### Psychological aspects of human interactions through trading and risk management process

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# What is it NOT about?

Unfortunately or not:

- not behavioral finance
- not a mathematical model
- not a sociological matter
- not 'how to survive being risk manager' (but closer to that more than others:-))
- It is purely my own attempt to theorize upon very practical situations I myself was frequently involved

# What is it about?

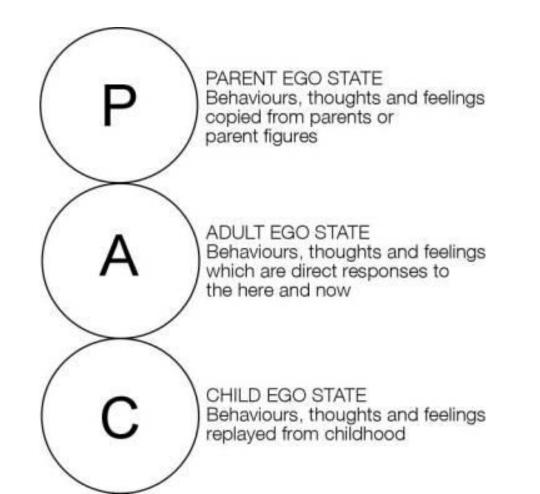
- I am going to represent my own view on the problem of human interactions between traders and risk managers based upon
  - My own 10-year experience as the market risk manager (in Russian banks, investment company, MICEX Derivatives)
  - My knowledge as the psychotherapist
  - Transactional analyses theory of Eric Berne, Canadian-born psychiatrist (he himself studied psychoanalysis under Dr. <u>Paul Federn</u>, an early, important follower of Sigmund Freud)

# Some base concepts of transactional analyses

- Ego state (Parent-Adult-Child, PAC) model
  - Is on of the most widely spread ideas TA is known for
  - ...and is erroneously called primitive, "simplified version of psychoanalyses"
  - But this is not right. TA plainness is deceptive. TA is deep, integrative approach to the theory of psychology and psychotherapy, and due to its structural simplicity – flexible and effective
- Transaction
- Game
- Script

### Ego state (Parent-Adult-Child, PAC) model

 At any given time, a person experiences and manifests their personality through a mixture of behaviours, thoughts and feelings. Typically, according to TA, there are three egostates that people consistently use:



# Ego state (Parent-Adult-Child, PAC) model

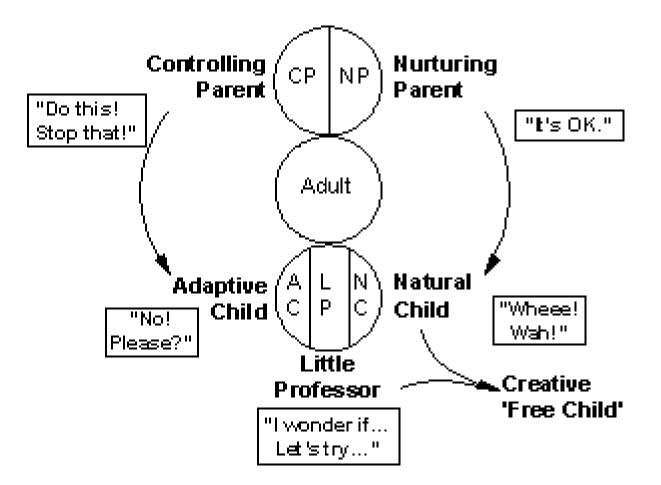
#### • Parent:

- a state in which people behave, feel, and think in response to an unconscious mimicking of how their parents (or other parental figures) acted, or how they interpreted their parent's actions.
- For example, a person may shout at someone out of frustration because they learned from an influential figure in childhood the lesson that this seemed to be a way of relating that worked.
- Adult:
  - a state of the ego which is most like a computer processing information and making predictions absent of major emotions that could affect its operation.
  - While a person is in the Adult ego state, he/she is directed towards an objective appraisal of reality.
- Child:
  - a state in which people behave, feel and think similarly to how they did in childhood.
  - For example, a person who receives a poor evaluation at work may respond by looking at the floor, and crying or pouting, as they used to when scolded as a child.
  - Conversely, a person who receives a good evaluation may respond with a broad smile and a joyful gesture of thanks.
  - The Child is the source of **emotions**, **creation**, **recreation**, **spontaneity and intimacy**.

# Parent and Child ego states' subdivisions

- Within Parent and Child ego states are **subdivisions**.
  - Parent ego-state shows itself either more nurturing (permission-giving, security-giving) or more criticizing (comparing to family traditions and ideals in generally negative ways);
  - Childhood behavior is either more natural (free) or more adapted to others.
- This way, Parent ego state manifests itself as Criticizing (or Controlling) Parent or as Nurturing Parent
- And Child ego state manifests itself as Adaptive Child or Natural Child

# Parent and Child ego states' subdivisions



# Child ego state substruture

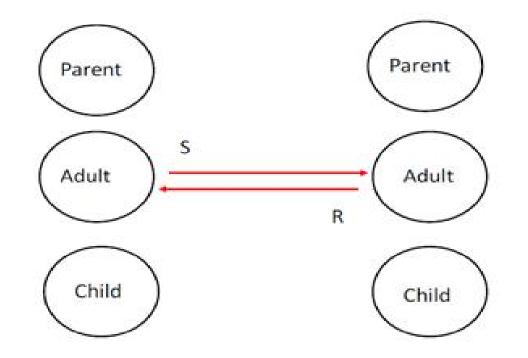
- Natural Child behaves free, naturally, without limitations (person in this ego state smiles, runs, shouts, laughs when joyful, and cries when wants to cry)
- Adaptive Child behaves in responce to parents, important figures or society:
  - Positive Child does its best to execute all they want, fulfil all those requirements
  - Negative Child reacts in strictly opposite way: NOT to perform anything they want
- A tricky moment: Negative Child's reations ARE NOT FREE.
  - They are the same way stipulated by outer environment, its' rules, assessments, opinions. They are in some amount **automatic**.
  - So, if one behaves the way «they won't make me do that» (a «teenager's» character) it is not the manifest of real menthal freedom, it is nearly the same **bound** as Positive Child shows!
- That is why Negative child is the equal part of Adaptive Child

- People frequently can be in dialog with theirselves, or 'speaking voices' within themselves: you know, it is not a kind of schyzofraenia (hopefully:-)).
- Perhaps it is exactly your Negative Child (or it is Natural Child? it is really a question!) speaks to you: «I wanna sleep!!! I hate finishing this presentation!!!» and forces you (OK, my:)) body to bed
- ... and your Controlling Parent in reply: «You MUST!»
- It is the very common way how the inner dialog (and thus, decision-making and, broadly, people behavior) is structured – by contact of different ego states with each other

- As you can see, Parent and Child ego-state are, at least in the beginning, inherited by the person (from his/her real childhood).
  - Further, all ego-states develop and become more complex.
  - There is no "universal" ego-state; each state is individually and visibly manifested for each person.
    - For example, each Child ego state is unique to the childhood experiences, mentality, intellect, and family of each individual; it is not a generalised childlike state.
- There is no "right" or "correct" or "healthy" or "best" ego-state!
- Each ego state performs its **function**
- We can only talk about more or less adequate human behavior
- which in terms of TA corresponds to more or less adequate switching of ego-state in real situation

# Transaction

- Transaction is the unit of each human interaction
- It consists of stimulus and reaction
  - Stimulus: the first person contacts the second person from one own ego state to some ego state of the second person
  - Reaction: the second person "reply" from one own ego state to some ego state of the first person

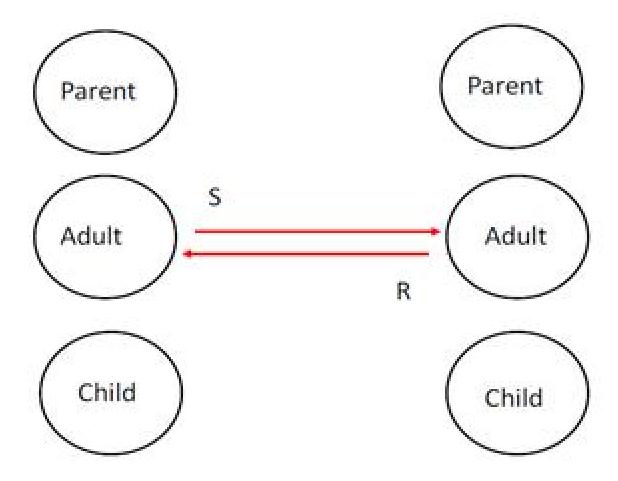


### Transaction

- All of these ego states into the transaction can be the same, or can differ (for instance, here can be four different ego states in one transaction)
- If the reaction returns the exact way the stimulus was, the transaction is called complementary
- In another case, the transaction is called crossed

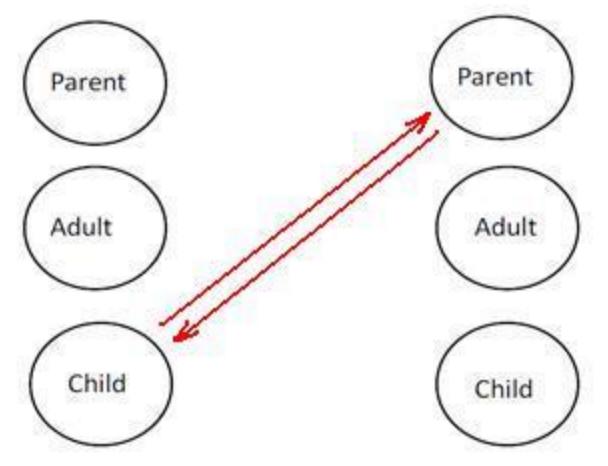
# Example of complementary transaction

- A: "Have you been able to write the report?" (Adult to Adult)
- B: "Yes I'm about to email it to you." (Adult to Adult)



# Example of complementary transaction

- A: "You should have your room tidy by now!" (Parent to Child)
- B: "Will you stop hassling me? I'll do it eventually!" (Child to Parent).



# **Complementary transaction**

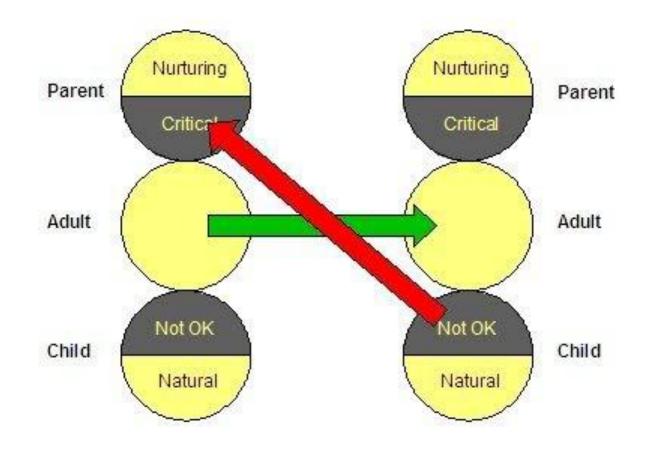
- Communication like this can continue indefinitely.
- Clearly it will stop at some stage but this psychologically balanced exchange of strokes can continue for some time

### **Crossed transactions**

 Communication failures are typically caused by a 'crossed transaction' where partners address ego states other than that their partner is in.

# Example of crossed transaction

- A: "Have you been able to write that report?" (Adult to Adult)
- B: "Will you stop hassling me? I'll do it eventually!" (Child to Parent)



### **Crossed transactions**

• ... which can continue indefinitely.

 Crossed transaction can be the basis for enormous number of conflicts

# Life (or Childhood) Script

- Closer to our potential trader's loss scenario.
- According to TA, each person can have its personal script.
  - Script is a life plan, directed to a "reward".
  - Script is decisional and responsive;
    - i.e., decided upon in childhood in response to perceptions of the world and as a means of living with and making sense of the world. It is not just thrust upon a person by external forces.
  - Script is reinforced by parents (or other influential figures and experiences).
  - Script is for the most part outside awareness.
  - Script is how we navigate and what we look for, the rest of reality is redefined (distorted) to match our filters.
- Though in the early beginning the script was our choice, for the grown-up person it is nearly completely unconscious...
- Only some marks, or strangely repetitive occasions, situation patterns can implicitly show us that something goes as if our life's part is "guided by mysterious force", is out of our control

# Life (or Childhood) Script

- Each culture, country and people in the world has a Mythos, that is, a legend explaining its origins, core beliefs and purpose.
- According to TA, so do individual people.
- A person begins writing his/her own life story (script) at a young age, as he/she tries to make sense of the world and his place within it.
- Although it is revised throughout life, the core story is selected and decided upon typically by age 7.
- As adults it passes out of awareness.
- A life script might be "to be hurt many times, and suffer and make others feel bad when I die", and could result in a person indeed setting himself up for this, by adopting behaviours in childhood that produce exactly this effect.

# Trader's "loss script"

- I suppose several cases when «loss script» can be turned on (really «turned on» – 'cause it is, with no joking, SCRIPT, nearly in sense «computer program»!)
- All those cases can be found programmatically
  - To have big unrealized profit and to lose it «in one moment»
  - The opposite case: «panic» when «just open» position goes in negative direction (for short time) – I'll discuss it further, after «Fixations»
  - Repetitive PL patterns (out of seasonal and market correlation)

### Defence mechanism

 Defence in psychoanalyses is unconscious psychological strategy invoked to cope with reality

# Defence mechanism

#### Vaillant's categorization of defense mechanisms

- Level 1 Pathological
- The mechanisms on this level, when predominating, almost always are severely <u>pathological</u>. These four defenses, in conjunction, permit one to effectively rearrange external experiences to eliminate the need to cope with reality. The pathological users of these mechanisms frequently appear irrational or <u>insane</u> to others. These are the "psychotic" defenses, common in overt <u>psychosis</u>. However, they are found in <u>dreams</u> and throughout childhood as well.
- Level 2 Immature
- These mechanisms are often present in adults and more commonly present in <u>adolescents</u>. These mechanisms lessen distress and anxiety provoked by threatening people or by uncomfortable reality. People who excessively use such defenses are seen as socially undesirable in that they are immature, difficult to deal with and seriously out of touch with reality. These are the so-called "immature" defenses and overuse almost always leads to serious problems in a person's ability to cope effectively. These defenses are often seen in severe depression and personality disorders. In adolescence, the occurrence of all of these defenses is normal.
- Level 3 Neurotic
- These mechanisms are considered <u>neurotic</u>, but fairly common in adults. Such defenses have short-term advantages in coping, but can often cause long-term problems in relationships, work and in enjoying life when used as one's primary style of coping with the world.
- Level 4 Mature
- These are commonly found among emotionally healthy adults and are considered mature, even though many have their origins in an immature stage of development. They have been adapted through the years in order to optimize success in life and relationships. The use of these defenses enhances pleasure and feelings of control. These defenses help us integrate conflicting emotions and thoughts, while still remaining effective. Those who use these mechanisms are usually considered virtuous.

#### Pathological defences

- The mechanisms on this level, when predominating, almost always are severely pathological. These four defenses, in conjunction, permit one to effectively rearrange external experiences to eliminate the need to cope with reality. The pathological users of these mechanisms frequently appear irrational or insane to others. These are the "psychotic" defenses, common in overt psychosis. However, they are found in dreams and throughout childhood as well.
- **Delusional Projection:** Grossly frank delusions about external reality, usually of a persecutory nature.
- **Denial**: Refusal to accept external reality because it is too threatening; arguing against an anxiety-provoking stimulus by stating it doesn't exist; resolution of emotional conflict and reduction of anxiety by refusing to perceive or consciously acknowledge the more unpleasant aspects of external reality.
- **Distortion**: A gross reshaping of external reality to meet internal needs.
- **Splitting**: A primitive defense. Negative and positive impulses are split off and unintegrated. Fundamental example: An individual views other people as either innately good or innately evil, rather than a whole continuous being.
- **Extreme projection**: The blatant denial of a moral or psychological deficiency, which is perceived as a deficiency in another individual or group. and anxiety.

#### Immature defences

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- Acting out: Direct expression of an unconscious wish or impulse in action, without conscious awareness of the emotion that drives that expressive behavior.
- Fantasy: Tendency to retreat into fantasy in order to resolve inner and outer conflicts.
- **Idealization**: Unconsciously choosing to perceive another individual as having more positive qualities than he or she may actually have.[14]
- **Passive aggression**: Aggression towards others expressed indirectly or passively such as using procrastination.
- **Projection:** Projection is a primitive form of paranoia. Projection also reduces anxiety by allowing the expression of the undesirable impulses or desires without becoming consciously aware of them; attributing one's own unacknowledged unacceptable/unwanted thoughts and emotions to another; includes severe prejudice, severe jealousy, hypervigilance to external danger, and "injustice collecting". It is shifting one's unacceptable thoughts, feelings and impulses within oneself onto someone else, such that those same thoughts, feelings, beliefs and motivations are perceived as being possessed by the other.
- **Projective identification:** The object of projection invokes in that person precisely the thoughts, feelings or behaviors projected.
- **Somatization**: The transformation of negative feelings towards others into negative feelings toward self, pain, illness, and anxiety.

Trader's stress-profile through defenses

- What kind of defense is dominating?
- It is the very important information about trader: knowing his defences, one is able to suggest how he or she well react in stressful situations (say – FINANCIAL CRISIS)
- My hypotheses is that if immature (and, more important – pathological) defenses dominate, it is the some sign for the risk manager that this person could be not very adequate when crisis (no matter worldwide or local, enterprise wide) comes

# How to identify trader with immature/pathological defenses?

- Where are special tests available for psychoanalysts which can show what kind of defense is dominating
- Some of them could be realized as a software
- This test can be put as a part of all-over psychological testing (e.g. when a new trader is passing an interview)
- But those standard tests need to be adapted for business situation:
  - For instance, the question "how often do you masturbate?" is appropriate in psychoanalytical circumstances, but here it isn't a good idea to begin with <sup>(2)</sup>
- What is further? I suppose, at the first stage this is a risk to identify, but not to eliminate.

# **Fixations**

- Sigmund Freud theorized that some humans may develop psychological fixation due to:
  - A lack of proper gratification during one of the <u>psychosexual</u> stages of development, or
  - Receiving a strong impression from one of these stages, in which case the person's personality would reflect that stage throughout adult life.

# Fixations - psychosexual stages

Stage	Age Range	Erogenous zone(s)	Consequences of Fixation
			Orally aggressive: chewing gum and the ends of pencils, etc.
			Orally Passive: smoking, eating, kissing, fellatio, and cunnilingus[3]
<u>Oral</u>	Birth–1 year	Mouth	Oral stage fixation might result in passivity, gullibility, immaturity, and a manipulative personality.
			Anal retentive: Obsessively organized, or excessively neat
Anal	1–3 years	Bowel and bladder elimination	Anal expulsive: Reckless, careless, defiant, disorganized, coprophiliac
			Oedipus complex (in boys)
Phallic	3–6 years	<u>Genitals</u>	Electra complex (in girls)
Latency	6-puberty	Dormant sexual feelings	Although fixation usually does not occur at this stage; if it does, he or she tends to be extremely sexually unfulfilled.
<u>Genital</u>	Puberty-death	Sexual interests mature	Frigidity, impotence, unsatisfactory relationships

### Anal fixation and trading strategy

- Traumatic experience at that stage may concern events when little child sees smth that came out of him/her, and feels it as a part of himself/herself. But parents may call it dirty, this way de-valuing the very little person – cause child thinks that he is dirty, bad
- So anal fixation has much to deal with concept of "value", and partially money
- If the person tends to retain money (not to buy securities in good moment) or securities (not to sell them in good moment), perhaps he or her had problems at this stage
- Knowing that a person has fixation at that stage (perhaps by tests) may predict somehow a style of trading strategy

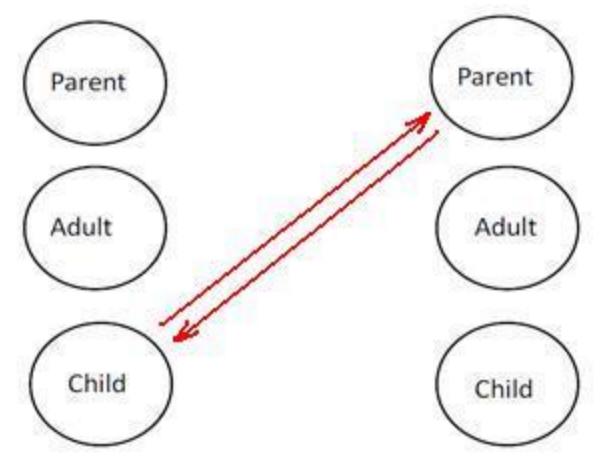
# Trader's loss script - «panic»

«panic» when «just open» position goes in negative direction (for short time)

- Back to our interactions
- RM is "judging", "*I KNOW*": "trader only wants to gain more and more and doesn't care about risk!", and so on
- Trader is responding symmetrically: "You know nothing about Real Market!, you academic worm!"

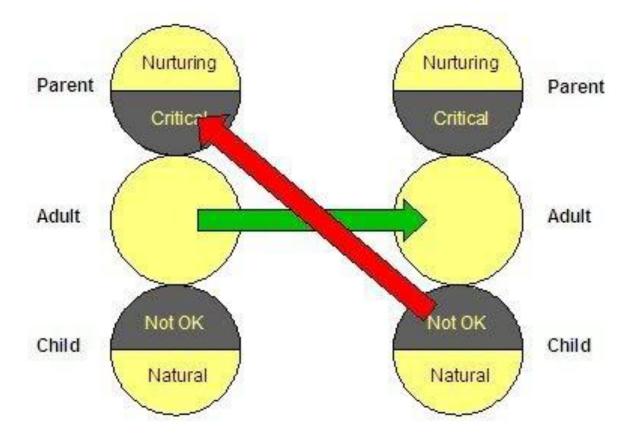
- This is... Critical Parent to Child transaction!
- And it gets the very expetable reply: Negative Child to Criticizing Parent

- A: "You should have your room tidy by now!" (Parent to Child)
- B: "Will you stop hassling me? I'll do it eventually!" (Child to Parent).



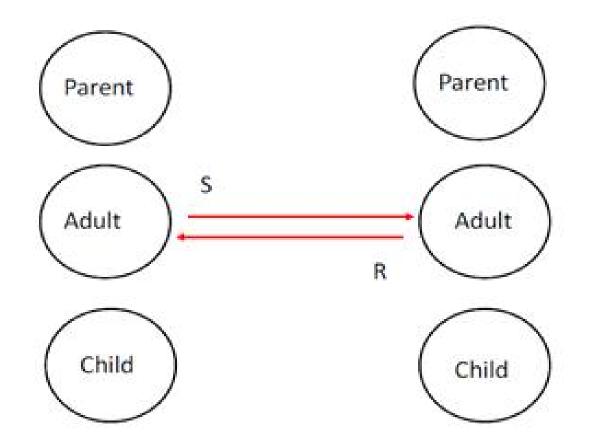
### Risk Manager $\leftarrow \rightarrow$ Trader transactions

- Or even this way...
- A: "Have you been able to write that report?" (Adult to Adult)
- B: "Will you stop hassling me? I'll do it eventually!" (Child to Parent)



#### Risk Manager $\leftarrow \rightarrow$ Trader transactions

- But it should be Adult to Adult transaction!
- A: "Have you been able to write the report?" (Adult to Adult)
- B: "Yes I'm about to email it to you." (Adult to Adult)



- Risk manager should increase his/her awareness!
  - about own ego-states
  - own scenarios
  - Games they play with Trader
  - and so on

# Know Yourself!

- Know Yourself must be the new principle for the Risk
  Manager!
- Or else, we stay on "judging" position, lose our contact with ourselves (and →lose contact with trader), and have great difficulty to learn (in a broad sense)
- ...because Parent doesn't learn it only knows everything!
  - ...including knowing future 'cause very characteristical phrase of Parent ego state sounds like «be careful! you will fall right now!», «you will break this cup now!» (it is said as to prevent accident, but it means that Parent intrinsically knows what will exactly happen with other person in future)

# Practical recommendation on managing trader's loss scenarios

- First, it is impossible to force (!) trader to go into psychotherapy. There is no
  - Psychological
  - Legal
  - Ethical

#### circumstances for that.

- Psychotherapy is performed from Adult position, not from Child (trader) who is said by Critical Parent (riskmanager)
- Second, deep psychotherapy, especially psychoanalyses, is significantly long process.

# Practical recommendation on managing trader's loss scenarios

- I suppose that to find balance between "classic psychoanalytical" and practical "coaching" approach is the good idea.
- It can be performed as a group training with the slogan like "to improve your own trading performance".
  - Person goes not to heal himself or herself from some psychological pathology, but to improve his/her performance
  - Training format is relatively "psychologically safe"
  - It is much more rapid than personal psychotherapy

# Ludomania (problem gambling)

- And the very broad topic worth mentioning I won't cover it here, just warn of its high importance
- In some forms it is addiction
- International Classification of Disorders F63.0
- «...many difficulties in limiting money and/or time spent on gambling which leads to adverse consequences for the gambler, others, or the community»

#### **DSM-IV** diagnostic

an individual must have at least 5 of the following symptoms:

- Preoccupation. The subject has **frequent thoughts** about gambling experiences, whether past, future, or fantasy.
- Tolerance. As with drug tolerance, the subject requires **larger** or more frequent wagers to experience the same "rush".
- Withdrawal. Restlessness or irritability associated with attempts to cease or reduce gambling.
- Escape. The subject gambles to improve mood or escape problems.
- Chasing. The subject tries to win back gambling losses with more gambling. PERHAPS «WINNING BACK» MARKERS CAN BE AUTOMATED!
- Lying. The subject tries to hide the extent of his or her gambling by lying to family, friends, or therapists. DOESN'T IT REMIND OF NICK LEESON?
- Loss of control. The person has unsuccessfully attempted to reduce gambling.
- Illegal acts. The person has broken the law in order to obtain gambling money or recover gambling losses. This may include acts of theft, embezzlement, fraud, or forgery.
- Risked significant relationship. The person gambles despite risking or losing a relationship, job, or other significant opportunity.
- Bailout. The person turns to family, friends, or another third party for financial assistance as a result of gambling.

# early recognition? - !

- This is a case of investigating (I'm not ready to cover this topic now), but
- ...perhaps psychological screening tests are available
- ...and it is possible to recognize a ludomaniac person at early stage (maybe when interviewing a new trader candidate)

# a bit of ludomania statistics

"British Gambling Prevalence Survey 2007"

- 0.6% of the adult population had problem gambling issues
- The highest prevalence of problem gambling was found among those who participated in
  - spread betting (14.7%),
  - fixed odds betting terminals (11.2%)
  - betting exchanges (9.8%)
- USA about 5% (Volberg, 1996)

# Summary

- Risk Manager  $\leftarrow \rightarrow$  Trader
  - Ludomania
  - Financial crisis: trader's stress profile (psychological defenses)
  - Fixations: strategy of retaining money
  - "Quiet market": trader's "loss scenario"
- Risk Manager to himself/herself
  - Personal awareness
    - knowing his/her own ego-structure
    - "what Games am I playing with Trader?"
    - dominating defenses
    - script
  - − To build "Adult $\leftarrow$ →Adult" relationships
- Risk Managers society
  - Develop investigations (trader's ego-structure, defences, fixations)
  - Build summary psychological Trader's risk profile
  - Develop group trainings especially for this purpose

# Questions?

- Perhaps it is more efficient to ask (first) questions before I show preliminary research results
- You can ask personal questions if you want. (Psychology is always at one-edge a personal matter, I think...)