performed individually or in groups. The health behaviour index ranges from 24 to 120 scores. The higher the score, the greater the intensity of declared health behaviour.
The intensities of the four categories of health behaviour are calculated separately, according to a diagnostic key. The overall index is then converted into standardized units based on the table and interpreted using sten scores. Low scores are 1–4 stens, medium scores are 5–6 stens and high scores are 7–10 stens (Juczyński, 2001).

The study involved 61 patients aged 19–70 years (average age M = 29.52): 45 women and 16 men. It was conducted in the period from March to May 2013 in a selected dental clinic.

### Results

Variables were described using descriptive statistics: the arithmetic mean (minimum, maximum) and standard deviation. Correlations were determined by Pearson’s correlation coefficient. The significance of differences was assessed using the Mann–Whitney U test. In order to answer the research questions, mean values were determined in the surveyed sample and compared to standardized data. At the outset, the distribution of the examined psychological variables was checked. The values of skewness and kurtosis indicate that the distributions in the sample differed significantly from the normal distribution curve in three scales (skewness and/or kurtosis > /1/). In the remaining scales, however, the distributions were not significantly different from the normal curve; there were just a few, relatively insignificant differences.

The self-efficacy of all those surveyed was assessed using the GSES scale. The average raw score for all respondents was M = 30.05 (7 stens). This means that the subjects – patients with functional disorders of the masticatory organ – reveal elevated levels of self-efficacy (Min. = 11: 1 stens, max = 40, 10 stens).

The analysis of results on health locus of control obtained in the MHLC test shows that the subjects had elevated levels of internal locus of control, slightly elevated levels of external control – fate or chance and reduced levels of external control – others, when compared to the standards (Juczyński 2001).

The Life Orientation Questionnaire SOC-29 made it possible to analyse the overall sense of coherence and its components: comprehensibility, manageability and meaningfulness. The mean score for SOC in the studied group was M = 123.89 (min. = 35, max. = 183), SD = 27.32. The result shows
a low sense of coherence in the whole group (standard mean: 130–160, Antonovsky). As for comprehensibility, which is the component of coherence, the mean score was $M = 43.20$ (min. = 17, max. = 62). These results allow for the conclusion that patients in the studied group differed in terms of comprehensibility ($SD = 9.49$) and manageability $M = 42.87$ (min. = 10, max. = 67) with $SD = 11.32$. It can be also concluded that the group was diversified in terms of meaningfulness: $M = 37.82$ (min. = 8, Max. = 55) with $SD = 9.95$ (Table 1).

**Table 1.** Distribution of variables: self-efficacy, health locus of control and a sense of coherence

<table>
<thead>
<tr>
<th></th>
<th>Min.</th>
<th>Max.</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>11</td>
<td>40</td>
<td>30.05</td>
<td>5.89</td>
<td>-1.14</td>
<td>1.67</td>
</tr>
<tr>
<td>Internal locus of control</td>
<td>12</td>
<td>36</td>
<td>27.08</td>
<td>4.55</td>
<td>-0.69</td>
<td>0.83</td>
</tr>
<tr>
<td>External locus of control – others</td>
<td>6</td>
<td>32</td>
<td>20.97</td>
<td>6.36</td>
<td>-0.40</td>
<td>-0.54</td>
</tr>
<tr>
<td>External locus of control – fate or chance</td>
<td>13</td>
<td>34</td>
<td>22.79</td>
<td>4.95</td>
<td>0.12</td>
<td>-0.27</td>
</tr>
<tr>
<td>Overall sense of coherence</td>
<td>35</td>
<td>183</td>
<td>123.89</td>
<td>27.32</td>
<td>-0.56</td>
<td>1.59</td>
</tr>
<tr>
<td>• comprehensibility</td>
<td>17</td>
<td>62</td>
<td>43.20</td>
<td>9.49</td>
<td>-0.18</td>
<td>0.02</td>
</tr>
<tr>
<td>• manageability</td>
<td>10</td>
<td>67</td>
<td>42.87</td>
<td>11.32</td>
<td>-0.49</td>
<td>0.55</td>
</tr>
<tr>
<td>• meaningfulness</td>
<td>8</td>
<td>55</td>
<td>37.82</td>
<td>9.95</td>
<td>-0.66</td>
<td>1.06</td>
</tr>
</tbody>
</table>

Source: own elaboration

The analysis of the Health Behaviour Inventory (IZZ) results shows the overall score for health behaviours. The mean score for this variable in the examined group was $M = 69.43$ (Min. = 24, Max. = 110), indicating that the result is lower ($M = 81.82$, Juczyński 2001). Lower scores were also obtained for healthy eating habits: $M = 2.88$ (Min. = 1, max. = 5), ($M = 3.22$ Juczyński 2001), prophylactics: $M = 2.85$ (min. = 1, Max. = 4.83), ($M = 3.42$ Juczyński 2001), positive mental attitude: $M = 3.1$ (Min. = 1, Max. = 5) ($M = 3.52$ Juczyński 2001) and health practices $M = 2.80$ (min. = 1, Max. = 5) ($M = 3.32$ Juczyński 2001). The results indicate reduced levels of all of the health-related variables under analysis. Respondents care less about their health (Table 2).

**Table 2.** Distribution variable – health behaviour

<table>
<thead>
<tr>
<th></th>
<th>Min.</th>
<th>Max.</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health behaviour</td>
<td>24</td>
<td>110</td>
<td>69.43</td>
<td>18.37</td>
<td>0.07</td>
<td>-0.25</td>
</tr>
<tr>
<td>Healthy eating habits</td>
<td>1.00</td>
<td>5.00</td>
<td>2.88</td>
<td>0.86</td>
<td>0.04</td>
<td>-0.02</td>
</tr>
</tbody>
</table>
The next step of the analysis was to examine whether individual health resources such as self-efficacy, health locus of control and a sense of coherence are associated with more health behaviours in patients with functional disorders of the masticatory organ. The test for correlation between variables such as self-efficacy and health behaviours showed a significant but weak relationship of these variables ($r = 0.27$). The correlation between self-efficacy and healthy eating habits was also weak ($r = 0.30$), and so was the correlation between self-efficacy and prophylactics ($r = 0.23$). There was also a weak relationship between self-efficacy and positive mental attitude ($r = 0.33$). In contrast, correlations between a sense of coherence, all of its dimensions and health behaviours are strong.

Table 3. Correlations between self-efficacy, health locus of control, a sense of coherence and health behaviours

<table>
<thead>
<tr>
<th></th>
<th>Health behaviours</th>
<th>Healthy eating habits</th>
<th>Prophylactics</th>
<th>Positive mental attitude</th>
<th>Health practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>0.27*</td>
<td>0.30**</td>
<td>0.23*</td>
<td>0.33**</td>
<td>0.088</td>
</tr>
<tr>
<td>Internal locus of control</td>
<td>0.14</td>
<td>0.159</td>
<td>0.078</td>
<td>0.207</td>
<td>0.058</td>
</tr>
<tr>
<td>External locus of control – others</td>
<td>0.014</td>
<td>0.031</td>
<td>0.006</td>
<td>–0.054</td>
<td>0.068</td>
</tr>
<tr>
<td>External locus of control – fate or chance</td>
<td>–0.056</td>
<td>0.054</td>
<td>–0.006</td>
<td>–0.053</td>
<td>–0.188</td>
</tr>
<tr>
<td>Overall sense of coherence</td>
<td>0.56**</td>
<td>0.59**</td>
<td>0.39**</td>
<td>0.66**</td>
<td>0.31**</td>
</tr>
<tr>
<td>• comprehensibility</td>
<td>0.24*</td>
<td>0.46**</td>
<td>0.135</td>
<td>0.29*</td>
<td>–0.015</td>
</tr>
<tr>
<td>• manageability</td>
<td>0.60”</td>
<td>0.54**</td>
<td>0.44**</td>
<td>0.73”</td>
<td>0.40”</td>
</tr>
<tr>
<td>• meaningfulness</td>
<td>0.61”</td>
<td>0.57”</td>
<td>0.45”</td>
<td>0.70”</td>
<td>0.40”</td>
</tr>
</tbody>
</table>

* $p < 0.05$; **$p < 0.01$ (one-sided significance).

Source: own elaboration

The analysis of correlations between health behaviours, their components and internal sense of control, powerful others externality and chance externality did not show any statistically significant relationships. There was a moderate correlation between healthy eating habits and the overall sense of coherence $r = 0.59$. The correlation between a sense
of coherence – comprehensibility and healthy eating habits was $r = 0.46$ (moderate correlation). There were weak correlations between a sense of coherence – comprehensibility and health behaviours ($r = 0.24$), as well as SOC – comprehensibility and positive mental attitude ($r = 0.29$). The correlation between a sense of coherence – manageability and health behaviours was moderate ($r = 0.60$); healthy eating habits – moderate ($r = 0.54$); prophylactics – moderate ($r = 0.44$); positive mental attitude – strong ($r = 0.73$); and health practices – weak ($r = 0.40$). The relationship between a sense of coherence – meaningfulness and health behaviours was strong ($r = 0.61$); healthy eating habits – moderate ($r = 0.57$); prophylactics – moderate ($r = 0.45$); positive mental attitude – strong ($r = 0.70$); and health practices – weak ($r = 0.40$) (Table 3).

### Discussion

In connection with the intended objective and the theoretical background of this study, the main research question is: *Are there any correlations between individual health resources and health behaviours in patients with functional disorders of the masticatory organ?* The results of the correlation analyses indicate that self-efficacy is positively correlated with health behaviour. This shows that the more effort patients put and the more persistent they are in reducing symptoms of the disease, the more they engage in certain health activities. Self-efficacy as a predictor of health behaviour may be expressed through physical activity, healthy diet, periodic health check-ups or, for example, giving up addictions (Kościelak, 2010).

A sense of coherence is positively associated with health behaviour. These variables create a strong, positive relationship. It follows that an increased sense of coherence indicates an increase in health behaviours. This means that patients with functional disorders of the masticatory organ retain mental balance despite the complex problems. Individuals with a strong sense of coherence have the ability to maintain mental balance, even in the face of difficult life situations and traumatic events. They can understand the situation they are in, predict reactions to the influence of internal and external environment and perceive the meaning of their own health activities (Antonovsky, 1995).

Internality, powerful others externality and chance externality are not statistically significantly correlated with health behaviours in all health
categories. This shows that the surveyed patients do not perceive health behaviours as relevant to their health.

The examined patients with functional disorders of the masticatory organ reveal elevated levels of self-efficacy. This means that the subjects are convinced that they can effectively cope with difficulties caused by the disease. Stress is the main cause of functional disorders of the masticatory organ and the effects of stress, such as facial pain and disease control, are hampered by strong self-efficacy beliefs. Individuals with a strong belief in self-efficacy make long-term plans, put more effort and are more persistent in pursuit of the goal. Self-efficacy affects physical and mental health by selecting appropriate coping strategies and modifying the intensity of stress. Patients believe that they can effectively cope with the difficult situation, disappointment and stress, which also affects the physiological functioning of the body (Cervone, 2011; Gerrig, 2009; Kościelak, 2010).

The analysis of results concerning a sense of health control has revealed that the subjects had elevated levels of internal locus of control, slightly elevated levels of external control – fate or chance and reduced levels of external control – others. This shows that patients with functional disorders of the masticatory organ believe that their health can be controlled by them and, to a lesser extent, by fate and chance, but not by powerful others. Those with internal locus of control rely on their own skills and their actions are aimed at achieving goals (Kościelak, 2010). A sense of internal control decreases with age in these individuals, while powerful others (doctors) and fate or chance externality increases (Juczyński, 2001).

The subjects show lower levels of health behaviours, which means that they care less about their health. Functional disorders of the masticatory organ affect primarily the face, and despite quite severe pain patients sometimes do not perceive it as a disease requiring specific health behaviours. This indicates that the subjects have the disease (they have been diagnosed by health professionals), but they still feel healthy in some ways. Generally, they do not think of themselves as ill. According to them, some organ or system is dysfunctional and the problems are limited to this one place, e.g., ankle sprain (Gerber, 2008 Okeson, 2013). Patients are not aware of their own disease and its consequences, and do not take measures to improve their health. Perhaps, this is due to a lack of sufficient knowledge about the disease, its course and effects.

The entire group under analysis is characterized by a reduced sense of coherence (M = 123.89); (standard mean: 130–160, Antonovsky 1995).
These results indicate that if individuals with a weak sense of coherence take any action to improve their health, they do so without conviction. The efforts they take to cope with emotions are also devoid of conviction and therefore are rather ineffective. Low levels of SOC make it difficult for people to maintain mental balance. Individuals with functional disorders of the masticatory organ often find it hard to fully maintain mental balance, although they try hard to participate in social events despite the disease. In these individuals, tension very often turns into stress, which is not reduced and intensifies the disease (Antonovsky, 1995; Strelau, 2008).

The statistical analyses allow for the conclusion that a sense of meaningfulness is the best predictor of individual health determinants. It is a belief that patients should fight, be active and constantly strive to achieve their goals despite the difficulties. When it comes to the type of health behaviour, a positive mental attitude, i.e., avoiding stress and depressing situations, having control over negative emotions, especially fear of pain, and stimulating positive emotions, has turned out to be most determined by individual health resources.

Health behaviours are formed throughout life, but take other forms in health, and others in disease. The choice of health behaviours is associated with objective knowledge about health and disease, individual beliefs and experiences, as well as social and cultural factors.

The conclusions of the study are as follows:

1. Patients with functional disorders of the masticatory organ in the studied group had elevated levels of self-efficacy.
2. The respondents revealed decreased levels of SOC.
3. The subjects showed reduced levels in all categories of health behaviour.
4. The studied group do not take care of their health in a satisfactory way.
5. The determination of a sense of coherence and health behaviours in patients with functional disorders of the masticatory organ should serve as an indicator in their rehabilitation.

Chronic functional disorders of the masticatory organ may result in depression and co-exist with depression (Baron et al., 2008; Stępien, 2004). Close links between functional disorders of the masticatory organ and depression indicate the need for studies on depression in patients with functional disorders of the masticatory organ. Given the social dimension of the effects of this disease, it is advisable to conduct psychological research in a larger and more socially diverse group of patients with functional disorders of the masticatory organ.
References


