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# Vulnerability and Social Exclusion: Risk in Adolescence and Old Age

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## Abstract

Vulnerability can be defined as the quality or state of being exposed to the possibility of being attacked or harmed, either physically or emotionally. In this chapter, it is defined as a possible ability of an individual or a group to face, manage, and anticipate a possible problem. This concept of vulnerability is associated with that of risk factor for social isolation, and therefore to situations that can also lead to illness and lack of mental and physical health. It can have its roots in poverty, in social exclusion, in ethnicity, in disability or simply in disease or specific developmental phases in life. All these aspects reflect very important vulnerability factors among biological, psychological, social, and behavioral variables. To date, no one has highlighted together two critical moments in life in which this brain area undergoes important variations: *adolescence*, in which its development occurs, and *old age*, in which this area goes into cognitive decline with the relative loss of many higher cognitive functions. This knowledge can help to better understand the forms of exclusion due to vulnerability in order to develop new forms of social inclusion.

**Keywords:** vulnerability, social exclusion, risks, adolescence, old age

## 1. Introduction

Vulnerability is a broad concept that not only incorporates being individually exposed to physical, psychological, or emotional harms but also incorporates a social dimension that refers to the inability of people, communities, or societies to overcome the effect of stressors to which they are exposed and are at risk of not realizing their potential to achieve positive life outcomes [1]. As such, it can have its roots in poverty, in social exclusion, in ethnicity, in disability, or simply in disease or specific developmental phases in life. There has recently been a surge of interest in vulnerability within the scientific community, and different measures have been gradually developed both at macro- and at microtheoretic levels. The first level encompasses composite measures at a macrocountry level, to capture a country proneness to shocks and its ability to recover from shocks [2, 3], while the second one refers to individual or community levels of assessment that can be further aggregated to form a society or even a country vulnerability measure [4, 5]. It is, however, rather difficult to identify and assess vulnerability both at individual and community level, not only because of the different composite measures available but also because it involves a longitudinal perspective and tracking the well-being of

a particular person, household, or community, over years or before and after that, a known hazard requires cost/effective tools that are seldom available.

The issue turns to be even more complex when vulnerability is to be assessed in adolescents, where several of the available indicators progressively lose their explanative power [6]. Research, and empirical experience evidence, showed that adolescents do not always act by serving their own best interests. The perception they have of their own risks, in short- and long-term results, is far larger than the reality, as they frequently underestimate the risk associated with particular actions or more broadly particular choices. Within it, vulnerable youth embodies those characteristics and experiences that put them at risk of developing problem behaviors and outcomes that increase the potential to hurt themselves, their community, or more frequently both. In this context, in order to allow effective preventive or prompt interventions, it become extremely important to identify both the known indicators of vulnerability and the short-term consequences of that inability to successfully coping and overcoming the effect of stressors they are exposed to and not realizing their potential to achieve positive life outcomes.

Interdisciplinary research conceptualizing, measuring, and evaluating the burden of adolescent vulnerability and, with particular urgencies, that research aimed at identifying any factors that potentially protect or can buffer youths from its effects is sorely needed [7]. It is highly recommended, indeed, to mix approaches designed to explore as comprehensively as possible the complexity that coexists on risk and protective adolescents' choices as well as the perception they have on their own vulnerability [6].

Based on premise, several sources of indicator have been proposed creating commonalities, in some cases, while posing on different divergent paradigms, in other cases. For example, a consistent set of commonalities is that of the so-called risk approach, in which risky behaviors are seen as the impact of youth vulnerability, as they constitute an empirical threat for their life. On the other side, there can be found the protective or the buffering approach aimed at identifying those individual or environmental characteristics or conditions that could reduce the effects of stressful life events [8]. An important contribution to both approaches is coming from the international WHO collaborative Health Behaviour in School-aged Children (HBSC) researchers' group. HBSC is a four-year cross-national study that asks 11-, 13-, and 15-year-old youths about their health and well-being, about their social environments, and about their choices within a broad health and well-being framework [9].

The HBSC is a more than 30 years long experience encompassing more than 350 researchers from 48 countries and regions, throughout the European region and in north America. HBSC must not be considered a standard epidemiological study, at least not that in which behaviors are simply collected as health threats. Instead, health-related behaviors, such as drinking, smoking, or even bullying or intersexual intercours, are interpreted as the result of interconnected individual and social patterns within adolescent lifestyles. Hence, demographics and the macrosocial influences together with individual perceptions and choices are acknowledged, and for these reasons, it represents the best available source of vulnerability indicators, in the individual, familial, school, psychosocial environments, and macrolevel environments [71].

The contribution coming from researchers across different disciplinary fields allowed the study to progressively expand and overcome the known scientific barriers [9]. The study represents the first and more extensive surveillance in the ages of adolescence. It allows researchers to shift from an individual point of view to a broader sight at a micro- and mesocommunity level and back again to the individual age, gender, and SES-specific level.

To understand the evolutionary mechanisms that develop during adolescence, it is also important to consider, in addition to the aspect of neurophysiological development, the presence of risk factors, i.e., the concept of “vulnerability.” At the base of this concept, there is a basic assumption according to which, besides the physiological variability of the development, there is also the individual variability that can explain why some adolescents are particularly at risk of implementing dangerous, deviant behaviors. Adolescents have a tendency to implement coping strategies that lead to greater risks due to a natural neurophysiological and individual development. In this regard, according to the evolutionary point of view, the human brain ontogenetically continues its development from birth, during adolescence and then ages during the old age. In many areas of the brain, a number of connections between the various neurons increase exponentially in the first months and years of life, maturing in adolescents and then gradually decrease, decaying in elderly people. In particular, there is a brain area, the prefrontal cerebral cortex that follows more than others this trend, variation in the life span of each. It is involved in mental abilities and complex cognitive processes, such as language, decision-making, and social understanding even of complex social situations. In fact, neuroscience researches have helped to better understand this concept from an ontogenetic point of view, from birth to death. It emerged that there are two critical periods in the life of a human being, the adolescence and the old age, because this very important brain structure, the prefrontal cortex, is maturing during adolescence and decaying during old age, and this reflects the neural correlates of vulnerability.

It is the area of the brain that is sensitive to the brain circuit of reward [10, 11], also sensitive to risk behaviors such as addiction and gambling. In fact, this brain area is responsible for the cognitive processes. These involve control and monitoring of cognitive processes [12] and behaviors also implemented in social relationships.

All these aspects reflect very important vulnerability factors among biological, psychological, social, and behavioral variables.

To date, no one has highlighted together two critical moments in life in which this brain area undergoes important variations: (i) *adolescence*, in which its development occurs, and (ii) *old age*, in which this area goes into cognitive decline with the relative loss of many higher cognitive functions. In detail what happens? Vulnerability in adolescence is examined through the example of anger.

## **2. Vulnerability in adolescence: the example of anger**

Anger is a universal emotion, which we all feel, so it should not be too alarming. In reality, however, exactly the opposite happens: anger scares us. This happens because anger can be an expression of a loss of control, of a refusal to us, or it can still be an expression of real violence [13]. Despite being very common, rabies is also very difficult to define and describe: it involves physiological activations, muscular tensions, cognitive processes, subjective experiences, and evident behaviors. The latter, in particular, can be very different: angry people can be very aggressive or develop destructive [14].

Rage and oppositional behavior, although not directly related to the onset of pathological disorders, are important risk factors, which, if encountered at a young age, can predict the onset of clinical problems [14]. For this reason, it is very important to ask how children react to the emotion of anger and what coping strategies they put in place to defend themselves from its possible negative consequences: this is what Fabes and Eisenberg [15] did with their study, coming to the conclusion that the strategies implemented can be completely different, depending on their social skills and gender. Specifically, the two researchers found that male children tend to



let off steam and to further express their anger, even aggressively, while the females favor more assertive coping strategies. In addition, children with more social and more popular skills tend to use strategies that minimize the likelihood of having other conflicts later, as well as the risk of damaging the social relationships involved in the conflict situation. Furthermore, children with more social and more popular skills tend to use strategies that minimize the likelihood of having conflicts and harming social relationships. The work that can be done in schools. We will resume this theme at the end of the chapter, but let us start by saying that the goal may be, as Rosenberg [16] suggests, to teach children how to use anger as an alarm bell that warns us that we are going toward a probable dissatisfaction of our needs and that could lead us to interact with others in the most wrong way possible, that is to say with aggression and violence.

## **2.1 From anger to interpersonal conflict**

Novara and Di Chio [17], as part of a research aimed at identifying the most effective pedagogical interventions to encourage the management of children's quarrels, also give the floor to the children themselves through interviews. They have listed the reasons behind these arguments, also reporting that the arguments can "happen to everyone". The children interviewed refer to situations characterized by the presence of feelings of anger and anger: anger over contended friendships, for the mockery suffered, for violation of rules, for possession of games, or for the assumption of roles within them.

This leads us to think that between the emotion of anger and the onset of interpersonal conflicts, there is a close relationship. Van Kleef [18] confirms it and goes even further, distinguishing between intrapersonal anger effects and interpersonal effects. Results of his study make us understand that at an intrapersonal level, anger is associated with hostile feelings, distorted perceptions and attributions, and competitive behavior. On the interpersonal level, on the other hand, anger sometimes causes mutual hostility, and therefore competition, while in other situations, it activates alternative strategies that motivate cooperation. In this regard, some scientific evidence can be found with respect to the fact that cooperative strategies are the most effective for an adequate management of conflict situations. Novara and Passerini [19], for example, suggest that conflict is a place where each conflict has the opportunity to make their own contribution, and it is a space that is created precisely because of an initial divergence: speech in the school context—they also tell us that the school's task must be to guarantee the experience of conflict in order to give everyone the opportunity to contribute to the resolution of the relationship problems that are created. Already a few decades before, Sherif et al. [20] had marked a turning point in the psychology of groups and in the study of intergroup conflicts, thanks to the experiment of Robbers Cave: in a nutshell, about 20 Oklahoma City boys who had never met or known before, but completely homogeneous by religion and social background, they were invited to a summer camp and randomly divided into two groups. The experimenters soon noticed that the mere fact of having them divided into two groups had given rise to a series of stereotypes and prejudices against "the other group" that soon led to real conflicts, from theft of flags and clothing to mutual jokes, from the creation of nonconventional weapons to the request to always eat in separate tables. In the second phase of the experiment, however, the goal was to restore peace among the groups. The mere recourse to activities to be done together did not give the desired results, but the situation changed when the experimenters resorted to higher-level objectives, which required cooperation between all to be achieved: in the field, the news spread that the water pipes they had been sabotaged, and boys from both groups were selected to solve

the problem; when, thanks to the mutual collaboration, they managed to free the obstructed pipe, they found themselves celebrating together. Within a few days, the weather began to change and when the experiment ended and all the boys had to return to their homes, they were all very happy to make the return trip in the same bus sitting next to each other.

## **2.2 Adolescence and social exclusion: bullying and cyberbullying**

Bullying can be considered a subcategory of interpersonal conflicts, characterized by intentionality, repetition, and asymmetry of power [21, 22]. These three peculiar characteristics, identified by the pioneering studies of Olweus, that led to the publication of the omnibus “Olweus Bullying Prevention Program” [23] make bullying different from any other form of violence [24].

Anger is a strong emotional component of bullying, which in some situations can have a double value. In an attempt to investigate the emotional aspect of relational dynamics related to bullying situations, Rieffe et al. [25] conducted a study comparing a group of children with autism spectrum disorders with a group of typically developing children. The emotions that are most related to bullying are the anger and lack of guilt in both groups, while victimization behaviors are related to the feeling of fear in the case of children with typical development, while for children with autism feelings of anger are also detected in cases of victimization.

Garner and Hinton [26] found a negative correlation between emotional self-regulation and experiences of bullying, both for the bully and for the victim, and the most present emotions within these dynamics proved to be rabies and sadness. In parallel, several studies, including that of Menesini et al. [27], have highlighted the role that the moral disengagement mechanisms postulated by Bandura [28] could have. In fact, despite the acts of bullying are generally considered by the class group as something unjust and wrong [29], the bully is an individual who manages to protect himself from feelings of devaluation, feelings of guilt and shame, thanks to these mechanisms that allow him to self-justify himself and to partially disable moral control over his actions [30]. In practice, people involved in acts of bullying demonstrate, on the one hand, not being able to manage and adjust their emotions, and on the other (in particular with regard to bullies) to be able to ignore the negative consequences of their actions thanks to protective mechanisms of moral disengagement [21].

When episodes of cyberbullying occur, we are in the presence of the same peculiar characteristics of the more “classic” forms of bullying (intentionality, repetition and asymmetry of power), even if a different medium is used [31]. In fact, cyberbullying is manifested through the internet, mobile phones, and all electronic devices that allow, in a clear or hidden way, to send messages, emails, images, or videos with the aim of harming someone [32]. Moreover, it is decidedly more complicated to maintain cyberbullying within precise boundaries: it can be perpetrated 24 hours a day, a much wider audience can be reached, and the attacker has the possibility to remain anonymous [33]. The fact that it is not always possible to identify who the culprit is, on the one hand it favors its de-individuation and de-empowerment, and on the other, it increases the feelings of anxiety, anger, and fear in the victim [34].

Exactly like when we talk about bullying, even when dealing with the issue of cyberbullying, it seems impossible not to mention the role played by emotions and emotional regulation. A recent transnational research by Ortega et al. [35] has shown that victims of different types of bullying, including the “classic” and cyberbullying, experience very similar emotional reactions, which in many cases include feelings of anger. Spielberger et al. [36], in studying the emotion of anger,

had pushed to distinguish between anger as a “trait” and anger as “state”: we speak of trait when it corresponds to a predisposition of the individual, and of state when it is instead a temporary and temporary characteristic. Lonigro et al. [37], starting from this distinction, carried out a study to understand if cyberbullying was related to anger understood as a trait or a state, discovering that in most cases of cyberbullying, victims and aggressors experience anger as a state, therefore temporarily, contrary to what happens with physical bullying, face to face, when anger is identified as a real trait of the personality of the people involved.

The concept of emotional intelligence has been defined, in a pioneering way by Salovey to Mayer [38] as the ability to monitor one’s own and others’ emotions, to differentiate them and to use such information to guide one’s thoughts and actions, and completely overthrow them. Galimberti [39] and Pacchin [40] have come to identify in “emotional illiteracy,” one of the main causes of today’s tendency to aggression and violence (verbal and otherwise) that finds fulfillment on the web and in particular in social networks. Galimberti, in particular, defines it as that emotional indifference due to which there is no emotional resonance in the face of facts that are witnessed or gestures that are performed. To remedy this worrying tendency, Goleman [41], who has resumed and popularized the concept of emotional intelligence, offers real programs of emotional literacy to be implemented in schools.

To conclude, this overview on the negative consequences of anger can lead to the social exclusion of children and young people in their reference context, before moving to the preventive tools that can be put in place. It is useful to address the issue of antisocial behavior, since several authors identify an important predictor in this field.

### **2.3 When the vulnerability becomes a crime**

Rutter [42] categorizes a series of risk factors of delinquency and violence, among which it is interesting to highlight the aggressiveness, the impulsivity and the low self-control (among the individual factors), the low social competence, and lack of empathy (among social factors). These categories are then joined by those of family, school, and ecological factors. These are elements that become relevant in some cases in antisocial initiation, in other cases in the maintenance of a criminal career, and in others, in the process of escalation and aggravation [43].

Several criminal theories in the past associated the onset of delinquent behavior with factors of social disorganization and subcultural values present in the social context of reference [44], but recently scientific research has focused on theories that focus on the factors of tension (Strain Theories). This, if they arise at an early age, can lead to antisocial behavior and to the commission of crimes with the purpose of “loosening” this tension: people would then engage in criminal activity to respond to stress and emotions negatively generated by specific factors of tension. They steal to reduce the tension generated by the lack of money. They flee to reduce the stress generated by violent parents, sometimes they take revenge against the source of stress or looking for goals related to it [45].

In addition, to having studied and conducted a review of the main Strain Theories, Agnew [46, 47] came to the conclusion that the “tension” referred to all theories can be explained in terms of accumulation of anger and frustration, such as to cannot be more tolerated and therefore to force the individual to alternative ways of escape: the crime turns out to be one of these ways of escape.

Other authors, starting from Agnew’s studies, have investigated this aspect: Brezina et al. [48] applied it to the scholastic context, seeking and finding a positive correlation between students’ anger levels and peer conflicts. In their research, the students with higher levels of anger (and therefore with a higher level of “tension”)



have proved to be the ones most involved in the quarrels and conflicts that have arisen within the school. Mazerolle et al. [49], on the other hand, have investigated more deeply, wondering if the “anger” referred to in these theories is a situational anger (a state related to the specific situation) or a dispositional anger (a specific trait part of the individual’s personality). Results showed that both anger and situational anger can become stressful elements and cause tension, but always following two distinct processes and therefore different cognitive mechanisms.

Lastly, it is interesting to note that the most used social response to people who commit crimes is namely the punitive response. Therefore, imprisonment is ineffective from the point of view of education to the management of anger, which as we have seen is an emotion that plays a central role in the genesis of conflicts, prevarications, and antisocial behavior. Heseltine et al. [50] conducted a study that showed the ineffectiveness of an intervention program on rabies management aimed at detained persons: comparing the group that used the program with the group on the waiting list. Important differences were found from the point of view of theoretical knowledge on the subject of rabies, but the differences in terms of levels of anger experienced and manifestation of anger through aggressive behaviors were found to be almost nonexistent.

## **2.4 Vulnerability: an example of social inclusion intervention**

In previous paragraphs, we have shown how central the theme of anger in the genesis of behaviors that facilitate social exclusion such as actions of bullying (bullying and cyberbullying) to arrive at real antisocial and criminal behavior. Twenge et al. [51] have also shown that social exclusion itself plays an important role in generating more anger, giving rise to a very dangerous vicious circle that starts from anger, generates social exclusion, and consequently, generates further anger, increasingly difficult to manage.

To break this chain, it is necessary to intervene with programs of emotional education, and in particular of education in the management of anger, before it causes social exclusion, therefore starting from its first manifestations. Botvin et al. [52] through a study have shown that intervention programs aimed at the first averages and based on rabies management and conflict resolution techniques prevent both the risk of abuse of tobacco, alcohol and drugs, and the onset of violent and delinquent behavior. Also, our experience with the association of EssereUmani started from middle school, with a program of intervention on conflict management through the tool of mediation [21], aimed at students from the first to the third year. Recently, however, we realized that prevention can start earlier, even from primary school, where it is useful to start talking about managing emotions, with particular reference to negative emotions such as anger.

The path “Pleasure, I am the Rage!” involved about 1000 primary school children in Turin and the Province in the school year 2017/18. It has the aim of stimulating a reflection on emotions and their recognition, starting from emotion that has more disruptive effects in our daily life, especially when we are not able to manage it. It is a workshop path that, alternating moments more frontal to interactive activities and games, manages to involve children making them active actors of the path itself. The schools have shown to appreciate this program of intervention and to consider its continuation from year to year useful. “Pleasure, I am the rage!” Is a path whose validity has been recognized through its inclusion in the training catalog of the City of Turin “Crescere in Città” and in the catalog of the Shared Project “For a Human Man,” of the Diocese of Turin; the course was also adopted by the network of schools called “Rete S.C.A.R.—Schools that Care About Relationships,” of which the Associazione EssereUmani is a founding body.



### **3. Social vulnerability in the elderly**

Old age is usually associated with that of fragility, but in this chapter a new aspect associated with this concept is that of vulnerability.

#### **3.1 Social vulnerability and frailty in the elderly: the role of the European Union in promoting social inclusion and intergenerational dialog**

The European Union is a conglomerate of more than 500 million people, approximately 100 million of whom are older adults [53]. The Europeans are aging soon but living longer does not mean living a more active, healthier, and independent life. As reported by the European Commission: “The number of Europeans aged over 65 will double in the next 50 years, and the number of over 80 year olds will almost triple. Life expectancy will continue to increase, yet unhealthy life years make up around 20% of a person’s life” ([https://ec.europa.eu/eip/ageing/about-the-partnership\\_en](https://ec.europa.eu/eip/ageing/about-the-partnership_en)). Indeed, the aging population is dealing with troubled anthropological demographic, and epidemiological transformations.

Active and healthy aging is a necessity and societal challenge shared by all European countries. However, it is also an opportunity for Europe to “establish itself as a global leader that is capable of providing innovative solutions.” Considering the above, the European Commission has set up the European Innovation Partnership in Active and Healthy Aging (EIP-AHA) in order to foster innovation and digital transformation in the field of active and healthy aging. As reported in the EIP-AHA website ([https://ec.europa.eu/eip/ageing/about-the-partnership\\_en](https://ec.europa.eu/eip/ageing/about-the-partnership_en)):

“The EIP on AHA aims to promote healthy and active aging. The six EIP-AHA action groups (A1 adherence to prescription, A2 fall prevention, A3 lifespan health promotion & prevention of age-related frailty and disease, B3 integrated care, C2 independent living solutions, and D4 age friendly environments) involve stakeholders ranging from academia to public authorities, large industry and SMEs, health and care organizations, investors and innovators, end users, and patients’ associations.”

The common aim of these action groups is to increase the average healthy lifespan of EU citizens by 2 years by the year 2020. Considering Action Group A3, it brings together around 100 organizations, studying the association between frailty in the elderly and adverse health outcomes and better preventing/managing the frailty syndrome and its consequences [54].

#### **3.2 What is frailty in the elderly?**

Frailty is a clinical syndrome whose key characteristic increases vulnerability to stressors due to decline in the ability to maintain homeostasis, impairments in multiple systems, and decreases physiological reserves [55]. A frail elderly is an older person who is at increased risk of psychophysical health regression. Indeed, frailty in the elderly is a multidimensional concept taking appropriate account of the complex interplay among environmental physical, psychological, and social factors [54].

Until now, there is no unambiguous and recognized operational definition of frailty [56]. Experts from the EIP-AHA have identified two profitable approaches: the first one addresses physical determinants (medical definition), while the second one takes into account biological, cognitive, psychological, and socioeconomic factors (bio-psychosocial definition).

The operative definition of frailty relates to the risk of adverse healthcare outcomes (such as vulnerability, hospitalization, disability, institutionalization, and death) to which the elderly shall be the subject, given the association between the level of frailty and the risk at the present time: the more severe the frailty level, the

more serious the risk [57, 58]. The incidence of these adverse healthcare outcomes relates not only to the patient’s functional, physical, or mental status, but also to their social and socioeconomic status. Lacking even one of the last conditions leads to an increased use of healthcare and welfare services [59, 60].

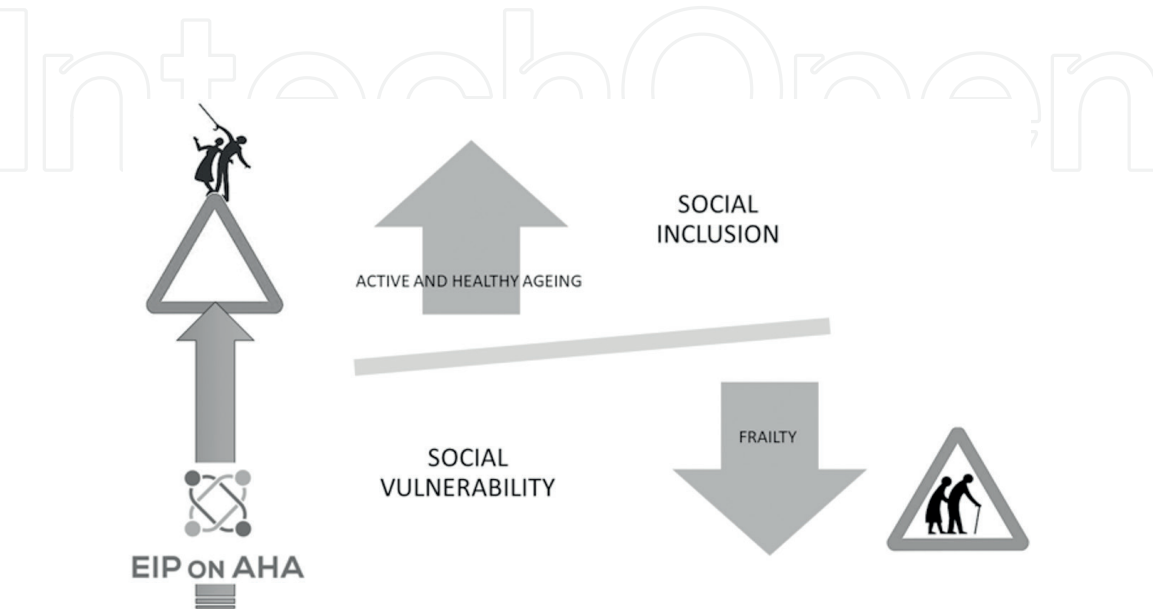
Importantly, social vulnerability is related to the health of elderly people and have to be considered as potential frailty predisposition and worsening factor.

Therefore, loneliness and social isolation have been associated with physical decline [61–64]. Conversely, a strong social network has a protective effect [54].

Loneliness and social isolation are distinct concepts. Valtorta and Hanratty (2012) reported: “One of the most widely used definitions that has loneliness as a subjective negative feeling associated with a perceived lack of a wider social network (social loneliness) or the absence of a specific desired companion (emotional loneliness)” while “social isolation is defined objectively using criteria such as having few contacts, little involvement in social activities, and living alone.” Indeed, individuals may feel lonely without actually be socially isolated, experience loneliness and isolation equally, or be socially isolated without feeling lonely (Valtorta and Hanratty, 2012). For these reasons, the role played by social and socioeconomic factors in determining frailty and any possible form of intervention need consideration (**Figure 1**).

Frailty quantification methods might provide a useful guide to quantify social vulnerability [65, 66]. Actually, the health status can be summarized by a deficit accumulation approach [67–69]: the more deficits an elderly accumulates, the more vulnerable he/she will be. If several distinct deficits could be combined to estimate not just relative frailty, but also social vulnerability, this social vulnerability index would offer insights into the health and social care needs of the elderly [66]. Such an idea was brought forward by Andrew and colleagues [66] who have found that social vulnerability is higher among people who are frailer and that it is associated with higher mortality. Moreover, Gale et al. [70] found that high levels of loneliness increased the risk of becoming physically frail, even if loneliness and social isolation were not associated with a frailty index rate of change.

Unless we do not have unanimous agreement on how to characterize social vulnerability, we have to recognize that attention to social factors is integral to the provision of care for elderly people.



**Figure 1.**  
The scheme represents how the elements interact with each other with respect to the two dimensions: social inclusion and social vulnerability.

### **3.3 How to promote active aging in Europe? Intergenerational dialog and participation**

Ten years ago, the Slovenian Council Presidency proposed to declare the 29 April European Day of Solidarity between Generations. During the 2018 EU Day of Solidarity between Generations, Anna Widegren, Secretary General of the European Youth Forum claimed that “a more social and sustainable Europe is one where welfare systems are based on intergenerational solidarity; more resources are invested in better care systems to ensure work-life balance and prepare for demographic changes. In other words, a more social Europe must ensure that the elderly as much as the young can have confidence in their present and in their future.”

Elderly citizens have much to contribute to our society. Active involvement of the elderly in their communities can bring economic and social value through the contributions they make and the opportunities they create as volunteers, workers, informal carers, and consumers. It can also maintain their motivation and sense of feeling valued, thus avoiding social isolation and many of its associated problems and risks.

To date, the elderly face many obstacles to their involvement in their communities. These can include restrictions on their mobility, access to political civic processes and infrastructure. Moreover, there is a lack of opportunities to keep up to date with technological changes, lack of information, reduced social networks, and loss of confidence and self-esteem. Politics, academia, and authorities have to provide support and create the conditions in which the elderly are able to participate fully in their communities. EU and EIP-AH can support them thanks to a variety of funding programs, researches, or development-focused actions.

## **4. Conclusion**

As already mentioned at the beginning of this chapter, vulnerability can be defined as the quality or state of being exposed to the possibility of being attacked or harmed, either physically or emotionally. In this chapter, it is defined as a possible ability of an individual or a group to face, manage, and anticipate a possible problem. This concept of vulnerability is associated with that of anger as risk factor for social isolation. As already reported, to date, no one has highlighted together two critical moments in life in which vulnerability can become critical phase of life for social isolation: *adolescence*, in which its development occurs, and *old age*, in which this area goes into cognitive decline with the relative loss of many higher cognitive functions. In the first section of this chapter, anger has been described as an example of emotion that can lead to social isolation during adolescence. Moreover, an example of social intervention of prevention and social inclusion has been suggested. In the second section of this chapter, vulnerability in old age with respect to the various factors that can support dialog in a European context has been described. All these aspects reflect very important vulnerability factors among biological, psychological, social, and behavioral variables. This knowledge can help to better understand the forms of exclusion due to vulnerability in order to develop new forms of social inclusion. Being able to better understand the risk factors of vulnerability can help to put in place useful strategies and new ways of social inclusion at very critical ages where risky behavior can endanger social exclusion.

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## References

- [1] Victorian Government Department of Human Services. Positive Pathways for Victoria's Vulnerable Young People: A Policy Framework to Support Vulnerable Youth. Melbourne, Victoria: Victorian Government Department of Human Services; 2010
- [2] Briguglio L, Cordina G, Farrugia N, Vella S. Economic vulnerability and resilience: Concepts and measurements. *Oxford Development Studies*. 2009;**37**(3):229-247
- [3] Cariolle J. The economic vulnerability index. *Development*. 2011;**9**
- [4] Calvo C, Dercon S. Measuring Individual Vulnerability. Department of Economics Discussion Paper Series. Oxford; 2005
- [5] Sen A. Poverty: An ordinal approach to measurement. *Econometrica*. 1976;**44**(2):219-231
- [6] National Research Council (US) and Institute of Medicine (US) Board on Children, Youth, and Families; Fischhoff B, Nightingale EO, Iannotta JG, editors. Adolescent Risk and Vulnerability: Concepts and Measurement. Washington (DC): National Academies Press (US); 2001
- [7] Fernandes-Alcantara AL. Vulnerable Youth: Background and Policies. Washington DC: Congressional Research Service; 2018
- [8] Centers for Diseases Control and Prevention (CDC). School Connectedness: Strategies for Increasing Protective Factors Among Youth. Atlanta, GA: US Department of Health and Human Services; 2009
- [9] Currie C, Nic Gabhainn S, Godeau E. The health behaviour in school-aged children: WHO collaborative cross-national (HBSC) study: Origins, concept, history and development 1982-2008. *International Journal of Public Health*. 2009;**54**:131-139
- [10] Morese R. Punishment and cooperation in ingroup and outgroup context. *Rivista Internazionale Di Filosofia E Psicologia*. 2018;**9**(3):286-301
- [11] Morese R, Rabellino D, Sambataro F, Perussia F, Valentini MC, Bara BG, et al. Group membership modulates the neural circuitry underlying third party punishment. *PLoS One*. 2016;**11**(11):e0166357. DOI: 10.1371/journal.pone.0166357
- [12] Palermo S, Morese R. Disinhibition, Response-inhibition and Impulse Control Disorder in Parkinson's Disease. Vol. 35. New York: Nova Science Publisher; 2018. pp. 135-164
- [13] Whitehouse E, Pudney W. A Volcano in My Tummy. Helping Children to Handle Anger. Aotearoa, New Zealand: Foundation for Peace Studies; 1996
- [14] Radke-Yarrow M, Kochanska G. Anger in young children. In: di Nancy LS, Bennett L, Thomas R, editors. *Trabasso Psychological and Biological Approaches to Emotion*; 1990
- [15] Fabes RA, Eisenberg N. Young children's coping with interpersonal anger. *Child Development*. 1992;**63**(1):116-128
- [16] Rosenberg MB. The Surprising Purpose of Anger. Beyond Anger Management: Finding the Gift. Encinitas, CA: PuddleDancer Press; 2005
- [17] Novara D, Di Chio C. Litigare con Metodo. Gestire i Litigi dei Bambini a Scuola, Le Guide Erickson; 2013

- [18] Van Kleef GA. Don't worry, be angry? Effects of anger on feelings, thoughts, and actions in conflict and negotiation. In: Potegal M, Stemmler G, Spielberger C, editors. *International Handbook of Anger*. New York, NY: Springer; 2010
- [19] Novara D, Passerini E. *Con gli Altri Imparo. Far Funzionare la Classe come Gruppo di Apprendimento*, Le Guide Erickson; 2015
- [20] Sherif M, Harvey OJ, White BJ, Hood WR, Sherif CW. *Intergroup Cooperation and Conflict: The Robbers Cave Experiment*. Norman, OK: University of Oklahoma Book Exchange; 1961
- [21] Morese R, Defedele M, Nervo J. *I Teach You to Quarrel—Empathy and Mediation: Tools for Preventing Bullying*. London: Socialization Rosalba Morese, IntechOpen; 2018
- [22] Shelley H, Swearer SM. *Four Decades of Research on School Bullying: An Introduction Educational Psychology*. Vol. 174. Papers and Publications; 2015
- [23] Olweus D. Bully/victim problems in school: Knowledge base and an effective intervention programme. *The Irish Journal of Psychology*. 1997;18:170-190
- [24] Smith PK, Sharp S. *School Bullying: Insights and Perspectives*. London: Routledge; 1994
- [25] Rieffe C, Camodeca M, Pouw LBC, Lange AMC, Stockmann L. Don't anger me! Bullying, victimization, and emotion dysregulation in young adolescents with ASD. *European Journal of Developmental Psychology*. 2012;9(3):351-370
- [26] Garner PW, Hinton TS. Emotional display rules and emotion self-regulation: Associations with bullying and victimization in community-based after school programs. *Journal of Community and Applied Social Psychology*. 2010;20(6):480-496
- [27] Menesini E, Sanchez V, Fonzi A, Ortega R, Costabile A, Lo Feudo G. Moral emotions and bullying: A cross-national comparison of differences between bullies, victims and outsiders. *Aggressive Behavior*. 2003;29(6):515-530
- [28] Bandura A. *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall; 1986
- [29] Caravita SCS, Miragoli S, Di Blasio P. Why should I behave in this way? Rule discrimination within the school context related to children's bullying. In: Elling LR, editor. *Social Development*. New York: Nova Science Publishers; 2009. pp. 269-290
- [30] Bandura A, Barbaranelli C, Caprara GV, Pastorelli C. Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*. 1996;71:364-374
- [31] Tokunaga RS. Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*. 2010;26:277-287
- [32] Hinduja S, Patchin JW. Cyberbullying: Neither an epidemic nor a rarity. *The European Journal of Developmental Psychology*. 2012;9:539-543
- [33] Campbell MA, Cross D, Spears B, Slee P. *Cyberbullying Legal Implications for Schools*. Occasional Paper 118. Melbourne: Centre for Strategic Education; 2010
- [34] Cassidy W, Faucher C, Jackson M. *Cyberbullying among youth: A comprehensive review of current international research and its*

implications and application to policy and practice. *School Psychology International*. 2013;**34**:575-612

[35] Ortega R, Elipe P, Mora-Mercha'n JA, Genta ML, Brighi A, Guarini A, et al. The emotional impact of bullying and cyberbullying on victims: A European cross-national study. *Aggressive Behavior*. 2012;**38**:342-356

[36] Spielberger CD, Reheiser EC, Sydeman SJ. Measuring the experience, expression and control of anger. *Comprehensive Pediatric Nursing*. 1995;**18**:207-232

[37] Lonigro A, Schneider BH, Laghi F, Baiocco R, Pallini S, Brunner T. Is cyberbullying related to trait or state anger? *Child Psychiatry and Human Development*. 2015;**46**(3):445-454

[38] Salovey P, Mayer JD. Emotional intelligence. *Imagination, Cognition, and Personality*. 1990;**9**:185-211. DOI: 0.2190/DUGG-P24E-52WK-6CDG

[39] Galimberti U. I miti del nostro tempo. Feltrinelli; 2009

[40] Pacchin M. Evoluzione della devianza e dei reati dei minori in Italia 1997-2007. Aracne Editrice; 2011

[41] Goleman D. Emotional intelligence. New York, NY, England: Bantam Books, Inc; 1995

[42] Rutter M. Crucial paths from risk indicator to causal mechanism. In: Lahey BB, Moffitt TE, Caspi A, editors. *Causes of Conduct Disorder and Juvenile Delinquency*. New York, NY, US: Guilford Press; 2003. pp. 3-24

[43] Zara G. La Psicologia Criminale Minorile, Carocci, Roma; 2006

[44] Wolfgang ME, Ferracuti F, Mannheim H. *The Subculture of Violence: Towards an Integrated Theory*

in *Criminology*. Vol. 16. London: Tavistock Publications; 1967

[45] Agnew R. Strain theories. In George Ritzer: *The Blackwell Encyclopedia of Sociology*. Malden - USA: Blackwell Publisher; 2007

[46] Agnew R. Building on the foundation of general strain theory: Specifying the types of strain most likely to lead to crime and delinquency. *Journal of Research in Crime and Delinquency*. 2001;**38**(4):319-361

[47] Agnew R. General strain theory. In: Bruinsma G, Weisburd D, editors. *Encyclopedia of Criminology and Criminal Justice*. New York, NY: Springer; 2014

[48] Brezina T, Piquero AR, Mazerolle P. Student anger and aggressive behavior in school: An initial test of Agnew's macro-level strain theory. *Journal of Research in Crime and Delinquency*. 2001;**38**(4):362-386

[49] Mazerolle P, Piquero AR, Capowich GE. Examining the links between strain, situational and dispositional anger, and crime: Further specifying and testing general strain theory. *Youth and Society*. 2003;**35**(2):131-157

[50] Heseltine K, Howells K, Day A. Brief anger interventions with offenders may be ineffective: A replication and extension. *Behaviour Research and Therapy*. 2010;**48**(3):246-250

[51] Twenge JM, Baumeister RF, Tice DM, Stucke TS. If you can't join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology*. 2001;**81**(6):1058-1069

[52] Botvin GJ, Griffin KW, Nichols TD. Preventing youth violence and delinquency through a universal school-based prevention approach. *Prevention Science*. 2006;**7**(4):403-408

- [53] Eurostat. Population Structure and Ageing. Available from: [https://ec.europa.eu/eurostat/statistics-explained/index.php/Population\\_structure\\_and\\_ageing](https://ec.europa.eu/eurostat/statistics-explained/index.php/Population_structure_and_ageing) [Accessed: July 20, 2017]
- [54] Liotta G, Canhao H, Cenko F, Cutini R, Vellone E, Illario M, et al. Active ageing in Europe: Adding healthy life to years. *Frontiers of Medicine (Lausanne)*. 2018;5:123. DOI: 10.3389/fmed.2018.00123. eCollection 2018
- [55] Clegg A, Young J, Iliffe S, Rikkert MO, Rockwood K. Frailty in elderly people. *Lancet*. 2013;381:752-762
- [56] European Commission. European Innovation Partnership on Active and Healthy Ageing Portal. Available from: [https://ec.europa.eu/eip/ageing/home\\_en](https://ec.europa.eu/eip/ageing/home_en) [Accessed: August 01, 2017]
- [57] White MC, Holman DM, Boehm JE, Peipins LA, Grossman M, Henley SJ. Age and cancer risk: A potentially modifiable relationship. *The American Journal of Preventive Medicine*. 2014;46(3, Suppl 1):S7-S15. DOI: 10.1016/j.amepre.2013.10.029
- [58] World Health Organization. Cardiovascular Diseases: Fact Sheet. Available from: <https://www.who.int/mediacentre/factsheets/fs317/en/> [Accessed: November 29, 2017]
- [59] Falvo R, Poscia A, Magnavita N, La Milia DI, Collamati A, Moscato U, et al. Health promotion for older people in Portugal. *Zdrowie Publiczne i Zarzadzanie*. 2017;1:49-61. DOI: 10.4467/20842627OZ.17.006.6232
- [60] Poscia A, Falvo R, La Milia DI, Collamati A, Pelliccia F, Kowalska-Bobko I, et al. Healthy ageing–happy ageing: Health promotion for older people in Italy. *Zdrowie Publiczne i Zarzadzanie*. 2017;1:34, 48. DOI: 10.4467/20842627OZ.17.005.6231
- [61] Perissinotto CM, Stijacic Cenzer I, Covinsky KE. Loneliness in older persons: A predictor of functional decline and death. *Archives of Internal Medicine*. 2012;172:1078-1083
- [62] Barth J, Schneider S, von Kanel R. Lack of social support in the etiology and the prognosis of coronary heart disease: A systematic review and meta-analysis. *Psychosomatic Medicine*. 2010;72:229-238
- [63] Thurston RC, Kubzansky LD. Women, loneliness, and incident coronary heart disease. *Psychosomatic Medicine*. 2009;71:836-842
- [64] Holt-Lunstad J, Smith TB, Baker M, Harris T, Stephenson D. Loneliness and social isolation as risk factors for mortality: A meta-analytic review. *Perspectives on Psychological Science*. 2015;10:227-237
- [65] Ahmed N, Mandel R, Fain MJ. Frailty: An emerging geriatric syndrome. *The American Journal of Medicine*. 2007;120(9):748-753
- [66] Andrew MK, Mitnitski A. Different ways to think about frailty? *The American Journal of Medicine*. 2008;121(2):e21
- [67] Kulminski A, Yashin A, Ukraintseva S, Akushevich I, Arbeev K, et al. Accumulation of health disorders as a systemic measure of aging: Findings from the NLTC data. *Mechanisms of Ageing and Development*. Nov 2006;127(11):840-848
- [68] Mitnitski AB, Mogilner AJ, Rockwood K. Accumulation of deficits as a proxy measure of aging. *The Scientific World Journal*. 2001;1:323-336
- [69] Woo J, Goggins W, Sham A, Ho SC. Public health significance of the frailty index. *Disability and Rehabilitation*. 2006;28(8):515-521



[70] Gale CR, Westbury L, Cooper C. Social isolation and loneliness as risk factors for the progression of frailty: The english longitudinal study of ageing. *Age and Ageing*. 2018;**47**(3):392-397. DOI: 10.1093/ageing/afx188

[71] Cavallo F, Zambon A, Borraccino A, Raven-Sieberer U, Torsheim T, Lemma P, et al. Girls growing through adolescence have a higher risk of poor health. *Quality of Life Research*. 2006;**15**:1577-1585