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RESILIENCE IN THE LIGHT OF RESEARCH AND THEORETICAL REFLECTION

Abstract

Resilience has been characterized in the paperf from the perspective of a theoretical point of view and in the light of the results of empirical research. Two terms are used in the literature: *resiliency*, as a dispositional trait of personality and *resilience*, as the transactional process of relation between individual and environment and as the process of coping behaviour. The first meaning of the term is more emphasised in the paper. Psychological resiliency is discussed in the context of emotional and cognitive mechanisms. The next part of the article is devoted to determinants of resiliency from cognitive, social and existential point of view. Development and health implications of resiliency are discussed at the end of this paper.

Key words: resiliency, resilience, personality, coping, emotions, spirituality, religiosity, health

Resilience belongs to the positive psychological categories, which were established in order to clarify why the individual does not break down in the face of difficulties. The term comes from the 1950s, and its current popularity is connected with development of positive psychology and health psychology. Two similar terms used in the literature should be distinguished: *resiliency* as a dispositional trait of personality and *resilience* as the transactional process of relation between individual and environment and as the process of coping behaviour. The first meaning of the term is more emphasised in this paper.

It can be said that conceptof resiliency has salutogenic[1] meaning. In accordance to the intention of Antonovsky (1987), the essence of the salutogenic approach is the identification of personal dispositions, processes and mechanisms

[1] *Salus* (Latin) – health.

that make the man maintains health, despite a confrontation with serious stressful events. Besides it, mental resilience is a concept focused on the process in the same meaning as health and disease in salutogenic approach. Resilience is revealed in the act of "rising from the fall" after a difficult stressful event. The sooner individual goes out from a phase of mental trauma and return to normal functioning, the more one reveals the resilience.

Heszen and Sęk (2007, p. 173) define resilience as: "a conjunction of effective skills for coping with a large stress, which involve flexible, creative dealing with adversity; the main role is played here by the ability to *bounce-back* from negative experiences and the capacity to induce positive emotions."

The opposite of resiliency is vulnerability, susceptibility, sensitivity to stressors. To the category of opposite sense can be also include *Personality type D*. This construct will be discussed below.

Theoretical approach to resilience

Resilience is conceptualized in different ways. Most often one can find three approaches:

1. Resiliency as a feature of personality. In this aspect it is treated as a disposition to wrestling with life difficulties. It can be classified as mental health resources. Thus, like personality trait, it is conditioned on both sides: inheritance, mainly temperament characteristics and, on the other hand, influences of the environment. Such understanding of resiliency has been popularised in Poland by Ogińska-Bulik and Juczyński, who have published a number of research which have been carried out on the basis of this term (Ogińska-Bulik, Juczyński, 2010; Ogińska-Bulik, 2010, 2010b, 2011, 2011a). The authors used the questionnaire, developed by themselves, titled: *Resiliency Measurement Scale* SPP-25, and in versions for children and adolescents SPP-18 (Ogińska-Bulik, Juczyński, 2008; 2011).
2. Resilience in terms of transactional paradigm. In this context the resilience is treated as a transaction between the individual and the environment. Heszen and Sęk (2007) strongly emphasize the transactional nature of the resilience. It reveals a transaction between the individual and the situation in the stressful situation. Resilience in this approach does not depend so entirely on individual resources, but also on the properties of the stressful event and its context: social, cultural and ecological.
3. Resilience as an important mechanism in the process of coping. Transactional approach directly moves the issue of resilience into the area of research of coping with stress, especially with one's disease or disease or loss of close persons. The emotional resources, such as a tendency to generating positive emotions and skills of cognitive work with the difficult past (reappraisal)

increase the effectiveness of the resilience. The ability to concentrate on the task, high formal and emotional intelligence, and the variety of coping strategies are important conditions of resilience. On the other hand rumination and blaming others belongs to the strategies lower resilience.

The author of this paper in his research is using the term resiliency understood as the personality trait, which involves using the method of Ogińska-Bulik and Juczyński SPP-25 (2008). The understanding of resilience as a process is very inspirational, but it causes serious methodological problems.

Psychological mechanisms of resilience

In the literature psychological resilience mechanisms are divided into two groups: individual and social. The group of personal mechanism includes:

1. Emotional and even physical detachment from the situation of difficult, traumatic experience.
2. Generating of positive emotions, or rather their co-generating, next to the negative emotions associated with a difficult experience. The cognitive mechanisms of stressful event's development are following:
   (a) Davis, Nolen-Hoeksema and Larson (1998) wrote about changing of perception in stressful situation to find its positive aspects. This is a cognitive mechanism of reevaluating – *benefit finding*.
   (b) The same authors identified mechanism of finding meaning in a difficult experience through its place in a natural sequence of human life – *sense making*. There is some similarity to accepting of suffer – „attitude over the suffering," which Frankl described as *the attitudinal values* (1984, 2006).
   (c) Folkman and Moskowitz (2000) stated that occurrence of positive emotions are connected with a task-oriented coping style (*problem-focused coping*), moreoverwith the application of the strategy of positive reevaluation (*positive reappraisal*) and giving positive meaning to ordinary events (*infusing ordinary events with positive meaning*).
   (d) Fredrickson (1998, 2001) underlined that positive emotions are the basis of immunity. In her *the broaden-and-build theory of positive emotions*, author notes that both kinds of emotions – negative and positive, occur in response to the stress. Function of the negative emotions is to narrow one's mind to focus on the way to invade the obstacle, or to flee before it. In contrast to negative emotions, positive emotions (e.g., job satisfaction) expand one's mind functions that allow seeing the new aspects of the difficult situation, and also new ways of action, different from the existing. Broadening the area of perception and action builds individual physical, psychological and social resources.

(e) Tugade and Fredrickson (2004) cites research showing that resisted people develop their positive emotionality by generating positive emotions, using such strategies as sense of humour, relaxation techniques and positive thinking.

3. Another mechanism is a consistent realization of the goals, despite the subjective and situational difficulties, in conjunction with plastic, adapted to the situation strategies. A change of goals is told as an expression of resilience. However, the preservation of goal and changing the strategies can be treated as indicator of the resilience.
4. Cognitive mechanisms of developing difficult experiences are associated with abundant internal narration (internal dialogue). The rich, well-structured narration is a sign of cognitive transformation of event in time's dimension of past and present.

Turning to social mechanisms, it should be pointed out that this kind of mechanisms is related mainly to the creation of social support's network and to skills of using the social resources to supplement and multiplying the resilience (Sęk, Cieślak, 2004).

Resilience has also consequences at the level of the physiology. Negative emotions in a situation of stress cause arousal response to physiological and hormonal system in the fight-or-flight reaction. The resilient individuals are prone to generate also positive, not only negative emotions. On the other hand, the stimulation of the cardiovascular system after experiencing stressful event returns faster to the standard state in the case of resistant persons. In opinion of Fredrickson and Levenson (1998), emotional disposition to positive emotions can be used as an explanation of physiological evidences. This means that psychic mechanism for *bounce-back* has its component on the physiological level.

Determinants of resilience

Determinants of resilience are psychological and social in nature. One and the other areconsidered on different levels of generality.

Existential determinants of resilience include philosophy of life, beliefs, spirituality and religiosity. Peres, Moreira-Almeida, Nasello and Koenig (2007) cited the American data (Vieweget et al., 2006), which showed that the occurrence of traumatic events which were so serious, they could cause PTSD, is estimated at 50–90% of the population, while the diagnosis of PTSD did not exceed 8%. This difference authors explain by resilience, which causes that not always after the trauma comes to serious disorders. There is a question about the determinants of such resilience. The authors concluded that there are many considerations. They paid attention to religious coping, which turned out to be a popular strategy to cope with the trauma. After terrorist attack on the towers of

the World Trade Center in New York City on September 11, 2001 the Americans coped with the trauma mostly by the conversation – 98%. The prayer and spiritual experiences were on the second place – 90% (Schuster et al., 2001).

Searching for explanations of the differences in reaction to trauma, Peres, Moreira-Almeida, Nasello, and Koenig (2007) stated that memories of trauma in people reacting in the form of PTSD are non-verbal in nature, because these people have difficulty in synthetic narration of traumatic event and assimilation of those experience to memory through a coherent narration. In opposition to them, the persons, which have not responded to the trauma by PTSD, express their memories in the form of a narration that is much more complete, internal structured, logical. Such characteristics of the narration that is reveals coping with trauma, which can be interpreted as a manifestation of resilience. Peres et al. (2007) paid attention to the results of the research with the use of neuro-imaging of the brain, explaining the cerebral mechanism for these differences. In a test group that reacted in the form of PTSD on trauma, authors of researches found reduced hippocampal activity, whose function is integration of a new event with individual cognitive map of experience. The authors confirmed synthetic, assessing and integrating role of the hippocampus in the formatting of cognitive map, included individual oneself and the environment. This weakness of this function of hippocampus is visible in fragmentary narration, which is characteristic for persons, which responded to trauma in the form of PTSD.

The spirituality is mentioned in literature as a predictor of resilience. This is the concept defined very differently in the social sciences (Ostrowski, 2010). In accordance to the theory of Hay (2007), spirituality is an innate psychic dimension. It has nature of a relational consciousness. Spirituality reveals, how Sperry wrote (2001), in early childhood as self-awareness. Then it gradually develops as a need to find meaning of action and capacity to transcendence, which is understood as going beyond one's own self into the world of values.

Kim and Esquivel (2011) stated, on the basis of a review of the research, that religiosity is mentioned in the literature as a second, independent predictor of mental resilience, next to the spirituality. The authors remarks, however, that these two concepts are defined in different paradigms. Spirituality is related to inner life of individual. The researchers locate this term in phenomenological-existential paradigm. They often accentuate its innate nature and biological determinants (Hay, 2007). On the other hand, religiosity is a kind of social activity, with cultural determination (socio-cultural paradigm). Many ideas of the authors concerning the meaning of both terms often overlap, but research should maintain their distinctness.

Crawford, Wright and Masten (2006) in a work on the importance of spirituality as a factor developing mental immunity of children and adolescents, mentioned four mechanisms, which are consequences of spirituality, namely: building interpersonal close ties, openness to social support in various forms, interiorization of standards and moral values and stimulation of human

development. It should be told, that for a person who trusts in God, sources of social support include both the support from the social environment and the support from a supernatural, sacred area. Religiosity is most often cited as a positive predictor of resilience, but the authors indicate the possibility of the reverse relation. It may happen that religiosity reduces resilience, when strongly outweigh the sense of sinfulness, that isfavouredby image of God as a severe judge, rather than as a merciful father (Pargament, 1997).

The importance of spirituality as a predictor of resilience has been confirmed by Werner (1996) in her longitudinal, lasting more than 40 years research of 698 children from the Hawaiian Islands. The development of children was charged from the side of genetic predisposition and environmental circumstances. They grew up in conditions of poverty and a lack of healthy family relationships. Most of them, as expected, had suffered mental and physical impairment. As adults they had problems with the maintenance of the stability of their own family. However, one-third of children, despite the difficult conditions developed properly, realized social functions in a normal way. The factor which determines their resilience was, *inter alia*, spirituality, measured in this case as a form of religiosity and belonging to the Church. Of paramount importance was social support from the significant persons, such as parents, relatives, guardians or teachers. In the light of these results, it can be said that Werner has formed a question not only what caused the ontogenetic development disorders, but mainly what determined the fact that despite the pathogenic conditions for the development, children developed normally?

There is a similarity between Werner (1996) research and the theory of coherence, developed by Antonovsky (1987, 1991). The theory of coherence was mentioned in the first part of this article. According to this theory, the important determinant of resilience is the coherence with the world. Antonovsky has stated this regularity, as a result of the study, conducted in Israel. He examined the psychological functioning and mental health of women in menopause. As expected, the women, who were imprisoned in Nazi concentration camps as young girls, in a majority, tolerated menopausal period worse, compared to women, which were not in the camp. In the group of women who survived the camp, good health enjoyed just 29%, and in comparative group 51%. Attention of author caught the 29% of the women, former prisoners of concentration camps, who have enjoyed good health, in spite of very difficult past, the menopause and mature age. To explain the differences, Antonovsky created neologism *salutogenesis*. According to the theory, salutogenesis is the mechanism which determines the health, in opposition to the *pathogenesis* – set of causes of a disease. Antonovsky stated that in the mechanism of salutogenesis, high sense of coherence with the world, reflected in three aspects: *comprehensibility* – the belief that the world is understandable, *meaningfulness* – the world and human life have a sense, and *manageability* – there is possible to act on the world with success, was important. Such defined coherence determines the resilience in the light of

the empirical results (Eriksson, Lindstrom, 2006). Antonovsky's research had the same theme as Werner: finding answer to the question what cause health despite the dynamic action of pathogenic factors. Question about mechanisms of health Antonovsky called salutogenic, as opposed to identifying the causes of disorder, which he described as a pathogenic question.

The problem of personality as a determinant of resiliency is brought up in the research of Fredrickson and Tugade (2003). They demonstrated that individuals with high scores on the *Ego-Resilience Scale* are characterized by Extroversion, low Neuroticism and high score on a Scale of Openness[2]. It should be depicted that in the dimensions of personality in Eysenck's theory, "resilient" score are located in the quarter of extroversion-neuroticism in opposition to persons with Type D personality, with negative emotionality, who are placed in the quarter of introversion-neuroticism. Individual with type D personality is prone to be worry, and to control of emotional expression, in order to avoid social danger. Hence there is the term "personality-prone-to-stress." Therefore, the Type D personality is contrasted to hardy personality (Kupper et al., 2013).

The hardy personality is an idea, developed by Kobasa (1983), which is connected to the problem of resilience. In the light of empirical evidences the author stated that the *hardy personality* is a construct with three components: *Commitment* – there is important belief in the meaning of actions, *Challenge* – connected with high self-efficacy and *Control* – sense of internal control in contradistinction to external control. It is worth mentioning that the hardness is associated with tenacity, hardy skills of fighting, to not surrender; while resilience means dealing with strategies flexible, up to the development of the situation, and a quick exit from the crisis.

An important determinant of resilience is the emotional intelligence, defined as the ability to differentiate one's own emotions and to recognize emotions of other people. This kind of intelligence is responsible for adequate using of emotions and interpersonal contact in the process of coping with difficulties (Salovey, Mayer, 1989–1990). Emotional intelligence is expressed, *inter alia*, as the ability to gather knowledge about one's own emotions, on the basis of life experience. Fredrickson (1998) underlined that this form of intelligence is associated with intuitive ability to respond in stress with positive emotions. This is typical for resistant persons. The positive emotions allow one to increase the resources of resilience in coping with stress.

Social determinants of resilience are connected with the size, availability and adequacy of social support, especially from the side of peer and family. It is important for individual to have the ability to establish the satisfactory emotional ties. They develop an individual social support network (Sęk, Cieślak, 2004).

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[2] The authors chose three scales: Extroversion, Neuroticism and Openness from *NEO Five-Factor Inventory* (NEO-FFI).

The consequences of resiliency connected with development and health

Resiliency as the individual disposition has varied positive correlates with other processes that reveal themselves during life of the individual. These include the ability to reduce negative emotions in reaction to stress (anxiety, sadness, despair, resignation, anger), with simultaneous predominance of positive emotions. Fredrickson told about it in her, mentioned above *the broaden-and-build theory of positive emotions* (2001). The author presents results of research that high-resilient persons have optimistic attitude to the future and they are able to generate more positive emotions, compared with low-resilient. Remarkable are the results of the research in the group of students, carried out before the terrorist attack on the World Trade Center in New York City on September 11, 2001 and repeated about 3 weeks after the attack. Fredrickson and Tugade stated (2003), that the resilience is significantly correlated with six positive emotions out of ten, such as: interest, satisfaction, joy, hope, sexual desire and pride. In case of negative emotions, a significant negative correlation was only with two: anger and sorrow. The authors find that experiencing positive emotions helps greater resilience, which then increases the willingness to experience positive emotions and thus it starts the mechanism of positive feedback. This mechanism is the basis of the deal, which essence is the using of a wide range of strategies, adequately to the development of the situation, combined with the readiness to be flexible towards changes of situation (Fredrickson, Joiner, 2002).

Resilience promotes the posttraumatic growth. This conclusion revealed in the above mentioned investigation. Students after the terrorist attack unveiled a higher level of hope, satisfaction with life and optimism than before attack (Fredrickson, Tugade, 2003). Discussing these results Ogińska-Bulik and Juczyński (2008), they emphasized that resilience is a predictor of positive emotions after the crisis. High-resilient students after terrorist attack experienced less depression than sensitive students. Resilience plays a role of a buffer between stress and emotional response.

Returning to the issue of posttraumatic growth, the complexity of the relationship between the resiliency and the rise of growth should be noted. Ogińska-Bulik has revealed that the resilience is a good predictor of personal growth, but not the only one. Very important is the spirituality (Felcyn-Koczewska, Ogińska-Bulik, 2011; Ogińsk-Bulik, 2010a, 2013).

Interesting are the test results, indicating a positive correlation between the resilience and the state of health on psychic and physical level (Chanduszko-Salska, Ogińska-Bulik, 2011). Health is positively determined by *flourishing*. According to Fredrickson, this term means functioning onthe optimal level for the individual. The *flourishing* manifested by a sense of happiness, life

satisfaction, personal growth and high level of resilience (Tugade, Fredrickson, Barrett, 2004).

Many studies confirm the relationship between the state of health and resilience, intermediated by spirituality and religiosity (Werner, 1996; Pargament, 1997), by a sense of meaning of life (Frankl, 1984, 2006), by sense of coherence (Antonovsky, 1987, 1991), and by positive attitudes towards people (Van Dyke, Elias, 2007).

In conclusion, it should be noted that resilience is an interdisciplinary category, of a great significance, could be treated as a source of inspiration of psychological theory and empirical research, but also used for practical applications in psychotherapy and crisis intervention, as well as in health promotion and prevention.

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