

Humanitas University in Sosnowiec. Faculty of Social Sciences and Humanities

JACEK OLSZEWSKI

ORCID: 0000-0002-5323-4383

jackolszews@poczta.onet.pl

---

*Forms of Emotional Health and Coping with Stress in People  
with Cardiovascular Diseases*

---

Formy zdrowia emocjonalnego a radzenie sobie ze stresem u osób z chorobami układu  
sercowo-naczyniowego

HOW TO QUOTE THIS PAPER: Olszewski, J. (2020). Forms of Emotional Health and Coping with Stress in People with Cardiovascular Diseases. *Annales Universitatis Mariae Curie-Skłodowska. Sectio J, Paedagogia-Psychologia*, 33(3).

ABSTRACT

Cardiovascular diseases, among the diseases of civilization, are the most common cause of death; every second person dies from them. The burden of a life-threatening illness undoubtedly promotes the development of emotional disorders. However, from a positive psychological perspective, psychological well-being can be a buffer to protect cardiac patients from falling into helplessness. Therefore, the author of the study takes up the problem of integration of subjective well-being with psychopathology, reduced to the level of anxiety, which can determine the form of emotional health. The aim of the conducted research was to determine the relationship between the forms of emotional health, determined by the level of life satisfaction and the level of anxiety, and the type of methods used to cope with stress. The study involved 100 people (50 women and 50 men) suffering from cardiovascular diseases who had undergone cardiac surgery. The age of the respondents ranged from 45 to 65 years. The variables were measured using the Life Satisfaction Scale (SWLS), State-Trait Anxiety Inventory (STAI) and the Coping Orientations to Problems Experienced (COPE). The results of the research indicate that the studied cardiologic patients show different forms of emotional health. In addition, in groups of people affected by cardiovascular diseases, different forms of emotional health are linked to ways of coping with stress.

**Keywords:** cardiovascular diseases; life satisfaction; level of anxiety; emotional health; coping with stress

## INTRODUCTION

Cardiovascular diseases, among the civilization-related diseases, are the most common cause of death; every second person dies from them. Despite the significant progress in treatment, these diseases are still an important problem in medical as well psychosocial as economic terms (Badger, 1992; McCabe, Schneiderman, Field, Skyler, 2013; Monastyrska, Beck, 2014). Their development is influenced by, among other things, psychological factors such as: stress, hostility, high levels of anxiety, depression (Bush, Pössel, Valentine, 2017; Gianaros, Jennings, 2018). On the other hand, the burden of a life-threatening illness can foster the development of emotional disorders: anxiety, depression, stress-related disorders (Chauvet-Gelinier, Bonin, 2017; Kovacs, Bandyopadhyay, Grace, Kentner, Nolan, Silversides, Irvine, 2015; Roseman, Kovacs, 2019).

## EMOTIONAL HEALTH

The current knowledge undermines the traditional definition of health, which is based on a medical approach, mainly focused on pathology. The diagnostic criteria of disorders introduce the separation between health and pathology of mental life, including emotional life. The classification of mental health only in terms of the presence or absence of pathology seems unsatisfactory, as this approach covers only the half of the mental health area (Trzebińska, 2008). Positive psychology takes into account both positive and negative aspects of human functioning (Trzebińska, 2008). Full health is also determined by well-being, which is considered the important element of positive mental health (Ogińska-Bulik, Juczyński, 2008). Therefore, contemporary empirical studies seek to combine subjective well-being with psychopathology (Shaffer-Hudkins, Suldo, Loker, March, 2010; Westerhof, Keyes, 2010).

The complete mental health model of Corey Keyes and Shane Lopez (2002) is consistent with this approach. This model describes qualitatively different forms of mental health, which are determined by the dimensions of psychopathology and well-being. Based on this model, the performance evaluation allows to determine the position of a person in the field of mental health, which is expressed by the degree of effectiveness in coping with life tasks. However, this model has its limitations. It does not take into account intermediate states determined by average results in terms of psychopathology, well-being. Therefore, Jacek Olszewski (2012, 2014) proposes to modify this model (Figure 1). Such a modification makes it possible to take into account also the average intensity of well-being and psychopathology and to distinguish as many as nine different forms of mental health, limited to the emotional sphere, in the further part of the study referred to as forms of emotional health (Olszewski, 2012, 2014, 2018b).

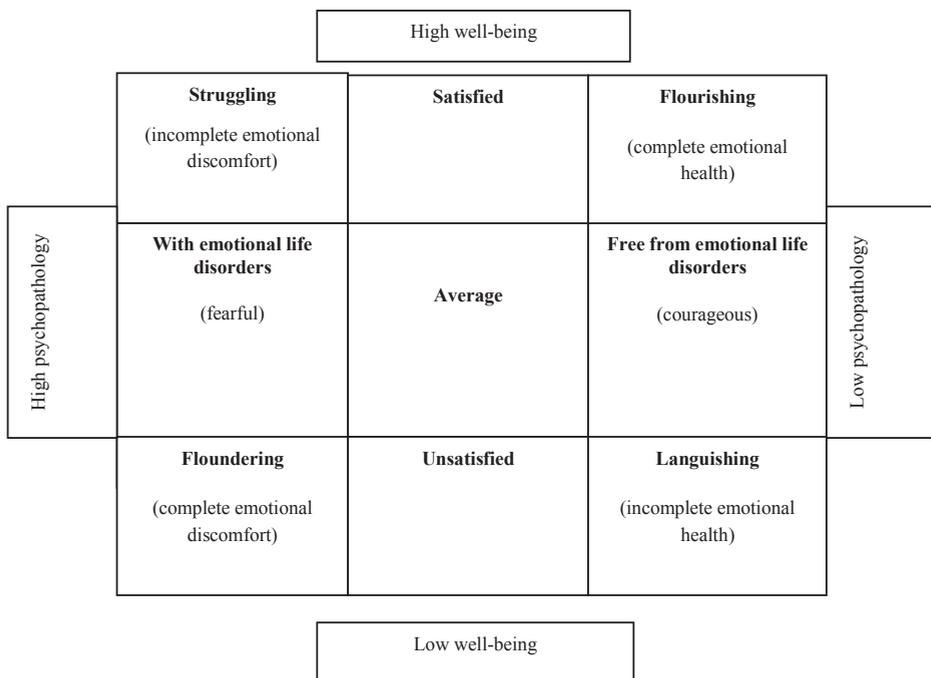


Figure 1. The complete emotional health model

Source: Author's own study on the basis of (Keyes, Lopez, 2002, p. 50).

## COPING WITH STRESS

Coping with stress, the creators of the cognitive concept of stress – Richard Lazarus and Susan Folkman (1984, p. 141) – define as “the ever-changing cognitive and behavioral efforts to master external and internal requirements that a person considers to be burdensome or exceeding his or her resources”. In their concept, Lazarus and Folkman (1984) assign an important role to the subjective evaluation of the cognitive relationship between the person and his or her environment. The initial assessment determines whether the transaction is stressful for the individual or not. And if it is stressful, whether it is an injury or loss, a threat or a challenge and the secondary assessment allows to determine the possibilities of dealing with a given situation. Stevan Hobfoll (1989) in his concept draws attention to human resources. According to him, man strives to preserve and create resources, and the danger may be their loss, e.g. as a result of illness.

Among the coping styles, there are essentially different ways: active-problem-oriented, emotional and evasive. It is assumed that an active attitude towards difficulties, characterized by, efforts to overcome them, is more beneficial for adaptation than a passive attitude, characterized by (among others things) the con-

centration on emotions and an attitude to escape from difficulties (Olszewski, 2010, 2018a). Charles Carver and Michael Scheier (1994), referring to the model of self-regulation of behaviour, distinguish between remedial measures that reflect both a permanent disposition to deal with a particular situation and specific strategies applied in specific stressful situations. These authors distinguish the following styles of coping with stress: active coping, evasive behaviour and seeking support and focusing on emotions (Olszewski, 2015, 2018a).

### COPING WITH STRESS AND THE COMPONENTS OF EMOTIONAL HEALTH

The results of numerous studies indicate that people with the high level of anxiety are willing to use non-adaptive ways of coping with difficulties. Elizabeth Eurelings-Bontekoe, Marianne van der Slikke, and Margot Verschuur (1997) have shown that patients in basic healthcare with anxiety characteristics are willing to use passive ways of coping and avoid difficult situations. Also Jakob Smári, Elvar Arason, Hafsteinn Hafsteinsson, and Snorri Ingimarsson (1997) examining, *inter alia*, the role of coping styles in the anxiety of the unemployed using the Carver, Scheier and Weintraub COPE Questionnaire indicate the relationship between anxiety and coping styles that are evasive and emotionally focused and the negative correlation of these symptoms with reappraisal. As for the search for social support for anxious people, Julie Deisinger, Jeffrey Cassisi, and Sandra Whitaker (1996) conclude from empirical research that anxious individuals are more likely to be involved in seeking support than those not affected by emotional disorders. In addition, the results of research conducted by Paolo Grandinetti, Andrea Frustaci, Giuseppe Guerriero, Solaroli, Luigi Janiri, and Gino Pozzi (2011), show that such strategies as: ventilation of emotions, denial, behavioural escape, use of emotional support and self-blame positively correlate with fear. A valuable mental resource that fosters remedial adaptation and ensures mental resilience is life satisfaction, which, according to positive psychology representative, is associated with activity that is considered extremely effective in dealing with stress (Czapiński, 2004; Trzebińska, 2008). Also Carlos Freire, María Del Mar Ferradás, Antonio Valle, José Núñez, and Guillermo Vallejo (2016) have empirically demonstrated that mental well-being is an important personal resource for adaptive stress management strategies. Moreover, Nancy Sin (2016) points to the positive role of well-being in the prevention of cardiovascular diseases. On the other side, research has been conducted, the results of which indicate that stronger stress correlates with lower positive psychological well-being, while worse stress management is associated with a decline in psychological and physical well-being (Streisand, Mackey, Herge, 2010).

## COPING WITH THE DISEASE

In the face of cardiovascular diseases, which pose a real threat to life, the patients launch various ways of coping with stress resulting from the disease, most of them have clear difficulties in this respect (Badger, 1992; Heszen, Sęk, 2007; McCabe, Schneiderman, Field, Skyler, 2013; Roseman, Kovacs, 2019; Wrona-Polańska, 1999). The disease, being a source of high mental tension, can trigger the use of non-adaptive ways of coping (Wrona-Polańska, 1999). Observations indicate that cardiovascular diseases may be associated with inability to cope with chronic stress and the lack of supportive bonds with other people (Heszen, Sęk, 2007). As empirically demonstrated by Dorota Włodarczyk (1999), people after myocardial infarction significantly more often than healthy people use the evasive style of coping with stress. The Włodarczyk study (1999) also shows that at the end of rehabilitation, sanatorium cardiac patients more often use active and independent coping strategies, accept their situation more, control their emotions more strongly, as well as try to solve their problems with greater realism and distance. The management of the disease and the effectiveness of treatment can also be influenced by *Type A behaviour pattern*. Barbara Bętkowska-Korpała's (2004) study shows that in patients with adverse effects of percutaneous coronary artery angioplasty, the *Type A behaviour pattern* was higher. However, patients after myocardial infarction representing the *Type A behaviour pattern* are more easily involved in rehabilitation exercises requiring physical effort, but it is more difficult for them to make changes in their lifestyle (Juczyński, 2001). The way the patient reacts to the disease and how he/she deals with it is also a result of his/her cognitive evaluation. The disease can be perceived by the patient in terms of loss, relief, benefits, challenges, sometimes it can also lead to reappraisals (Jarosz, 1983; Olszewski, 2008).

Thus, a cardiovascular disease assessed negatively by a patient as unpredictable and uncontrollable may lead to the use of methods aimed at reducing unpleasant emotional tension. On the other hand, it is possible for people affected by cardiovascular diseases to function effectively, despite experiencing a life-threatening situation. People who are prone to reappraisal can even increase their ability to cope with stress (Olszewski, 2010). Looking at life-threatening diseases and related suffering through the prism of Kazimierz Dąbrowski's theory of positive disintegration (1989), it can be expected that some patients will see health problems as a difficult situation, which requires launching new adaptation strategies and gives the opportunity to achieve a higher level of personal development (Kubacka-Jasiecka, 2010).

## METHODOLOGY OF RESEARCH

The aim of the research is to determine the relationship between the forms of emotional health, determined by the level of life satisfaction and the level of anxiety, and the type of methods used to deal with stress in people with cardiovascular diseases.

The research objective gives rise to formulating the following research problems:

1. Can subgroups with different forms of emotional health be distinguished in the group of people with cardiovascular diseases who have undergone cardiac surgery. And if they can be distinguished:
2. Are there any correlations between life satisfaction and the level of anxiety and the type of stress management methods used in the separate subgroups, characterized by different forms of emotional health?

The following research hypotheses correspond to the problems posed:

1. In the group of people with cardiovascular diseases who have undergone cardiac surgery, one can distinguish subgroups characterized by different forms of emotional health.
2. In separate subgroups, characterized by different forms of emotional health, there are correlations between life satisfaction and the level of anxiety and the type of methods used to deal with stress.

## PARTICIPANTS

The study involved 100 subjects (50 women and 50 men) affected by cardiovascular diseases (e.g. chronic ischaemic heart disease, hypertension with heart involvement, atrial fibrillation and flutter, congestive heart failure) that have undergone cardiac surgeries (e.g. percutaneous coronary artery angioplasty, coronary artery bypass grafting, cardiac valve replacement, pacemaker implantation). When selecting people for the study, the time criterion was adopted: at least 6 months after the procedure. The age of the respondents ranged from 45 to 65 years. The average age was 58.75 ( $SD = 5.69$ ). The research was conducted in the Health Resort Nałęczów S.A. and in the Cardiology Department of the Health Resort Hospital in Nałęczów.

## METHODS

To measure the variables, the following three testing tools were used to verify the hypotheses:

1. The scale of satisfaction from life (SWLS), created by Diener, Emmons, Larson and Griffin in adaptation by Juczyński. This scale allows us to ex-

amine one of the important components of subjective well-being – the satisfaction with life which is expressed in the feeling of satisfaction with one's own achievements and conditions (Ogińska-Bulik, Juczyński, 2008). This scale consists of five statements evaluated on a seven-stage scale. The reliability index (Cronbach's alpha) SWLS, established in the study of 371 adults was 0.81.

2. State-Trait Anxiety Inventory (STAI), whose authors in the Polish version are Spielberger, Strelau, Tysarczyk and Wrześniewski. The questionnaire allows to detect persons with definitely low or definitely high levels of anxiety understood as a permanent internal disposition (trait) and allows to record changes in the severity of anxiety understood as a state. Each of the two parts of the questionnaire consists of 20 statements which can be studied on a scale from 1 to 4. In our own research, we have included anxiety as a feature that allows us to study the X-2 scale. Sosnowski's internal compliance for 48 people was 0.88 for the X-2 scale (Wrześniewski, Sosnowski, Matusik, 2002).
3. The Coping Orientations to Problems Experienced (COPE), written by: Carver, Scheier, Weintraub, Polish adaptation of this tool was made by Juczyński and Ogińska-Bulik. The inventory allows to examine the frequency of use of 15 methods, of coping with stress, such as: 1. Active coping, 2. Planning, 3. Seeking for informational support, 4. Seeking for emotional support, 5. Suppression of competing activities, 6. Turning to religion, 7. Positive reinterpretation, 8. Restraint coping, 9. Acceptance, 10. Focus on emotions, 11. Denial, 12. Mental disengagement, 13. Behavioral disengagement, 14. Substance use, 15. Humor. The COPE Inventory scales in the Polish adaptation are formed by three factors, corresponding to remedial styles, such as: Active style, Avoidance style, Supportive and Emotional style. For each statement, the respondent shall mark one of the four answers from 1 to 4. Cronbach's alpha coefficients for individual scales range from 0.48 to 0.94 (Juczyński, Ogińska-Bulik, 2009).

## RESULTS. FORMS OF EMOTIONAL HEALTH IN PEOPLE WITH CARDIOVASCULAR DISEASES

Among the respondents, based on the results of the SWLS Life Satisfaction Scale and the STAI Inventory, using cluster analysis (k-means method), two subgroups with different forms of emotional health were selected. These are: "courageous" people (which constitute a more numerous subgroup:  $N = 59$ ), characterised by an average satisfaction from life and a reduced level of anxiety, and "floundering" people ( $N = 41$ ), characterized by the reduced satisfaction from life and an increased level of anxiety. The selected subgroups differ significantly

in terms of life satisfaction and the level of anxiety. The number, mean values, standard deviations and significance of the differences in the examined variables among people affected by cardiovascular diseases are presented in Table 1.

Table 1. Number (*N*), mean values (*M*), standard deviations (*SD*) of life satisfaction (SWLS) and level of anxiety (STAI) and significance of differences between mean values in subgroups of people with cardiovascular diseases

Subgroups with different forms of emotional health	1. "Courageous" ( <i>N</i> = 59)		2. "Floundering" ( <i>N</i> = 41)		<i>Z</i>	<i>p</i> <
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
SWLS	6.00	1.31	3.71	1.52	-6.56	0.001
STAI	4.17	1.23	6.66	1.48	-7.03	0.001

Source: Author's own study.

The data presented in Table 1 indicate that the subgroup of "floundering" people ( $M = 6.66$ ) compared to the subgroup of "courageous" people ( $M = 4.17$ ) is characterized by significantly higher levels of anxiety ( $Z = -7.03$ ;  $p < 0.001$ ) and significantly lower levels of life satisfaction ("floundering":  $M = 3.71$ ; "courageous":  $M = 6.00$ ;  $Z = -6.56$ ;  $p < 0.001$ ).

#### THE RELATIONSHIP BETWEEN FORMS OF EMOTIONAL HEALTH AND WAYS OF COPING WITH STRESS

The relationship between life satisfaction and the level of anxiety and ways of dealing with difficulties in groups with different forms of emotional health was determined by a correlation coefficient  $\rho$ -Spearman. These are presented in Table 2.

In both subgroups of people affected by cardiovascular diseases, different forms of emotional health ("courageous" and "floundering") are linked to the way of coping with stress. In the "courageous" subgroup, more stress management correlations were found (9) than in the "floundering" subgroup (8 correlations). In the subgroup of "courageous" people, there are significant correlations between life satisfaction (SWLS) and the ways of coping with stress (4 correlations). In this subgroup there are five correlations between the level of anxiety (STAI) and remedial activity. Also in the subgroup of "floundering", coping is associated with life satisfaction (4 correlations) and anxiety (4 correlations). Based on the strength of the relationship, more strong correlations were revealed in the "floundering" group. They concern fear (STAI) and supportive-emotional coping style ( $\rho = 0.37$ ) and the ways it consists of: focusing on emotions ( $\rho = 0.56$ ) and searching for informational support ( $\rho = 0.38$ ) and behavioral disengagement ( $\rho = 0.34$ ). Life satisfaction (SWLS), which in the group of "floundering" negatively correlates

Table 2. Correlation coefficients showing significant relationships between subjective well-being and anxiety and ways of dealing with stress in subgroups of people with cardiovascular diseases differing in forms of emotional health

Subgroups Variables	1. "Courageous"		2. "Floundering"	
	SWLS	STAI	SWLS	STAI
1. Active coping	-0.06	-0.17	<b>-0.52**</b>	-0.07
2. Planning	-0.10	-0.17	<b>-0.27*</b>	0.13
3. Seeking for informational support	-0.09	-0.07	-0.15	<b>0.38**</b>
4. Seeking for emotional support	-0.01	0.08	-0.13	0.22
5. Suppression of competing activities	-0.06	0.02	-0.22	0.04
6. Turning to religion	0.03	0.21	0.17	-0.11
7. Positive reinterpretation	0.22*	<b>-0.39**</b>	<b>-0.29*</b>	0.01
8. Restraint coping	0.11	0.00	-0.08	-0.15
9. Acceptance	0.10	-0.03	-0.09	0.08
10. Focus on emotions	<b>-0.26*</b>	<b>0.23*</b>	-0.17	<b>0.56**</b>
11. Denial	0.17	0.19	0.24	-0.11
12. Mental disengagement	0.17	0.11	0.24	-0.10
13. Behavioral disengagement	0.12	<b>0.27*</b>	0.10	<b>0.34*</b>
14. Substance use	0.12	0.20	0.03	0.12
15. Humor	<b>0.31**</b>	0.04	-0.11	-0.23
16. Active style	0.03	<b>-0.22*</b>	<b>-0.30*</b>	0.04
17. Avoidance style	<b>0.30**</b>	<b>0.25*</b>	0.08	0.06
18. Supportive and emotional style	-0.08	0.20	-0.15	<b>0.37**</b>

\* the correlation is significant at the 0.05 level

\*\* the correlation is significant at the 0.01 level

Source: Author's own study.

with active coping style ( $\rho = -0.30$ ) and the ways it consists of: active coping ( $\rho = -0.52$ ), planning ( $\rho = -0.27$ ) and positive reinterpretation ( $\rho = -0.29$ ).

On the other hand, in the group of "courageous" people, life satisfaction (SWLS) positively correlates with an avoidance coping style ( $\rho = 0.30$ ), and with humour ( $\rho = 0.31$ ), and with the active way of positive reinterpretation ( $\rho = 0.22$ ). Moreover, in this group, life satisfaction shows the negative relationship with focusing on emotions ( $\rho = -0.26$ ). In the group of "courageous" people, fear as a trait (STAI) shows a negative relationship with an active style ( $\rho = -0.22$ ) and an active strategy of positive reinterpretation ( $\rho = -0.39$ ). On the other hand, it is positively correlated with the avoidance style ( $\rho = 0.25$ ) and with the strategy of behavioral disengagement ( $\rho = 0.27$ ) and with the emotional way of focusing on emotions ( $\rho = 0.23$ ).

## DISCUSSION

The results of the study allow us to assume hypothesis 1, according to which in the group of people with cardiovascular diseases who have undergone cardiac surgery, subgroups with different forms of emotional health can be distinguished. Thus, cardiological patients show differentiation in the form of emotional health, which results from life satisfaction and the level of anxiety. Two subgroups with different forms of emotional health were selected from the group of the examined people. These are “floundering” people and increased anxiety, and “courageous” patients showing average life satisfaction and reduced anxiety levels.

“Emotionally floundering” persons with full emotional discomfort, resulting from the reduced life satisfaction ( $M = 3.71$ ) and the increased level of anxiety ( $M = 6.66$ ) manifest the form of emotional health that makes it difficult to deal effectively with the disease. It can be assumed that this lower positive psychological well-being triggers stronger stress in them, with which they cope less well (Streisand, Mackey, Herge, 2010). Dissatisfaction with oneself and with one’s life situation, with the coexisting tendency to experience negative emotions, shows a certain convergence with type D (stress) personality, which is a determinant of risky behaviours and, as research shows, is not conducive to their change in therapy and rehabilitation of cardiac patients (Juczyński, Ogińska-Bulik, 2009).

A more numerous group among the surveyed patients are “courageous” people (59%), whose reduced anxiety ( $M = 4.17$ ) may help to perceive their life situation as a challenge. Such patients with a “satisfactory” level of well-being ( $M = 6.00$ ) to a greater extent than “floundering in the disease” will be inclined to view their health problems as a difficult situation which requires new adaptation strategies to be used in place and which offers the possibility of achieving a higher level of personal development – post-traumatic growth (Kubacka-Jasiecka, 2010). This way of functioning can also be attempted to relate to a sense of coherence, which allows important areas of life to be made meaningful, understandable and controllable (Antonovsky, 1995). The “courage” of patients after myocardial infarction may also be related to the *Type A behaviour pattern* which although it is conducive to goal-orientation and activity facilitating involvement in rehabilitation, on the other hand, may make it difficult to follow the specialists’ recommendations concerning limitations resulting from the necessity to change one’s lifestyle to pro-healthy one (Juczyński, 2001). However, finding differences in mental characteristics in this group of patients would require further research. Therefore, in diagnosing psychological properties it seems justified to pay attention to the state of emotional health and psychological mechanisms that determine the behaviour of cardiac patients. The therapeutic and supportive psychological effects taken up should, therefore, take into ac-

count, among other things, the form of emotional health of the patient, in order to stimulate his internal resources to deal more effectively with a life-threatening illness that entails a number of limitations.

The results of the study also allow us to adopt the second hypothesis which assumes the groups of people with cardiovascular diseases, who are characterized by different forms of emotional health there are correlations between life satisfaction and the level of anxiety and the type of methods used to deal with stress. The functioning of patients “floundering” by the disease is rather passive, stagnant and based on seeking support and concentration on emotions. In this group, the increased level of anxiety (STAI) favours focusing on oneself, on the negative emotions experienced, and also encourages to use specialist advice and therapy as the part of informational support. Life satisfaction (SWLS) in this group, characterized by a non-adaptive form of emotional health, paradoxically favours the withdrawal from activity. Such people are satisfied that they do not have to plan, act, set further life goals, develop, and they lived from day-to-day life. This may be due to a change in the standards of one’s own life situation, which are decisive for one’s well-being (Juczyński, 2001). Their functioning can also be attempted to be interpreted in terms of secondary benefits from the illness (illness as relief, a benefit) (Jarosz, 1983; Olszewski, 2008).

On the other hand, in the group of “courageous” people, welfare (SWLS) correlates positively with active and evasive methods, while negatively with emotional ones. Satisfaction with life promotes adaptation to the disease, induces people with cardiologic diseases to positive re-evaluation and mental development. As a result, the “courageous” do not focus too much on their emotions and their health. Thanks to adaptive avoidance methods, e.g. the sense of humour, they can keep some distance from their own illness. Therefore, they can solve their problems with greater realism (Włodarczyk, 1999).

In the group of “courageous” people, fear makes them overconcentrate on negative emotions and they are unable to control them, which may block their tendency to make reappraisals and work on their own mental development. As a result, they are giving up active measures and leaning towards evasive ways of dealing with difficulties. According to the research, such a “courageous” style of emotional functioning is insignificantly predominant among the examined cardiac patients (59% of the examined persons are characterized by it).

Going beyond the results of these studies, it can be assumed that the impact on people affected by cardiovascular diseases will be justified in order to improve their functioning, by increasing their life satisfaction (using the cognitive change of standards against which a person assesses their current situation) and reducing the fear of disease, which will make patients more likely to cognitively assess the difficulties of the disease in terms of a challenge rather than a threat (Lazarus, Folkman, 1984). The separation of subgroups of cardiac patients char-

acterized by different forms of emotional health may indicate the legitimacy of perceiving the individual character of struggling with a life-threatening disease, which may increase the effectiveness of helpful psychological interactions. Especially for people “floundering in illness” the psychological effects of adaptation can be aimed at helping them to see their abilities, skills, resources (while being aware of their limitations), which can be used in setting and achieving life goals that give meaning to living with illness. Due to the small size of the groups, it is necessary to be careful in the interpretation of the results. However, this research may form the basis for more extensive future research in this area, which would need of medical, sociodemographic and psychological variables to take into account other aspects of subjective well-being and the impact of the functioning of cardiac patients.

### CONCLUSIONS

1. The studied cardiologic patients show differentiation in the form of emotional health, which results from life satisfaction and the level of anxiety. Among the respondents, there were two groups characterized by two forms of emotional health – people “floundering” in the disease (being a less numerous group), characterized by decreased life satisfaction and increased anxiety, and “courageous” people showing average life satisfaction and decreased level of anxiety.
2. In both groups of people affected by cardiovascular diseases, different forms of emotional health (“floundering” and “courageous”) are linked to the ways of coping with stress.
3. The functioning of patients “floundering” in the disease, as a result of anxiety, is passive, focused on negative emotions and based on seeking support. Their life satisfaction is based on withdrawal from activity and is not associated with self-fulfilment and self-development.
4. On the other hand, in the group of “courageous” people, welfare correlates positively with active and evasive methods, while negatively – with emotional ones. Satisfaction with life promotes adaptation to the disease, induces people with cardiologic diseases to positive re-evaluation and mental development. However, the anxiety experienced by people in this group may hinder their functioning and block the resources they have to deal effectively with the disease and its limitations.

## REFERENCES

- Antonovsky, A. (1995). *Rozwikłanie tajemnicy zdrowia. Jak radzić sobie ze stresem i nie zachorować*. Warszawa: IPN.
- Badger, T.A. (1992). Coping, life-style changes, health perceptions, and marital adjustment in middle-aged women and men with cardiovascular disease and their spouses. *Health Care for Women International*, 13(1), 43–55. doi:10.1080/07399339209515977
- Bętkowska-Korpała, B. (2004). Rola Wzoru Zachowania A w prewencji wtórnej choroby niedokrwiennej serca. In: K. Wrześniewski, D. Włodarczyk (red.). *Choroba niedokrwienne serca. Psychologiczne aspekty leczenia i zapobiegania* (pp. 175–194). Gdańsk: GWP.
- Busch, L.Y., Pössel, P., Valentine, J.C. (2017). Meta-analyses of cardiovascular reactivity to rumination: A possible mechanism linking depression and hostility to cardiovascular disease. *Psychological Bulletin*, 143(12), 1378–1394.
- Carver, C.S., Scheier, M.F. (1994). Situational coping and coping dispositions in a stressful transaction. *Journal of Personality and Social Psychology*, 66, 184–195
- Chauvet-Gelinier, J.Ch., Bonin, B. (2017). Stress, anxiety and depression in heart disease patients: A major challenge for cardiac rehabilitation. *Annals of Psychical and Rehabilitation Medicine*, 60, 6–12.
- Czapiński, J. (2004). Osobowość szczęśliwego człowieka. In: J. Czapiński (red.), *Psychologia pozytywna. Nauka o szczęściu, zdrowiu, sile i cnotach człowieka* (pp. 359–379). Warszawa: PWN.
- Dąbrowski, K. (1989). *W poszukiwaniu zdrowia psychicznego*. Warszawa: PWN.
- Deisinger, J.A., Cassisi, J.E., Whitaker, S.L. (1996). Relationships between coping style and PAI profiles in a community sample. *Journal of Clinical Psychology*, 52, 303–310.
- Eurelings-Bontekoe, E.H.M., van der Slikke, M., Verschuur, M.J. (1997). Psychological distress, depressive symptomatology, coping and DSM-III-R/ICD-10 personality disorders – a study among primary mental health care patients. *Personality and Individual Differences*, 23, 407–417.
- Freire, C., Del Mar Ferradás, M., Valle, A., Núñez, J.C., Vallejo, G. (2016). Profiles of psychological well-being and coping strategies among university students. *Frontiers in Psychology*, 7, 1554.
- Gianaros, P., Jennings, J. (2018). Host in the machine: A neurobiological perspective on psychological stress and cardiovascular disease. *The American Psychologist*, 73(8), 1031.
- Grandinetti, P., Frustaci, A., Guerriero, G., Solaroli, S., Janiri, L., Pozzi, G. (2011). Preliminary analysis of characteristics of coping in a sample of outpatient with anxiety disorders. *European Psychiatry*, 26, Supplement 1, 156.
- Heszen, I., Sęk, H. (2007). *Psychologia zdrowia*. Warszawa: PWN.
- Hobfoll, S.E. (1989). Zachowanie zasobów, nowa próba konceptualizacji stresu. *Nowiny Psychologiczne*, 5–6, 24–48.
- Jaroszyński, M. (1983). *Psychologia lekarska*. Warszawa: PZWL.
- Juczyński, Z. (2001). *Narzędzia do pomiaru w promocji i psychologii zdrowia*. Warszawa: PTP.
- Juczyński, Z., Ogińska-Bulik, N. (2009). *Narzędzia pomiaru stresu i radzenia sobie ze stresem*. Warszawa: PTP.
- Keyes, C.L.M., Lopez, S.J. (2002). Towards a science of mental health: Positive directions in diagnosis and interventions. In: C.R. Snyder, S.J. Lopez (eds.), *Handbook of Positive Psychology* (pp. 45–62). New York: Oxford University Press.
- Kovacs, A.H., Bandyopadhyay, M., Grace, S.L., Kentner, A.C., Nolan, R.P., Silversides, C.K., Irvine, M.J. (2015). Adult congenital heart disease-coping and resilience (ACHD-CARE): Rationale and methodology of a pilot randomized controlled trial. *Contemporary Clinical Trials*, 45, 385–393.
- Kubacka-Jasiecka, D. (2010). *Interwencja kryzysowa. Pomoc w kryzysach psychologicznych*. Warszawa: IPZ.
- Lazarus, R.S., Folkman, S. (1984). *Stress, Appraisal and Coping*. New York: Springer.

- Mccabe, P.M., Schneiderman, N., Field, T.M., Skyler, J.S. (2013) (eds.). *Stress, Coping, and Disease*. New York: Routledge.
- Monastyrska, E.M., Beck, O. (2014). Psychologiczne aspekty chorób kardiologicznych. *Medycyna Ogólna i Nauki o Zdrowiu*, 20(2), 141–144.
- Ogińska-Bulik, N., Juczyński, Z. (2008). *Osobowość, stres a zdrowie*. Warszawa: Difin.
- Olszewski, J.K. (2010). *O zaradności obezwładnionych lękiem. Osoby z nerwicowymi zaburzeniami lękowymi a stres*. Lublin: Wydawnictwo UMCS.
- Olszewski, J.K. (2012). Związki między dobrostanem psychicznym – psychopatologią a radzeniem sobie ze stresem u osób z różnymi formami zdrowia psychicznego. *Psychiatria i Psychologia Kliniczna*, 12(4), 265–272.
- Olszewski, J.K. (2014). Formy zdrowia emocjonalnego a radzenie sobie ze stresem osób dotkniętych chorobą nowotworową (badania kobiet po mastektomii na tle grupy porównawczej). In: L. Szewczyk, A. Kulik (red.), *Problemy psychosomatyki okresu rozwojowego i dorosłości* (pp. 95–113). Lublin: Prokurat.
- Olszewski, J.K. (2015). Sposoby radzenia sobie ze stresem w kontekście zdrowia emocjonalnego osób wkraczających w okres wczesnej dorosłości oraz osób starszych. In: Z.B. Gaś (red.), *Kłopoty z dorosłością* (pp. 163–178). Lublin: Innovatio Press.
- Olszewski J.K. (2018a). Aktywne radzenie sobie z trudnościami życiowymi a satysfakcja z życia i nastawienie lękowe u osób starszych. In: M. Lewandowski (red.), *Wybrane obszary edukacyjnej, zawodowej i społecznej aktywności człowieka* (pp. 151–160). Sosnowiec: Oficyna Wydawnicza Humanitas.
- Olszewski, J.K. (2018b). Formy zdrowia emocjonalnego a cechy osobowości u osób dotkniętych chorobą nowotworową (kobiet po mastektomii). In: B. Gawda (red.), *Język emocji. Annales Universitatis Mariae Curie-Skłodowska, Sectio J*, 31(4), 239–253.
- Roseman, A., Kovacs, A.H. (2019). Anxiety and depression in adults with congenital heart disease: When to suspect and how to refer. *Current Cardiology Reports*, 21(11), 145. doi:10.1007/s11886-019-1237-2
- Shaffer-Hudkins, E., Suldo, S., Loker, T., March, A. (2010). How adolescents' mental health predicts their physical health: unique contributions of indicators of subjective well-being and psychopathology. *Applied Research Quality Life*, 5, 203–217.
- Sin, N.L. (2016). The protective role of positive well-being in cardiovascular disease: Review of current evidence, mechanisms, and clinical implications. *Current Cardiology Reports*, 18(11), 106.
- Smári, J., Arason, E., Hafsteinsson, H., Ingimarsson, S. (1997). Unemployment, coping and psychological distress. *Scandinavian Journal of Psychology*, 38, 151–156.
- Streisand, R., Mackey, E.R., Herge, W. (2010). Associations of parent coping, stress, and well-being in mothers of children with diabetes: examination of data from a national sample. *Maternal and Child Health Journal*, 14, 612–617.
- Trzebińska, E. (2008). *Psychologia pozytywna*. Warszawa: Wydawnictwa Naukowe i Profesjonalne.
- Westerhof, G., Keyes, C.L.M. (2010). Mental illness and mental health: The two continua model across the lifespan. *Journal of Adult Development*, 17(2), 110–119. doi:10.1007/s10804-009-9082-y
- Włodarczyk, D. (1999). Wsparcie społeczne a radzenie sobie ze stresem u chorych po zawale serca. *Przegląd Psychologiczny*, 42, 95–113.
- Wrona-Polańska, H. (1999). Zmiana samopercepcji w procesie zmagania się z chorobą o niepomyślnym rokowaniu. In: D. Kubacka-Jasiecka, W. Łosiak (red.), *Zmagając się z chorobą nowotworową* (pp. 197–223). Kraków: Wydawnictwo UJ.
- Wrześniewski, K., Sosnowski, T., Matusik, D. (2002). *Inwentarz Stanu i Cechy Lęku STAI. Polska adaptacja STAI. Podręcznik*. Warszawa: PTP.

## STRESZCZENIE

Choroby układu sercowo-naczyniowego wśród chorób cywilizacyjnych stanowią najczęstszą przyczynę śmierci – umiera na nie co druga osoba. Obciążenie chorobą zagrażającą życiu niewątpliwie sprzyja rozwojowi zaburzeń emocjonalnych. Patrząc z perspektywy psychologii pozytywnej, buforem chroniącym pacjentów kardiologicznych przed popadaniem w bezradność może być dobrostan psychiczny, dlatego autor opracowania przeanalizował problem integracji subiektywnego dobrostanu z psychopatologią, sprowadzoną do poziomu lęku, które mogą wyznaczać formę zdrowia emocjonalnego. Celem przeprowadzonych badań było określenie zależności między formami zdrowia emocjonalnego, wyznaczonego przez poziom satysfakcji z życia i poziom lęku, a rodzajem stosowanych sposobów radzenia sobie ze stresem. W badaniach udział wzięło 100 osób (50 kobiet i 50 mężczyzn) dotkniętych chorobami układu sercowo-naczyniowego, które przeszły zabiegi kardiologiczne. Wiek osób badanych mieścił się w przedziale 45–65 lat. Do pomiaru zmiennych wykorzystano Skalę Satysfakcji z Życia (SWLS), Inwentarz Stanu i Cechy Lęku (STAI) oraz Wielowymiarowy Inwentarz do Pomiaru Radzenia sobie ze Stresem (COPE). Rezultaty badań wskazują, że badani pacjenci kardiologiczni wykazują zróżnicowanie pod względem formy zdrowia emocjonalnego. Ponadto w grupach osób dotkniętych chorobami układu sercowo-naczyniowego, różniących się formami zdrowia emocjonalnego, czynniki decydujące o formie zdrowia emocjonalnego są powiązane ze sposobami radzenia sobie ze stresem.

**Słowa kluczowe:** choroby układu sercowo-naczyniowego; satysfakcja z życia; poziom lęku; zdrowie emocjonalne; radzenie sobie ze stresem

