

# EXTREME RISK SEEKING

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## **Introduction**

The main subject of this paper is extreme risk seeking, seen as a pathological addiction. There are endless ways of seeking extreme risks. You can drive riskily or practise extreme sports that push the individual to the limit of his/her possibilities, you can make hasty and risky investments on the Stock Exchange, you can gamble, steal or damage other people's property, you can take notoriously dangerous substances, behave frivolously with the aim of endangering oneself. This type of behaviour has become more especially among adolescents, though noticeable in other age groups too. It is not always easy to distinguish between risk seeking seen as experience seeking and the mere repetition of more or less similar behaviours which have the only purpose of reaching high states of excitement and pleasure. Risks become extreme when they are continuous, and when they characterize an individual's life style, jeopardising possessions, safety and the person's own life, but especially when the fun and enjoyable experience of risk turns in a way that absorbs the person, allowing him to move away from the everyday realities and not tolerable feelings. The risk behavior becomes so a kind of internal object. It seems benevolent and protective, but in fact is tyrannical and able to dominate the psychic life. In these cases it is possible that real addiction has developed. One might call such addiction *Extreme Risk Seeking* (ERS). This paper focuses on how risk seeking can become a pathological addiction.

The article begins with a brief description of those addictions that originate from behaviours and not from the use of drugs. These are pathological conditions such as gambling, Internet addiction and compulsive shopping which have recently aroused widespread interest, even though they were described in literature as far back as the first half of the past century. It shall then address the issue of risk using different types of approaches ranging from historical to anthropological and from sociological to psychological approaches, focussing on works by authors who have dealt with decision-making psychology, analysing certain viewpoints of how emotions influence decision-making in a risk situation. Thus, the real issue of the article shall be discussed: deliberate risk seeking or risk-taking. It is important to distinguish between behaviour risk and risk taking. Behaviour risks are not necessarily related to awareness or to active seeking whereas risk taking implies seeking out excessively risky situations. This fascinating search may become inevitable and turn into a behavioural addiction. It is not clear why this happens. The various models suggested in the literature shed light on many aspects of risk seeking, but nevertheless they do not seem to have completely clarified the mental process through which the link between behaviour and person is created. The article will attempt to define the relationship between present experiences, feelings, extreme risk addiction and consequences deriving from traumatic events. In particular, the characteristics of Post-traumatic Stress Disorder (PTSD) shall be confronted with those of Extreme Risk Seeking (ERS). As a result of this, the author

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shall suggest a model which will define risk seeking as a consequence of a specific mental process, i.e. *risk seeking without trauma*.

### **Non-chemical addictions**

In 1990 Marks wrote an editorial for the British Journal on Addiction: *Behavioural (non-chemical) addictions*. In his paper, the author discussed how to interpret behavioural addiction and suggested paying the same attention to both drug addictions and non-chemical addictions, or behavioural addictions. In fact, various authors had previously described behaviours that assumed the characteristics of addictive behaviours but they did not imply the use of psychotropic drugs. For example, in 1945 Otto Fenichel referred to pathological cravings similar to drug addictions that arise without recourse to drugs. Among the non-chemical addictions Fenichel included bulimia, pathological gambling but also a craving for reading, a need for love and to continually seek sex and, as far as risk is concerned, kleptomania. In recent years, research and theoretical models have increased enormously. We talk about food addiction, sexual addiction, relationship addiction, work addiction, shopping addiction, Internet addiction and gambling addiction but also addictions to reading, to videogames, pyromania and shoplifting. Gambling is the only form of behavioural addiction that has been entered in the *Diagnostic and Statistical Manual of Mental Disorders (DSM IV)* under the category of Impulse-Control Disorder NOS.

There are two basic issues concerning the study. The first one regards the possibility that certain behaviours can really be considered symptomatic of an addiction, in other words it is possible to develop an addiction without dependence<sup>1</sup>. We can sum up three positions. Certain authors (e.g. Goldstein, 1994) identify a fixed number of chemical drugs and maintain that the only form of addiction originates from these. It is evident that, according to this model, non-chemical addictions cannot exist. Other, more numerous, middle-of-the-road authors (e.g. Orford, 2001) extend the list to include certain behavioural addictions such as *Pathologic Gambling* or *Technological Addictions*. This opinion is largely shared but is not as clear and stimulates continual updates. Finally, there are those who believe (e.g. Peele, 1985) that addiction is due to traumatic personal experience and that is why possible addictions abound but cannot be presumptively defined. In that case, the onus is no longer on chemical substances or on behaviour but on the relationship that is established between people, substances, behaviour and their context. This relationship is a unique, peculiar and highly meaningful process. According to the definition of Rigliano who largely refers to the classic works of Gregory, addiction is “.. the outcome of mixing the potential power of drugs with the power that the person is prepared to attribute to the drugs” (1998, p. 48). A second issue concerns the signs of behavioural addictions. John Elster (1999) maintains that it would be reductive to base the study of behavioural addictions on the mere phenomenology of chemical addictions. As a matter of fact there is not sufficient proof that the two types of addiction are homologous and thereby running the risk of underrating or denying the existence of non-chemical addictions just because they do not resemble chemical addiction sufficiently.

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<sup>1</sup> It may be useful remembering the difference between *dependence* and *addiction*: the term *dependence* is used to indicate a physical or chemical dependence, whereas *addiction* is used when every aspect of an individual's life is invalidated by the dependence (Maddux and Desmond, 2000).

## **Risk**

As Peretti-Watel (2002) noted, abundant research on risk in the field of human sciences adopt two main outlooks: the former focuses on collective risks (for example ecological risks) while the latter deals with individual risks, such as behaviours that expose individuals to sexually transmittable diseases or seeking strong feelings. Keeping the two outlooks separate is a bit like considering a phenomenon without its context of reference. In actual fact, the perception of risk has changed over the centuries. At least two major phases can be distinguished in hypothetical risk history (Nocenti, 2001). An early period corresponds to ancient times and to the early Middle Ages. For centuries even the most philosophically and mathematically advanced civilizations, such as the ancient Greek civilization, were not knowledgeable enough to be able to handle risk. They lacked mathematical models capable of estimating the probability of future events, without which any prediction was impossible. At that time man relied on oracles for predictions and ascribed any misfortune to nature, to the gods or to fate and not to a ponderable choice (Bernstein, 1996). Risk, as we know it, was produced by the vast revolution that includes the Renaissance, Christopher Columbus, Science and Capitalism: in a nutshell, modernity (Maso, 2003). Thanks to a challenge in the seventeenth century the first calculation of feasibility was made. Chevalier de Méré asked Blaise Pascal to solve the old enigma of the friar Luca Pacioli: how must two gamblers split their winnings when the game is not yet over and when one of the two is winning? Pascal accepted the challenge with the aid of Pierre de Fermat, giving rise to the Theory of probability in 17th century Paris. In modernity, risk is considered positive: it is the price to pay in freeing society from extreme poverty. Risking means acting, conquering and growing, whether it is a question of a scientific discovery or exploration. Yet end-of-the-millennium sociologists assessed the cost of this race (Giddens, 1990). The world today has turned into a *Risk Society* (Beck, 1992). In advanced modernity, the social production of wealth systematically keeps pace with the social production of risks. Likewise, the issues and distributive conflicts of a society based on extreme poverty are superseded by issues and conflicts arising from the production, definition and distribution of risks produced by science and by technology (Beck, 1986). According to this model risk is a sort of by-product of the creation of wealth, with which modern society has to continually reckon. The greater the wealth the greater the risk. Risk seeking has consequently lost part of its positive halo and there is greater concern about science, technology and new individual and collective behaviours. Fascinated by mathematical probability models and their possible applications, psychologists commenced research a while back to try to understand how people take decisions, how they calculate the consequences of an action (probability) and what drives them to risk or not to risk. Classical studies clearly separate the moment the decision is taken from that of the motivation and use mathematical models to explain the choice (Bresson, 1965). This type of approach, which can be defined as cognitive and consequential, has been superseded by subsequent research that has increasingly emphasised how emotions intervene in the decision-making process (Isen & Patrick, 1983; Damasio, 1994; Nygren et al. 1996). Loewenstein and his collaborators suggest a very interesting model that illustrates the relationship between feelings, choices made in a risk situation and behaviour. The theoretical model, called “risk-as-feelings-hypothesis”, differentiates between anticipatory emotion - or gut feelings (fear, anxiety dread) - and anticipated emotion, which is not experienced in the immediate present but

that is expected to be experienced in the future, in other words in anticipation of behaviour risks. Lowenstein maintains, contrary to the consequential approach, that gut feelings experienced at the time of the event, just like uncertainty, play a major role in decision-making. Emotions experienced in a risk situation not only influence choices and behaviour, but very often they also diverge from the person's cognitive appraisal of the risk. Moreover, emotions experienced in anticipation of a future event can alone incite behaviour, irrespective of cognitive appraisal (Loewenstein *et al.*, 2001). In other words, feelings and emotions play a major role in a risk situation: they often act as intermediaries between the person's cognitive appraisal and real behaviour, and sometimes they alone determine risk seeking or avoidance.

### **Pathological extreme risk addiction**

Some authors noticed that risk seeking tends to vary with age and is very different according to the phase of a person's life cycle. It is very common and frequent in adolescence whereas it becomes more bland or is completely absent in adulthood (Bonino, 2005). During adolescence risks often take on a developmental role: many behavioural risks, transitory ones, are to be considered part of the normal development of a person and not as a pathology, which on the contrary would be characterized by persisting behaviour (Bonino, Cattellino & Ciairano, 2003). In 1977 the Jessors had already defined adolescent behaviour risks as not necessarily irrational, perverted or sick, but able to fulfil functions essential to psychosocial development (Jessor & Jessor, 1977). For Richard Jessor (1998) risk and danger seeking behaviours are not to be analysed one by one, but need to be seen in their interaction with other aspects of an adolescent's life, and with the possible causes which may explain their appearance.

Although risks frequently represent an essential aspect of psychosocial development, it is nevertheless true that some people, already in adulthood, persist in actively seeking risks in so far as it has a completely different function for them (Moffitt *et al.*, 2001). Some psychiatrists (McElroy, Phillips & Keck; 1994; Blaszczynski, 1999; Blanco *et al.*, 2001) wondered whether certain mental illnesses could not be reconsidered according to people's attitude to risk, giving rise to the "*obsessive-compulsive spectrum*". It is common knowledge that obsessive disorders lead to risk seeking, to a reduced danger-avoidance capacity and to low levels of anticipatory anxiety. Vice-versa compulsive disorders are characterized by a high tendency to avoid risk, a marked aversion to risk and high levels of anticipatory<sup>22</sup> anxiety. This model, used frequently by authors dealing with pathological gambling (Hollander, Buchalter & De Caria, 2000), does not include all the diagnostic criteria implied by risk seeking. During an Episode Hypomanic or an Episode Manic an individual may get excessively involved in highly dangerous games, in other words excessive risk seeking.

Thanks to the principles of cognitive-behavioural models, psychoanalysis and Attachment Theories, Liotti (1999) places extreme risk seeking among those symptoms

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<sup>22</sup> the continuum spanning between the two poles includes, for the impulsive pole, type B personality disorders (borderline, antisocial, histrionic, narcissistic) impulse control disorders (Intermittent explosive disorder, pyromania, kleptomania, pathological gambling and trichotillomania also known as hair pulling disorder), paraphilias. Compulsive disorders include obsessive-compulsive disorders, body dysmorphic disorder, nervous anorexia, depersonalization disorder, hypochondria, Gilles de la Tourette syndrome.

peculiar to Personality Borderline Disorders. This author compares risk seeking to compulsive eating, drinking and drug addiction. A person suffering from Borderline Disorder will indulge in risk behaviours in order to achieve a certain emotional detachment, via distraction, from the painful emotional experience due to the pathology. Admittedly, if one wants to synthesize these points extrapolated from psychopathology, both risk seeking and avoidance, taken to extremes, are signs of psychological uneasiness. The clinical psychologist Marvin Zuckerman (1994, 1999), used seeking sensory deprivation and Hans Eysenck's theories to build a model based on the description of personality traits most often used to explain extreme risks seeking. Zuckerman hypothesized the existence of a personality trait, which is probably genetically determined and that he called "*Sensation Seeking*": if this trait constitutes a dominating characteristic of the personality, the individual will seek risks constantly. Zuckerman affirms, "*Drinking and driving, gambling and sleeping around is not behaviour but a personality*" (Zuckerman, 2000). Abundant research scored high points on the *Sensation Seeking Scale*, a specific test developed by Zuckerman, (Zuckerman, Meeland & Krug, 1985; Zuckerman, 1994) in subjects with various types of drug addictions, gamblers, reckless drivers and people with unprotected sex lives. The *Sensation Seeking Trait* is defined in numerous studies as a foreboding sign of behavioural risks, even though doubts have arisen recently about the real relationship between risk seeking and personality (Levenson, 1990; Llewellyn, 2003). The study of the *Sensation Seeking Trait* probably enables one to pinpoint a greater or a lesser tendency to risk seeking but the model does not make clear if risk is a form of pathological addiction nor does it clarify through which mechanism it starts. Risk as an addiction is progressively becoming a widespread topic among various authors. Marcelli e Braconnier (1999) maintain that risk behaviour, especially behaviour driven by excess seeking, should come alongside addictive behaviour. Pannarale (1998) talks of *risk addiction* as something that differs from the common risk behaviours in so far as the tendency to expose themselves to risk is different, or rather the criteria of selection among the predictable risks are different. Valleur and Charles-Nicholas (1982) have put risk behaviour on a par with pathological addictions and for the purpose have used an original metaphor: the medieval ordeal, or judgment of God, which in many societies of the past was a judicial practice by which the deity determined the guilt or innocence of the accused. This consisted in a "performance task" (e.g. a particularly difficult task to perform), in some cases a trial by combat also known as a "Judicial Combat". The accused was not always directly involved in the trial, in some cases he would be substituted by a champion. Valleur and Charles-Nicholas lead behavioural risks back to *ordeal-type behaviour*: the person who faces the risk entrusts him/herself to an extreme and absolute power that decides the outcome of the risky behaviour. This sort of judgment seeking, due to the need for regeneration and essentially to a problem of identity, is followed by strong sensation seeking and thus inevitably produces a process of repetition and progressive addictions.

### **Risk seeking, trauma seeking**

To go back to the definition suggested in the introduction, one can talk of extreme risk addiction when a behaviour pattern is such to lead to serious and continuous risk seeking; this pattern is activated in the presence of psychological and relational conditions. The role of affect seems to be fundamental. As Loewenstein and his

collaborators (2001) illustrated, taking a decision, especially in a risk situation, generates profound emotions. Not only is the decision pervaded by emotions, but in some cases it is the feelings alone that lead to behavioural risks/risk behaviour. In this case decision-taking becomes emotional and is no longer rational. But what sort of emotional drive can lead to risk seeking? Normally addictive behaviour is referred to as a succession of emotions which go from pleasure to excitement, but also to compulsion and guilt. Risk-seeking is driven by a want for strong sensations and for the pleasure of excess (Zuckerman, 2000). In order to go into detail it is important to note that the emotions described by *risk-takers* seem to play on those experienced by people who have been subject to psychic trauma and Post-Traumatic Stress Disorder (PTSD<sup>3</sup>). Horowitz, in his fundamental work relative to the impact which trauma has on personality (1976), identified eight psychological themes following severe trauma. These themes are reported in the table below and are confronted with the behaviour and emotions typical of extreme risk seeking (ERS).

| <b>Post-Traumatic Stress Disorder (PTSD)</b>                     | <b>Estreme Risk Seeking (ERS)</b>  |
|--|--|
| <i>Pain and sadness</i>  | <i>Pleasure and joy</i>  |
| <i>Guilt about one's destructive and violent impulses</i>        | <i>Sense of omnipotence</i>  |
| <i>Fear of becoming destructive</i>                              | <i>Pride in one's actions</i>  |
| <i>Feelings of guilt for having survived</i>                     | <i>Feelings of pride for having survived ( or having passed)the test</i> |
| <i>Fear of identifying oneself with the victim</i>               | <i>Feeling competitive towards the actions of other risk – takers</i>    |
| <i>Shame for the sense of impotence and feeling of emptiness</i> | <i>Pride in one's abilities</i>  |
| <i>Fear of repeating the trauma</i>                              | <i>Desire to repeat the experience to addiction</i>                      |
| <i>Intense rage towards the source of the trauma</i>             | <i>Attachment to one's experience</i>                                    |

Table 1

Studies following the one of Horowitz have demonstrated the importance of subjective responses to trauma: PTSD can not be interpreted only in the light of external stressing factors (*stressor*). March (1993) summarised the aspects of subjective perception most widely documented. These aspects are specified in table 2 and are confronted with extreme risk seeking aspects:

| <b><i>Subjective aspects of PTSD</i></b>         | <b><i>Subjective aspects of ERS</i></b>   |
|--|---|
| <i>Experience of estreme fear</i>                | <i>Experience of estreme excitement</i>   |
| <i>Subjective experience of impotence</i>        | <i>Subjective experience of omnipotence</i>                                     |
| <i>Life-threatening perception</i>               | <i>Perception of invulnerability</i>  |
| <i>Perception of potential physical violence</i> | <i>Perception of minimal or non existing risks for one's physical integrity</i> |

Table 2

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3 the psychological consequences of severe trauma are well known: pain and sadness, guilt for one's disruptive and violent impulses, feelings of guilt for having survived, fear of repeating the trauma. People who suffer of a post traumatic stress disorder experience terrible pain by simply recalling the event, and will try in every way to avoid repeating experiences which will recall the traumatic event. Even if today it is believed that PTSD not necessarily develops after an event outside the range of usual human experiences, it certainly is facilitated by it.

It is thus possible to assume that there is a specular/mirroring relationship between PTSD and ERS. The first confirmation of this has been provided by research, which has demonstrated how the consequences of PTSD favour a lifestyle that implies risk seeking. It has been seen, with significant frequency, that pathological gamblers suffer from PTSD symptoms (Ledgerwood & Petry, 2006) with a history of life traumas (Kausch, Rugle & Rowland, 2006). Exposure to traumatic experiences is a predictive factor for sexual risk behaviour (Smith, Lave & Chamberlain, 2006); sexual abuse in childhood is a frequent trauma suffered by males who will expose themselves to the risk of HIV infection by having sex with other males (Kalichman *et al.*, 2004). The exposure to trauma among teenagers increases the possibilities of sexual risk behaviour, of self-destructive and violent behaviour (Green *et al.*, 2005). Risk seeking behaviour is frequent among veterans who suffer from PTSD. To own guns and use them in a dangerous way is four times more frequent in veterans who suffer from PTSD than in patients who have been diagnosed with schizophrenia or that are on a rehabilitation programme for detoxification from drugs (Freeman, Roca & Kimbrell, 2003); moreover a significant percentage of pathological gamblers was noticed among veterans (Bibble *et al.*, 2005). War veterans seem to have lower levels of mortality compared to soldiers who were not lined up and to the general public, except for death due to injuries; this is explained with risk seeking behaviour; (Bell *et al.*, 2001). The possible mechanism underlying risk seeking among those who suffer from PTSD may be the need for a psychological modality to repair the damage suffered. People with PTSD re-experience a risk event and therefore a potentially traumatic one in order to come to terms with their sense of impotency and vulnerability. Already in 1925 in his writings Sigmund Freud wrote in *Inhibition, symptom and anxiety* that the meaning of a risk situation is the evaluation of our strengths and admitting our impotency, when faced with real danger or with pulsional danger. He called traumatic this experience of impotency (Freud, 1925). The unconscious attempt of those who have experienced a trauma seems to be that of regaining, at least in part, the capacity to handle the events and reduce their sense of impotency by exposing themselves to dangerous situations similar, in a certain sense, to the traumatic events already experienced, unconsciously hoping to overcome them and then forgetting them. If we go back to Valleur and Charles-Nicholas, the French authors previously mentioned, one could truly talk about a request for the “judgement of God”. This mental modality enables one to formulate an hypothesis for other forms of ERS, not directly linked to a trauma. A good starting point are the concepts formulated by Balint in 1959 with regard to *thrills* (Meneguz, 2001). Balint believes that there are basically two directions in object relationships: ocnophilia (seeking a relationship with the object and ensuing gratifications) and philobatism, (seeking to promote the Self by privileging spaces free of objects).

In his concept of object relationships, Balint describes thrills as events in which the individual loses and finds safety (characterised by a mix of fear, pleasure and hope). The following elements are all recognizable in thrills: awareness of the real external danger, exposure to the danger, the hope to tolerate the fear, avoid the danger and return home safe and sound. For Balint anyone who challenges fate with risky behaviour privileges the promotion of the Self (philobatism): by risking, the individual fools himself into believing that s/he does not need any internal object at all. Although these people are often gifted with skills, they nevertheless perform an overinvestment of the Self which hides an ambivalent relationship with internal objects: on the one hand

superiority and indulgence, and on the other hand regression towards an idea of the world similar to intrauterine life, the sense of safety like being in one's mother's arms. These people, are only apparently independent, self-sufficient. They are practically expressing the need to have something to cling to, objects which represent a caring mother, a distributor of safety, and also an erect penis as a symbol of power (Balint, 1959). This mental functioning modality may generate, if repeated, an addiction.

Those who face danger and survive it may find the experience so exciting to drive them to try again, thus taking a greater and more occult risk. The real danger is not the action but the feelings generated by it. In fact, if the experience concludes without damage, these feelings are accompanied by a feeling of omnipotence which strengthens the overinvestment of a part of the Self. These experiences can lead to the progressive formation of an internal protective object, able to provide an illusory protection against danger. In these terms the non-traumatic experience, i.e. to live through the risk, can transform itself into a mental structure that drives the individual to seek further risk experiences with the false illusion of being invulnerable. To paraphrase the model of Orphanides and Zervos (1995), one becomes addicted to risk as a consequence of a hazard miscalculated. Whoever approaches dangerous behaviour bets on the fact that they will be able to come through it; they calculate the probabilities of success and failure but they do not calculate their capability to cope with and handle the impact of the emotions that are triggered by the experience. These exciting and satisfying experiences and feelings which have overinvested the Self, may be organized in an independent internal psychic structure, a False Self able to take control over the person keeping him/her under its control. It is an addiction to an internal object, only apparently reassuring because in actual fact it is tyrannical and evil, able to drive one towards self-destructive behaviour. This process is similar to the one described by Donald Meltzer in 1973 when he traces his metapsychological theory of perversions and drug addictions. When addiction is impeded by the repair capabilities of the internal object, when addiction of good internal objects is rendered impossible by damaging attacks and good external object addiction is not available or is not recognizable, a drug addiction relationship occurs with the bad part of the Self, and the subjugation to its tyranny. The internal drug addiction object, in this case the narcissistic organization which has taken shape with challenging and risk seeking behaviour, feared, but also sought after for the protection it ensures. Without it there would be no protection from those anxieties which the individual tries to protect himself from, especially terror, paranoid anxiety whose essential qualities are paralysis leaving no possibility for action (Meltzer, 1973).

### **Some conclusive considerations on risk factors and protection factors**

In this article it is suggested that risk experiences can be events capable of determining a pathological addiction. We have described the many characteristics of risks as well as the link between affect and risk, risk as a psychopathological symptom, risk as a pathological addiction and parallelism between Post Traumatic Stress Disorder and Extreme Risk Seeking. The assumption herein developed is that ERS is a consequence of a compulsive search for non-traumatic experiences which conclude with the construction of a tyrannical and false protective internal object, able to allow the individual to experience illusory states of invulnerability and omnipotence.

As regards predictive factors, one can assume that ERS, like addictions in general, are fostered by a number of multiple biological, psychological and social factors. Research on risk factors, and likewise on protection factors, are to be addressed in very different fields, from neuroscience to behavioural science, from psychopathology to sociology. As to the psychological dimension, the article demonstrates the role played by affects in establishing this sort of addiction.

The research and investigations started by the English psychoanalyst, Peter Fonagy, on emotion regulation and on the development of the Self are of great help. Fonagy tried to confront and combine the richness of psychoanalytical heritage with cognitive psychology, with the attachment theory triggered by Infant Research, and investigating, in particular into personality borderline disorders. He details precisely the emotional skills of the individual and the *affect regulation*. The affect regulation is the capacity to modulate and change the course of an emotional experience, which is fundamental for the acquisition of an authentic sense of the Self. It includes a wide range of capabilities, from those that enable to recognise emotions in oneself and in others to those that enable to handle emotional states effectively and confidently within a relationship (Fonagy *et al.*, 2002a). Fonagy maintains that a form of affect regulation especially significant also for adults is the affect mentalization, a process made up of both self-reflective and interpersonal factors; by simply combining them one would be able to distinguish external reality from internal reality, and especially inner emotions from interpersonal events. Affect mentalization is developed right from the first object relations through self-reflective experience and through interpersonal experience and it is fostered by interaction with more mature minds that are kind, reflective and sufficiently in harmony with the person (Fonagy & Target, 2002b). This model could provide some guidelines for understanding the most remote aetiology of ERS, or offer the outline of an important risk factor. Premature experiences of attachment child/parent can negatively affect the development of one's capability to regulate relations, especially when attachment behaviour falls within the insecure-disorganized pattern as described by John Bowlby (1969, 1973, 1980). Among other things the correlation between attachment disorganization and unresolved trauma or loss has long since been identified among parents (Main & Hesse, 1990, 1992), this would indirectly strengthen the hypothesis of a relationship between PTSD and ERS.

The concepts suggested by Fonagy open interesting prospects for Extreme Risk Seeking prevention and psychotherapy. As to therapeutic treatment and rehabilitation programmes we are evidently faced with people who in substance are inclined to action and not very willing to intrapsychic work, based on progressive consciousness raising. Like other complex frames (food behaviour disorders, pathological gambling, drug addiction), it is important to imagine a multi-professional approach aimed in the first place at remodelling behaviour and at the new definition of cognitive schemes connected to ERS. Great importance needs to be placed on the relationship patient-team, right from the very beginning, especially for the emotional and transfer aspects of the clinical programme. It is important to avoid fractioning key figures and to substantially maintain coherence in communication, given that most probably subjects who are affected by ERS will tend to establish relationships on the basis of a disorganized attachment pattern.

As to prevention, it is important to envisage different levels of treatment. It is useful to bear in mind that a world that is continually advancing technologically is a

progressively more dangerous world. Thus, macro-actions are required in order to mitigate the impact of global growth not only on road traffic or on the environment, but also on the lifestyles that have been shaped in some way by a “risk society”.

If we take a look at operational aspects, the contents of the media and of advertisements represent implicit models of risk behaviour. Indeed, one can watch entire television programmes featuring risks and without sense or meaning, they are almost always performed by teenagers or young people, and are usually always accompanied by the hypocritical warning that such behaviour should not be repeated. The exchange of videos featuring risk-taking ventures are profuse on the internet, also on sites with a high number of visitors. A monitoring and filtering action is important, for example the promotion of self-regulating codes.

As to the information campaigns launched in various States, it is important to note that very often these deal with only one type of behavioural disorder, for example dangerous driving or excess drinking and neglect risk seeking on the whole. This is a partial perspective. If it is true that risk and emotions are so closely linked, communication strategies able to reach the heart of teenagers, and not their rational minds are required, moving beyond single behaviour disorders. Perhaps a foregone observation for those who have been working for years to prevent or reduce those damages deriving from pathological addictions.

*Abstract:* EXTREME RISK SEEKING. In this paper, author is hypothesizing that Extreme Risk Seeking (ERS), i.e. deliberately and continually seeking dangerous events able to arouse strong emotions, can become a pathological behavioural addiction. The article suggests an interpretative model of ERS and confronts it with Post-traumatic Stress Disorder (PTSD). Unlike those who experience a real trauma, people who deliberately seek risks take pleasure from the excitement and satisfaction that derives from the non-trauma, from the experience of an accomplished action without damages or consequences. These experiences strengthen the sense of omnipotent and invulnerable Self and cause such strong emotions to drive these people to the repetition of such behaviour. When this happens we are faced with an addiction. [KEY WORDS: extreme risk seeking, risk, trauma, behavioural addictions].

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