The risk for developing disordered gambling: Equal for every player?
Implications for research, policy and consumer protection

**Aims:** (1) To introduce the concept of individual vulnerability for developing a gambling disorder (GD), (2) to question gambling supply reduction and access limitations as effective GD prevention strategies and (3) to derive short- and long-term implications for research, gambling regulation and consumer protection of vulnerable gamblers.

**Background:** Gambling regulation is currently based on the assumption that participants have similar risks for the development of GD based on individual, social and predominantly gambling-related risk factors. Consequently, GD prevention mainly relies on supply and access limitations and “rational” consumer information and warnings within the Responsible Gambling concept. However, it remains an open research and policy question whether this “one-size-fits-all” approach really provides effective GD prevention.

**Method:** Recent findings on characteristics and risk factors for GD from clinical and epidemiological studies as well as from basic experimental research and cohort studies are summarized.

**Results:** Current evidence underpins a theoretical model that integrates a set of putative individual vulnerability factors for GD: Impaired cognitive control, increased reward and lower punishment sensitivity, higher attentional bias and cue reactivity, higher risk taking and steeper delay discounting, accompanied by a high rate of comorbid mental disorders. There is also increasing evidence that these intra-individual factors constitute antecedent vulnerability factors increasing the risk of individuals for GD. These findings would explain the relatively low prevalence rates of GD in different countries (0.5 to 2%) despite similar high availability and popularity of gambling in the adult population (around 40% to 80% lifetime gambling). Given this vulnerability concept, current gambling supply reduction policies are regarded as insufficient to protect vulnerable gamblers and as unnecessarily strict for the majority of resilient gamblers.

**Conclusions:** Implications for short-term improved public health concepts and a two-step strategy will be presented: (1) general consumer protection activities for the majority of resilient gamblers (e.g. information, self-limitation strategies, feedback and warning systems) and (2) improved activities for early detection and support of vulnerable gamblers with a variety of interventions like personalized warnings, provider-suggested and initiated temporary responsible gambling limits or time-outs, voluntary self-exclusion, and forced exclusion as ultima ratio. These activities require strong public regulation and control agencies. To support and refine the presented vulnerability concept as long-term aim, more experimental and prospective cohort studies are essential to better define and to early detect vulnerability factors in active gamblers. A better understanding of possible interactions between individual vulnerability and gambling related features is also needed. Furthermore, the effectiveness of intervention methods specifically targeting vulnerable gamblers has to be tested. Finally, ethical aspects of gambling regulation options like gambling bans will be discussed.
key words: gambling disorder, consumer protection, vulnerable gamblers, resilient gamblers, individual vulnerability