Psychiatr. Pol. 2014; 48(3): 563–572
PL ISSN 0033-2674
www.psychiatriapolska.pl

Resilience and responses to the experience of trauma – a fascinating but difficult study area

Krzysztof Szwajca

Department of Child and Adolescent Psychiatry, Jagiellonian University Medical College
Head: dr n. med M. Pilecki

Summary

The notion of resilience, which attempts to explain the phenomenon of positive adaptation (coping) of people exposed to adversities or traumatic events, is becoming a significant area of research in Poland. It is a complex and multidimensional notion, on the borderline between genetics, neurophysiology, anthropology of culture, sociology, medicine, political science, developmental psychology and psychiatry. The phenomenon of resilience is interactive (as it combines the experience of trauma with adaptation to it), it is difficult to measure and it raises serious methodological concerns. They tend to be so significant that some researchers consider resilience to be a construct of dubious scientific value. Such a view seems to be overly critical, however it indicates the magnitude of methodological difficulties. This article discusses some of them: problems with definitions and terminology, measurement difficulties associated with the interactive nature of resilience, the need to search for complex interactions between biological, psychological, social and environmental factors (rather than overly simplistic focus on individual factors which support good adaptation). The methodological issues have been divided into the following research areas: the nature of traumatic experiences, response to trauma, factors which impact the reporting of the reaction to trauma, developmental problems.

Key words: resilience, methodological difficulties, empirical studies

Introduction

The notion of resilience attempts to explain the phenomenon of positive adaptation (coping) of people exposed to adversities or traumatic events. It is defined as a dynamic process reflecting relatively well adaptation of the individual, despite the risks faced or traumatic experiences [1] It focuses on the fact that most of the victims can cope with the consequences of trauma (i.e. they recover fast) by themselves or with the help of a social network [2]. In the Polish literature the English term resilience is translated as: springiness, mental strength, resistance to injury, resourcefulness, vitality, elasticity or positive adaptation. No consensus terminology among researchers and the lack of scientific discussion [3] on this topic has made a number of authors,

including recent publications (for example [4]), use the original term. Years ago the notion of resilience (and earlier similar constructs) brought creative ferment to the traditional way of thinking about the impact of trauma on human life which is focused on the trauma and pathology. The concept of resilience is also spreading in Poland. However, in the psychiatric literature works relating to resistance and resources are not yet many (for example [5, 6]). This needs to change – you cannot write today about the impact of trauma and distress experiences, mechanisms of post-traumatic response, intergenerational transmission of disorders or internal family harm without taking into account issues of resilience. The resiliencee theory is complex, interesting, multi-faceted, its practical importance in the field of working with trauma – a huge (for example [7]). Its version trimmed down for the purposes of empirical research often strikes as oversimplification.

This work is an attempt to critically analyse the methodological difficulties associated with research into the subject of resilience. Relatively recently (2011) was published work devoted to methodological issues, analyzing primarily research tools for measuring this phenomenon [3]. Therefore the author especially focused on the difficulties associated with estimating: the real strength of a traumatic experience, response to injury, the factors affecting the relation of reaction to trauma (denying the impact of trauma on life), cultural patterns and social coping patterns, environmental contexts.

The nature of the traumatic experience

We do not know how to estimate the severity of trauma, and we do not know how important this variable is. Data on the impact of the type of abuse (sexual, physical, mental, being a witness, being a victim), frequency and duration (chronicity), the occurrence, the level of the perpetrator's violence (if it is interpersonal) and the suffering of the victim, post-traumatic functioning do not give conclusive results. It seems that other variables are more important in the prediction of post-traumatic responses, especially if we are dealing with a population of developmental age. For example, if the perpetrators of the trauma are family members (parents), how the primary guardian functions and whether the guardian is also a victim of trauma. We know for certain that developmental factors like the age of the victim and sensitive periods in the development of children and adolescents need to be taken into account in the assessment of traumatic experiences. Subjective importance attached to the traumatic event (an assumption of own helplessness, feeling that one's life is threatened, feeling bad, guilty or ashamed) is an important variable but it is difficult to measure [8]. It is yet more difficult to estimate the importance of cumulative trauma. It is the rule rather than the exception that most forms of psychosocial stress or trauma are not an individual, short-term stimulus. Undoubtedly, the total number of traumatic factors is more important than their nature [9].

How to assess the experienced trauma? Is a sociological fact enough, for instance being a child of a person suffering from schizophrenia? Research in the field

of resilience has covered diverse, heterogeneous populations: "children growing up in adverse living conditions", "people from high-risk groups", "people exposed to hardship and adversity", "people experiencing great misfortunes". In practice the resilience of the following groups has been studied: road accident victims, children living in orphanages, children experiencing domestic violence, victims of natural disasters or serious traffic accidents, children of mothers with schizophrenia, children living in poor families, people with chronic illness, mothers of children with a serious illness, people who have lost their jobs or have had serious financial difficulties, people after cardiac surgery, etc. Can the results of research on such diverse populations be generalised? To a limited extent. Did members of all these populations experience trauma? No.

Psychiatry perceives trauma as a narrow category and tends to provide a precise description of traumatic event criteria. Accordingly, extreme situation may result in PTSD or permanent personality change. A description of the stressor criterion in ICD-10 includes exposure to a stressful event or situation, particularly terrifying or catastrophic, one that would cause deep distress to almost every human being [10]. According to this definition, traumatic experience therefore means being subjected to torture, witnessing the violent death of someone, being a victim of rape, etc., but not looking after a seriously ill person, being diagnosed with a mortal or chronic disease [11]. These identifiable psychosocial stressors can result in adaptive disorders, the occurrence of which is assumed to be impacted by individual predispositions. Trauma can thus destroy the defence mechanisms in almost every human being, whereas we should rather be able to cope with the experience of a crisis (psychosocial stressor). Researchers in the field of resilience interchangeably use terms such as trauma, crisis or highly stressful events. Risk groups selected for research may be very big. In one of the most important – the study of children (and later adults) from the Hawaiian island of Kauai, the risk group included up to one third of the population – due to perinatal load, poor functioning of parents and family, poverty, divorce, mental illnesses, etc. [12]. A more precise delimitation of the boundaries of the resilience construct reduces the differences between studies in areas of "psychiatry" and "positive psychology". And so, in a group of children abused in families, only a few possess resilience at some stage of their life (between 6% and 21%) and only 5% function psychosocially well for a longer period of time [after: 2].

Response to trauma

Many doubts arise by the measurement of individual responses to trauma. When we are not dealing with a one-off, short-term trauma, numerous aftermaths in many areas of life are the rule [13]. In addition to the typical psychopathological phenomena changes may include: developmental retardation, disturbances of emotional self-regulation, regressive behaviour, attachment disorders in relationships with others, identity disorders, somatic diseases, impaired academic performance, memory impairment, a lower narrative efficiency, guilt and shame, impaired self-esteem, a tendency for

risky behaviours, secondary life problems, greater vulnerability to crises, a tendency to repeat learned violence patterns, etc. [14].

It is impossible to study everything. In general, research focuses on psychopathology and learning of developmental tasks relevant at the particular stage of life [15]. However, a number of studies show very different functioning of victims of trauma in different areas – for example in a classic study of abused children, two thirds of them did well at school, but only 21 % coped in terms of social competence [after: 16]. Should people considered to be elastic do well in many areas, or simply function well in one of them and achieve average score in the others? Can we accept that elastic people are those who do not suffer from PTSD (which is not always a good criterion for measuring sensitivity to trauma, especially in children) or depressive disorders? How many criteria should be further assessed in order to consider that a measurement of resilience is adequate? Good performance at school, refraining from the use of psychoactive substances, no suicide attempts, good quality of sleep, etc. And what about the quality of life, self-esteem, relational factors, physical health?

Resilience is not an individual trait, not something permanent, it is not given once and for all [17]. People who have undergone trauma can be successful at the time of the study, but over time their functioning may become less adaptive [18]. For example classic studies of children of alcoholics, which showed a population of well-adapted children aged 3-5 years, indicated years later (ages 9-11 and 12-14) that the same children displayed externalising behaviours with greater intensity than children of parents who do not drink [19]. At the same time a number of studies indicate gradual decay of psychiatric symptomatology following trauma [20]. The evolution of resilience therefore requires further study, but the longitudinal-prospective model is rarely used in empirical work [19]

Factors which influence the reporting of reactions to trauma

Lack of psychopathological symptoms in some victims may have little to do with the phenomenon of resilience – the actual severity of trauma may be of little importance (factors for inclusion in risk groups are statistical and sociological in character, for example children of mothers suffering from schizophrenia), professionals may overlook psychopathological symptoms (imperfect tools), and lastly, these symptoms might not be reported. We know that victims of trauma (especially ones which are felt to be particularly embarrassing and stigmatising such as sexual harassment) "do not admit" that they have had such experience and hence significantly underestimated numbers of victims are obtained in population studies [21]. Can a similar phenomenon concern the reporting of adverse consequences of traumatic events?

Cultural atmosphere and social expectations have for many years rather encouraged people to say that they possess strength, resilience (tyranny of positive thinking) and self-reliance. Victims of trauma display a higher level of conformity (than control populations) [22], a bigger need for social attractiveness and more focus on external

assessment [23]. A natural feature of confirming their normality with the researcher is constantly being analysed and in their case it is expressed more strongly.

The mechanism of trauma with axial PTSD symptoms of dissociation and avoidance may encourage the development of an avoidant coping style (which masks suffering and ineffectively tries to protect the victim). It is by no coincidence that a number of studies on the so-called post-traumatic growth indicate that it correlates positively with symptoms of PTSD – that is, the greater the severity of symptoms, the more the study subjects emphasise that they appreciate life and the spiritual sphere and notice better notice of positive changes in relationships with others after the trauma than prior to it [24]. These positive reformulations may be a kind of self-deception, denial of difficulties, wishful thinking or defence of self-assessment in a situation of an abundance psychopathological symptoms. In the studies, especially in the "shallow" ones, we do not really know to what extent functioning after trauma is assessed, and to what extent it is the proportions between complacency (or self-deception) and awareness of a crisis that are evaluated.

In addition, the willingness to report one's negative characteristics is small in the methods which apply questionnaires and structured interviews and increases in in-depth clinical interviews and projective measurements. In the studies of trauma, the use of in-depth interviews and projective tests provides very different results from those which are obtained from self-description questionnaires [25]. Also affective and cognitive attitudes influence the manner of autopresentation more strongly than in other areas of research. For example, in research on the transmission of trauma of the Holocaust it is emphasised that the "contagion" with post-traumatic symptoms of their children by the survivors themselves is perceived as the aggressors' success – Hitler's victory from beyond the grave [26], and the notion of intergenerational transmission of trauma induces guilt among parents and children alike [27]. The situation may also be different – children of alcoholics often define themselves as co-addicted, they believe in the DDA construct (although this personality profile is not supported by the empirical studies [28, 29], which meets their psychological needs and is an identity choice rather than anything else.

Difficulties in adequately estimating the response to trauma make the researchers yearn for an objective measurement based on more measurable, clear indicators (e.g., physiological indicators of stress), and less on the declarations of the study subjects. This seems neither possible nor advisable.

Developmental problems

Many doubts are raised by the question whether the results of adults can be extrapolated to children (and vice versa). In general, critics point out that research in the field of resilience is not sufficiently grounded in developmental problems even though this theory grew out of the observation of children and adolescents. It does not adequately focus on the subject which seems to be key – the quality

of care early in life and the impact of attachment patterns on coping with traumatic experiences [30].

Trauma rakes up thinking patterns (Bowlby's Internal Working Models) which have to some extent been buried so far. The current traumatic event is not felt to be like a new experience, but confirms early, preverbal, internalised beliefs about interpersonal relations. If the world is seen from the start as safe and predictable (like it is for people with an optimal attachment pattern), the risk of a destructive impact of traumatic experiences is smaller [31]. A conviction concerning the unpredictability and instability of the world which stems from attachment patterns severely restricts the search for support and assistance. It also decreases the quality of functioning: a correlation between avoidant attachment and problem behaviours in children has been well proved [32]. Also in adults many empirical data show that resilience is more clearly influenced by subjective perception of support (satisfaction with support and a sense of acceptance [33], or the feeling that help is available when we need it [34], than by objectively evaluated levels of support. The role of the early scripts is therefore immense – they are sensitive to the real character of care early in life, they are stable, they operate "secretively" (subjectively we know something but we do not know the sources of our knowledge), they define a sense of safety and willingness to seek support, thus becoming the key component of resilience. Their "secretive" character and complex mode of impacting, but also the retrospective and sectional nature of most studies, make it difficult operationalise.

Conclusions

The concept of resilience is not easy in operationalization. It brings up problems of definition and terminology. It enters confusing relations with similar terms such as coping mechanisms, post-traumatic adaptation, post-traumatic growth, restoration of mental and biological homoeostasis, salutogenesis, etc. In addition to the concept of resilience there is also Blocks' resiliency (ego-resiliency) [35], understood as a set of personality traits (as opposed to resilience which is a processual phenomenon). Thus, the confusion in terminology is huge.

There is no one dominant, empirically supported model to explain the phenomenon of resilience as there is no one way to attain the desired goal – good adaptation. According to the principle of equifinality, the approaches (mechanisms) are numerous, and they exist in complex interactions [36]. Some resilience mechanisms are universal (we all activate them in emergencies), others are characteristic for some situations, depending on the circumstances, contexts, types of trauma. Understanding of this phenomenon is becoming so increasingly "decentralised" – we look for complex interactions between biological, psychological, social and environmental factors rather than for individual ones which support good adaptation. But this complicates the research methodology – only with a simultaneous analysis of multiple variables can a more accurate picture be obtained. It is impossible to conduct research where all the important variables would

be controlled. Therefore, the results of studies in which a narrow range of variables is measured differ from one another.

It is difficult to measure key variables of resilience. Elasticity is of interactive nature – it combines the experience of trauma with adaptation to it. Very different measurement methods are applied to capture the elusive. Different tools are based on different theoretical constructs [37]. Research in the field of resilience is predominantly correlational and the obtained correlations are rather weak. It is difficult to decide about cause-effect relationships on their basis. The subject of resilience is situated on the borderline between genetics, neurophysiology, anthropology of culture, sociology, medicine, political science, developmental psychology and psychiatry. The complex and multidimensional notion of resilience may raise methodological concerns. They tend to be so significant that some researchers consider resilience to be a construct of dubious scientific value [16].

Research on resilience in its early phase promoted individualistic approaches to coping and neglected the role of cultural and social patterns [38]. They were focused more on personality traits for coping with stress than on the contexts of their lives. Today we know for certain that empirical studies have mistakenly shown that the more serious the trauma factor, the less important the individual traits, and the more important the environmental factors such the quality of the family (for example [39]) and environment and available resources. Thus, in the case of "real" traumas – serious, sustained traumas, especially suffered by people of developmental age (e.g. abuse in the family), contextual factors are of paramount importance [36].

Empirical studies of the first phase (focused on individual traits) assumed the form of sets of "protective factors", "resistance predictors", "satisfactory coping correlative" This methodology was not particularly conclusive – empirical studies brought little to the cognition of trauma coping mechanisms (or their inability cope). The way out of the vicious circle of uncertain or tautological results seems to be ecological studies exploring the so-called contextual environment ranging from the micro to the macro level. In this study attempts have been made to assess the impact of different variables such as personal features of the child (e.g. the temperament), the nature and scale of the trauma, the quality of parental care, poverty, support for the family, the significance of school systems, the characteristics of the local community (e.g. access to infrastructure, the threat of crime in the area), political variables (social injustice, minority status), the cultural context, previous experiences of abuse. It is only a dynamic interaction of multiple factors related to the individual, the family and the context which may more realistically explain the phenomenon of resilience. Nevertheless, the level of methodological complications in such extensive research is high.

A fascinating but difficult research area opens before us: an attempt to synthesise the data obtained in the studies in the areas of genetics, neurobiology, developmental psychology, an attempt to estimate the impact of individual characteristics of people who have undergone trauma, the characteristics of their families and the local community, and finally the characteristics associated with the culture in which they live

and the society which they form part of. Everything is there: the genes, neuroplasticity of the brain, the collective identity of the victims or lack thereof, public support systems which work better or worse, an important adult who will become an authority and a source of support, socially shared "beliefs" how to deal with adversity and many, many other variables. There are a lot more questions, studies and conceptualisations before us as contrary to what is believed, we still do not know much about the mechanisms of resilience .

References

1. Borucka A, Ostaszewski K. *Koncepcja resilience. Kluczowe pojęcia i wybrane zagadnienia*. Med. Wieku Rozw. 2008; 12: 587–597.
2. Borucka A, Ostaszewski K. *Czynniki i procesy resilience wśród dzieci krzywdzonych*. Dziecko Krzywdz. 2012; 40(3): 7–26.
3. Junik W. *Zjawisko rezyliencji – wybrane problemy metodologiczne*. W: Junik W. red. *Resilience*. Warszawa: Parpamedia; 2011. s. 47–66
4. *Resilience – pozytywna adaptacja dzieci krzywdzonych*. Vol. 11. Dziecko Krzywdz. 3(40); 2012.
5. Kühn-Dymecka A. *Występowanie wybranych zasobów osobistych u osób z rozpoznaniem schizofrenii*. Psychiatr. Pol. 2012; 46(2): 167–176.
6. Braniecka A, Parnowska D, Radomska A. *Poczucie humoru u pacjentów z depresją – przegląd badań*. Psychiatr. Pol. 2012; 46(6): 1007–1018.
7. Szwajca K. *Dyskurs resilience – konteksty i aspekty praktyczne*. Psychoterapia 2014; 168(1): 99–107.
8. Fujita G, Nishida Y. *Association of objective measures of trauma exposure from motor vehicle accidents and posttraumatic stress symptoms*. J. Trauma. Stress 2008; 21(4): 425–429.
9. Edwards D, Sakasa P, van Wyk G. *Trauma, resilience and vulnerability to PTSD: A review and clinical case analysis*. J. Psychol. Afr. 2005; 15(2):143–153.
10. *Klasyfikacja Zaburzeń Psychicznych i Zaburzeń Zachowania w ICD-10. Opisy kliniczne i wskazówki diagnostyczne*. Kraków–Warszawa: Uniwersyteckie Wydawnictwo Medyczne „Vesalius", Instytut Psychiatrii i Neurologii; 1997.
11. Heitzman J. *Stres w etiologii przestępstw agresywnych*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego; 2002.
12. Werner EE, Smith RS. *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, NY: Cornell University Press; 1992.
13. Widom CS. *Understanding the consequences of childhood victimization*. W: Reece M. red. *Treatment of child abuse: Common ground for mental health, medical, and legal practitioners*. Baltimore: Johns Hopkins Univeristy Press; 2000. s. 339–361.
14. Izdebski R, Szwajca K, de Barbaro M, Szaszkiewicz W. *Przemoc w rodzinie, maltretowanie fizyczne i wykorzystanie seksualne dzieci i młodzieży*. W: Namysłowska I. red. *Psychiatria dzieci i młodzieży*. Warszawa: PZWL; 2012. s. 409–444.
15. Beeghly M, Cicchetti D. *Child maltreatment, attachment and the self system: Emergence of an internal state lexicon in toddlers at high social risk*. Dev. Psychopathol. 1994; 6: 5–30.
16. Luthar SS, Cicchetti D, Becker B. *The construct of resilience: A critical evaluation and guidelines for future work*. Child Dev. 2000; 71(3): 543–562.

17. Rutter M. *Promotion of resilience in the face of adversity*. W: Stewart AC, Dunn J. red. *Families count: Effects on child and adolescent development*. New York, NY: Cambridge University Press; 2006. s. 26–52.
18. Meichenbaum D. *Bolstering resilience: benefiting from lessons learned*. Na: http://www.melissainstitute.org/documents/Bolstering_Resilience.pdf [dostęp: 20.05/2014].
19. Junik W. *Teoretyczne i empiryczne podstawy wzmacniania rezyliencji (resilience) u dzieci z rodzin z problemem alkoholowym*. Dziecko Krzywdz. 2012; 40(3): 27–45.
20. Dekel S, Solomon Z, Rozenstreich E. *Secondary salutogenic effects in veterans whose parents were Holocaust survivors?* J. Psychiatr. Res. 2013; 47(2): 266–271.
21. Ullman SE. *Talking about sexual assault: Society's response to survivors*. Washington, DC: American Psychological Association; 2010.
22. Schwartz S, Dohrenwend BP, Levav I. *Nongenetic familial transmission of psychiatric disorders? Evidence from children of Holocaust survivors*. J. Health Soc. Behav. 1994; 35(4): 385–402.
23. Schleuderer CG. *Issues of the Phoenix: personality characteristics of children of Holocaust survivors*. Niepublikowana praca doktorska. Athens, Georgia: University of Georgia; 1990
24. Ogińska-Bulik N. *Pozytywne skutki doświadczeń traumatycznych czyli kiedy łzy zamieniają się w perły*. Warszawa: Difin; 2013.
25. Wanderman E. *Separation problems, depressive experiences, and conception of parents in children of concentration camp survivors*. [Doctoral dissertation. New York University, 1980]. Dissertation Abstracts International; 41: 704.
26. Danieli Y. *Psychotherapists' participation in the conspiracy of silence about the Holocaust*. Psychoanal. Psychol. 1984; 1(1): 23–42.
27. Felsen I. *Transgenerational transmission of effects of the Holocaust: The North American research perspective*. W: Danieli Y. red. *International handbook of multigenerational legacies of trauma*. New York: Plenum Press; 1998. s. 43–69.
28. Sher KJ. *Children of alcoholics: A critical appraisal of theory and research*. Chicago: The University of Chicago Press; 1991.
29. Lilienfeld SO, Lynn SJ, Ruscio J, Beyerstein BL. *50 wielkich mitów psychologii popularnej*. Warszawa: Wydawnictwo CiS; 2011.
30. Lieberman AF, Chu A, van Horn P, Harris WW. *Trauma in early childhood: Empirical evidence and clinical implications*. Dev. Psychopathol. 2011; 23(2): 397–410.
31. Wallin DJ. *Przywiązanie w psychoterapii*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego; 2011.
32. Keller TE, Spieker SJ, Gilchrist L. *Patterns of risk and trajectories of preschool problem behaviors: a person-oriented analysis of attachment in context*. Dev. Psychopathol. 2005; 17(2): 349–84.
33. Sarason BR, Pierce GR, Sarason IG. *Social support: the sense of acceptance and the role of relationships*. W: Sarason BR, Sarason IG, Pierce GR. red. *Social support: an interactional view*. New York: John Wiley Sons; 1990. s. 97–128.
34. Norris F, Kaniasty K. *Received and perceived social support in times of stress: A test of the social support deterioration deterrence model*. J. Pers. Soc. Psychol. 1996; 71(3): 498–511.
35. Block J, Kremen AM. *IQ and ego-resiliency: Conceptual and empirical connections and separateness*. J. Pers. Soc. Psychol. 1996; 70(2): 349–361.
36. Ungar M, Ghazinour M, Richter J. *Annual Research Review: What is resilience within the social ecology of human development?* J. Child Psychol. Psychiatry 2013; 54(4): 348–366.

37. Daigneault I, Hébert M, Tourigny M. *Personal and interpersonal characteristics related to resilient developmental pathways of sexually abused adolescents*. Child Adolesc. Psychiatr. Clin. N. Am. 2007; 16(2): 415–434.
38. Hobfoll SE. *Stres, kultura i społeczeństwo. Psychologia i filozofia stresu*. Gdańsk: Gdańskie Wydawnictwo Psychologiczne; 2006.
39. Walsh F. red. *Normal family processes*. New York: The Guilford Press; 2003.