

resilience

the article

the balance between awareness and fear

citizens and resilience

## colophon

published by

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# 1 introduction

The concept of resilience is at the heart of the EU project 'Citizens and Resilience. The balance between awareness and fear'. This document provides the theoretical framework which forms the basis of the EU project. Its outcome is a well-founded choice of a description of resilience to be used in the EU project. To this end, various investigations into resilience are studied and analysed.

First of all, two fields of research into resilience are discussed. Secondly, existing definitions of and theories in respect of the concept of resilience are described, as well as various aspects of resilience. Thirdly, tools for measuring resilience are discussed. Fourthly, a number of interventions designed to strengthen resilience are discussed. Lastly, the concept of resilience is linked to the 'Citizens and Resilience. The balance between awareness and fear' project.



## 2 resilience

Etymologically, the word 'resilience' comes from the Latin 'salire' (to spring, spring up) and 'resilire' (spring back). This means that resilience can be regarded as the capacity to recover or spring back (Davidson et al., 2005). There are considerable variations in the way in which resilience is defined in the literature (Wolkow, Ferguson, 2001). This makes it difficult to interpret the research into resilience. Moreover, research into resilience often employs a wide range of measuring tools that are only partly connected with resilience. This causes problems in assessing and comparing the results (Friborg et al., 2005).



# 3 research into resilience

Recently the subject of resilience has attracted more interest than was previously the case. Of all the articles that have been published on the subject, four in five have appeared in the last ten years (Friborg et al., 2005).

Various approaches have been adopted in researching resilience, including that of developmental psychology and research into the effects of traumatic events on the psyche.

The research based on developmental psychology addresses resilience in children. Most of this research has been conducted with children growing up in 'unfavourable' circumstances (poverty, parental (mental) illness). The research into the effects of traumatic events deals with resilience as a recovery process following a traumatic event.

## resilience in developmental psychology

In the research into resilience in children, resilience usually refers to 'good results' despite serious threats to the child's development (Masten, 2000). There may be a difference between the criteria employed by parents, teachers and the community to assess how well a child is functioning. However, there is general agreement about what constitutes the norm for 'good functioning'. Different developmental tasks are prescribed for children of different ages. If a child is able to complete the relevant developmental tasks, this is regarded as a 'good result'. The research into resilience addresses elements that lead a child to achieve these results when the basic conditions for healthy development are not fulfilled.

Werner and Smith conducted a longitudinal study of children born into poverty (Werner and Smith, 2001; Johnson and Wiechelt, 2004). This study followed the lives of 505 people born on the island of Kauai in 1955. The ethnicity of the people in the study population varied. Most of the parents of these children worked on plantations, and the houses in which the children grew up had no electricity or running water. Two thirds of the group of children followed in this study ultimately developed serious problems. The remaining one third of the group developed into 'healthy' adults. Werner and Smith investigated this group and described the protective factors they perceived as differentiating it from the remaining two thirds of the study population. The following protective factors played a part in resilience:

- as a child, they developed at least one strong personal relationship with a role model, or had a good attachment to a carer;
- as a child, they had an 'easy' temperament, they were good-natured, affectionate and responsive;
- while they were at school, they had many friends and interests, including active participation in social activities (clubs, societies, etc.);
- while they were at school, they had better language and reasoning skills than the people studied in the 'two thirds' group.

Masten (1994) conducted a study reviewing the longitudinal and cross-sectional research into resilience, and established that the results overlapped (Johnson and Wiechelt, 2004). She studied the following topics in the literature on resilience in children: a mentally ill parent, financial difficulties, teenage mothers, children growing up in children's homes, chronic illness, criminality and neglect or abuse. She put forward ten protective factors that play a part in resilience:

- effective parenting,
- relationships with other competent adults,
- access to other people, adults in particular,
- good intellectual skills,
- talents or accomplishments that are appreciated by the child him/herself or by other people,
- self-reliance, a sense of self-worth and hope,
- religion or the feeling of belonging somewhere,
- socio-economic situation,
- good performance at school or contributions to the community,
- good luck.

In her 'Project Competence: a 20-year study of competence and resilience', Masten found the same factors, among others. This project showed that children who developed healthily despite unfavourable circumstances had more internal and external resources available to them, specifically in the form of good cognitive skills and effective parenting. Children less able to access these resources developed into vulnerable adults. This group experienced more stressful events and were less equipped to cope with them (Masten, 2000).

## resilience as a recovery process after trauma

More research has recently been conducted into resilience as a recovery process following a traumatic event. At the outset, it was above all the pathology following a traumatic event that was described, but in the past few years attention has also been paid to studying the group that has no problems after such an event.

Bonanno (2004) writes that the research into post-traumatic effects focuses too much on pathology and not enough on healthy processing. He also believes that healthy processing is not pathological, but 'normal'. Bonanno regards resilience as the ability to maintain a stable equilibrium. In his article 'Loss, Trauma, and Human Resilience' (2004), he describes various ways of achieving resilience:

- Hardiness: the personality trait 'hardiness' or 'toughness' helps to buffer extreme stress (Kobasa, Maddi & Kahn, 1982; Bonanno, 2004). It comprises three dimensions: the ability to identify a meaningful goal in your life, the belief that people can change their environment and the outcome of events, and the belief that people can learn from both negative and positive experiences in their life. People who are 'tough' have more confidence and are better equipped to apply coping skills and take advantage of social support.
- Self-enhancement: people with an over-high opinion of themselves seem to be more resistant to stressful events (Bonanno, Field, Kovacevic & Kaltman, 2002; Bonanno, 2004). In a study of individuals who were in or near the World Trade Center on 9/11, those reported to be 'self-enhancers' proved to be better able to adapt and to have more social networks. Their friends' evaluation of them was also more positive, and their friends believed that they were better able to adapt (Bonanno, Rennieke, Dekel & Rosen, 2003; Bonanno, 2004). This was also physiologically apparent (no increase in cortisol level under stress).
- Repressive coping: hardiness and self-enhancement are cognitive processes, whereas repressive coping occurs as a result of emotion-oriented mechanisms, for example emotional dissociation. 'Repressers' report relatively few stress reactions in stressful situations. However, indirect measurements show fairly high stress reactions (Weinberger et al., 1979; Bonanno, 2004). Repressers manage it better; sometimes they have more physical symptoms, but these disappear in the long term.
- Positive emotion and humour: positive emotion and humour play a part in resilience, since the negative aspects of the event are laid to rest and the negative emotion is cancelled out, and people stay in touch with their environment.

Bonanno believes that it is important to establish how resilience in adults relates to experiences while the person is developing. It is also important to investigate whether the various factors in resilience are cumulative or interactive. Here, the studies of resilience in children from the viewpoint of developmental psychology are of value.



# 4 definitions and theories

Agaibi & Wilson examined the literature on trauma, PTSD and resilience. Resilience is regarded as a complex repertoire of behavioural manifestations (Agaibi & Wilson, 2005; Wilson & Agaibi, in press). It characterises a style of behaviour with clearly definable patterns of thought and perception and decision-making methods in different situations. Resilience is defined as the ability successfully to withstand a threatening and challenging situation. It represents a favourable outcome despite substantial demands, costs, tension or risk. Resilience means being competent in response to the demands imposed on the ability to cope. It also means healthy recovery from extreme stress and trauma (Wilson & Drozdek, 2003; Agaibi & Wilson, 2005). Conceptually speaking, resilience is associated with curiosity and intellectual skills, and the ability to let go of problems and to reconstruct (Block & Kremen, 1996; Agaibi & Wilson, 2005). It is assumed that highly extrovert personality traits such as hardiness, egoism, self-esteem, assertiveness and locus of control contribute to resilience. This also applies to the capacity to mobilise resources (Agaibi & Wilson, 2005; Wilson & Agaibi, in press).

In the model developed by Wilson (2001, 2004), 'a model of resilience in response to psycho-logical trauma', the reaction to a traumatic life event is explained. Starting with the event and the characteristics of the event, its influence is described in turn on personality, 'self-structure' and ego processes. This determines activation of the allostatic stress response, which influences the continuum of adaptation and resilience. The stress response is presented as a combination of factors that influence each other. These factors are personality traits, modulation of affect, ego defences, coping style and mobilisation, use of protective factors. The result of the stress response is the measure of adaptation and resilience.

Connor (2006) defines resilience as a way of measuring the ability to cope with stress. Here, resilience describes the personal qualities that make it possible for individuals and communities to grow and even to make headway in unfavourable circumstances. Resilience can therefore be regarded as a way of measuring emotional stamina. Generally speaking, it is assumed that resilience develops over time. According to Connor, the concept comprises various elements.

Friborg too (Friborg et al., 2003) regards resilience as a construct comprising various dimensions. The concept refers not only to psychological skills, but also to the possibilities for the individual to take advantage of family, social and external support systems in order to cope better with stress. Generally speaking, resilient people are more flexible than vulnerable people are, and they protect themselves against stress by making use of various protective resources. These resources may be internal or external. Various writers classify these protective resources as psychological/internal characteristics, support from family and friends, and external support systems (Friborg et al., 2003).



# 5 aspects of resilience

In addition to various definitions and theories of the concept of resilience, the scientific literature also includes terms and topics related to this concept. These include 'static versus dynamic', 'post-traumatic growth', 'psychobiological mechanisms' and 'ego-resiliency'. These concepts are outlined briefly below.

## static versus dynamic concept

The concept of resilience is complex, and calls for dynamic variables with various mechanisms and processes within ecological and transactional models. Resilience as a dynamic process ensues from the interaction between the individual, the event and the environment. Existing developmental models of resilience that have come into being following longitudinal studies describe mutual influencing of the child involving parents, peers and/or environment (Johnson & Wiechelt, 2004). Further research into resilience addresses the recording of this mutual influence over time and the identification of the underlying mechanisms of resilience (Johnson & Wiechelt, 2006).

## resilience and post-traumatic growth

Post-traumatic growth is the growth that people may undergo after they have experienced a traumatic event. According to Linley and Joseph (2005), this is more than resilience. In their view, it involves growth and positive change, a change to functioning better as the result of an aversive event.

## ego-resiliency

Block (1996) described the construct 'ego-resiliency'. This construct refers to an individual's general capacity to adapt adequately to external and internal stressors. In this definition, ego-resiliency is a personality trait that offers individuals the opportunity to demonstrate the behaviour to which they are accustomed and to adapt it in line with the demands imposed on them by the environment.

## psychobiological mechanisms

Charney (2004) describes the psychobiological mechanisms of resilience in a review article. He states that in recent years there has been an increase in our knowledge of how the brain regulates reward and motivation, learns, reacts to fear, and develops adaptive social behaviour. The neural mechanisms that bring about these functions are relevant to the

way in which an individual reacts to extreme stress. They explain (in part) the character traits that are associated with resilience and courage. Charney established 11 possible neurochemical, neuropeptide and hormonal mediators of the psychobiological reaction to extreme stress. He related them to resilience or vulnerability. It emerged from this that the following neural mechanisms were relevant to the character traits associated with resilience:

- (1) reward and motivation (hedonism, optimism and acquired complaisance);
- (2) responsiveness to anxiety (behaving effectively despite anxiety);
- (3) adaptive social behaviour (altruism, attachment and teamwork).

# 6 measuring tools

The constantly changing context and the differences between and within people make it difficult to pinpoint and measure resilience. Some researchers argue in favour of descriptions of the concept of resilience in terms of risk and protective processes in place of conceptualisations of risk and protective factors (Johnson & Wiechelt, 2004).

On the basis of various characteristics of resilience, Connor has developed the “CD-RISC” (Connor Davidson Resilience Scale), a list completed by the individual that is used to measure resilience. This scale is also used to measure the effect of treatment of PTSD (Davidson, Payne et al., 2005; Connor 2003).

Friborg (2006) has also developed a resilience questionnaire, the “Resilience Scale for Adults”. This questionnaire contains 33 items, clustered under a number of factors: ‘personal strength’ (consisting of ‘positive self-image’ and ‘positive image of the future’), ‘social competence’, ‘structured style’, ‘family cohesion’ and ‘social resources’. This list is used, inter alia, to predict treatment outcomes. Friborg also suggests using this list as a tool for measuring protective factors preventing inadequate adaptation and psychological disorders. For the professional, the results of the questionnaire provide an overview of areas for psychological and psychosocial intervention. In this way, patients can be helped to find strength by drawing on the protective resources identified.



# 7 interventions

In her research on resilience in children, Masten (2000) formulates policy recommendations. She states that the results of research into resilience suggest that the greatest threats to children are those events that attack the basic protective systems before they have developed. It follows from this that attempts to reinforce the competence and resilience of children who are growing up in difficult situations must be geared to strategies for preventing damage to these systems, or for repairing or making good these systems. Thus it is extremely important to have programmes and a policy focusing on effective parenting and easy access to competent adults. This is the point on which there is the greatest consensus in all the research into resilience in children – having a good solid relationship with a competent and loving adult (Masten, 2000).

The motivational system is also important. When development proceeds normally, people are motivated to learn. Children of all ages need opportunities to experience success. This means that families, schools and communities must accept their responsibility to provide children with such opportunities and must ensure that children develop their talents. This can increase feelings of self-assurance and self-efficacy in children.

Masten argues in favour of promoting healthy development as a strategy for strengthening resilience. In this context, she describes three basic strategies for intervention:

- Risk-oriented strategies: to reduce the exposure of children to hazardous events (for example a neighbourhood project designed to prevent homelessness).
- Quality-oriented strategies: to increase the quantity, accessibility and quality of resources that children need in order to develop competence. They may be direct (by offering out-of-school activities) or indirect (via child-rearing courses for parents).
- Process-oriented strategies: with the aid of these, the fundamental protective systems for development are activated. This involves programmes that make children aware of these systems. The programmes ensure that the child experiences an increase in self-confidence when he or she has learned something. This is because the feeling of personal control is increased.



# 8 resilience in 'citizens and resilience. the balance between awareness and fear'

On the basis of the literature examined, in the EU project the concept of resilience is defined as follows (based on Masten, 1990):

**“the process of or opportunity for successful adaptation despite difficult or threatening circumstances”**

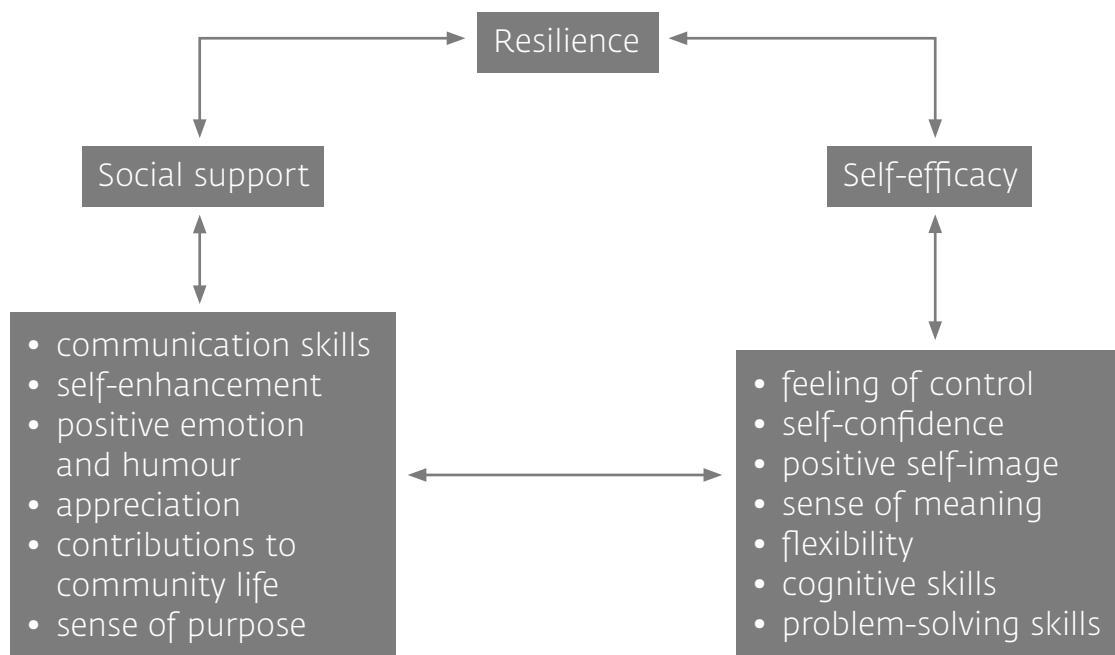
One reason for choosing this definition is that it fits well in the context of the EU project: the prevailing threat of terrorism. It also fits well with the positive starting point of the EU project, namely to strengthen the resilience of the population of Europe.

As can be seen from the research described earlier, resilience comprises various factors. The interventions involved in the EU project are aimed at influencing these factors, or at least those factors that are capable of being influenced. Factors such as IQ, socio-economic status and psychobiological resilience will therefore not be included.

On the basis of studying the literature and of relevance to the project, a number of factors in resilience have been identified. These factors derive from various theories and reference frameworks in respect of resilience. They are listed below, in no particular order.

- good relationships with other people and the capacity to receive social support
- good cognitive and communication skills
- talents or accomplishments that one values oneself or which are appreciated by others
- self-efficacy (general expectation of competence), self-esteem and hope
- a sense of purpose
- religion or the feeling of belonging somewhere
- contributions to community life
- self-enhancement
- adaptations of ways of coping that suit the situation and the person
- positive emotion and humour
- active problem-solving skills
- a belief that stress can have a strengthening effect
- flexibility: the ability to adapt to change
- acceptance of negative feelings, growth through negative experiences
- coping with stress: seeing stress as a challenge
- access to and use of protective processes

These factors are interactive – for example, the possession of good communication skills will lead to more social support and vice versa. In order to make the concept of resilience manageable, the factors are clustered under two headings: social support and self-efficacy.



# 9 the three products

## **The EU project will deliver three products:**

- A publicity campaign on resilience. This can be used in all the EU Member States, adapted to take account of cultural diversity.
- A musical and complementary teaching material; a practical intervention for teachers in primary education, with which they can strengthen their pupils' resilience.
- Strategies for community-based interventions, so that relief workers, policy-makers and administrators know what they need to organise in support of collective resilience and the natural recovery of the population.

## **Publicity campaign**

The task of combating terrorism is being tackled on a massive scale: government policy is addressing it, information services are being brought in, and many safety measures are being taken. And all this is necessary, but all too often the possibility of involving the general public as a partner in this is overlooked. Security also rests with people themselves; the resilience of citizens needs to be increased. To give the battle of citizens against terrorism a place in all this, in conjunction with the QuA marketing agency Impact is developing an international symbol against terrorism. This symbol is neutral, intercultural, multifaith, positive, easy to recognise, traditional and generally accepted. It is not a logo, but represents the message of resilience by non-verbal means.

## **Musical and complementary teaching material**

This part of the project is all about strengthening the resilience of children in primary education. It will make them better equipped to withstand direct or indirect threats, such as terrorism or other distressing events. The practical intervention that is being developed is a musical. This musical is about resilience, and will be rehearsed and performed by primary schoolchildren, under the guidance of a teacher. In addition to the musical, complementary teaching material is being developed, so that in class teachers can repeat and study in more depth the subjects raised in the musical. This teaching material includes the various aspects of resilience in an interactive way. A guide for parents is also being produced, so that they have the option of going over what has been learned at home. The aim of the intervention is twofold. The first goal is to tell children about the concept of resilience – what is resilience, what does it consist of, and what can you do with it? The second goal is to familiarise children with skills with which they can increase their own resilience. These skills can help children to adopt a more spirited attitude at the moment when they are (directly or indirectly) confronted with threatening situations, such as terrorism.

### **Community-based interventions**

Impact is engaged in mapping possible community-based interventions aimed at increasing resilience in the community, or at getting going on provision of acute, medium- and long-term psychosocial aftercare. The interventions often make an appeal to the key figures in specific communities, to voluntary organisations, to family doctors, and to professionals active in the field of public-sector public mental health. Community-based interventions could include, among other things, tried and tested communication techniques, the realisation and maintenance of social support, management and training of professionals and volunteers, and the setting up of an effective monitor to measure the effect of the interventions implemented. The question of which interventions are beneficial depends on the country and the situation. Impact's aim is to produce a clearly structured document containing possible 'community-based interventions'.

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