OUTLINE

1. Affective motivations of problem gambling
2. Previous research on distinct emotions in PG and non-PG
3. Previous research on emotion regulation in PG and non-PG
4. My hypotheses
5. Cognitive distortions about skill and control in gambling
6. Self-focused emotions and cognitive distortions
7. Players' challenges for emotion regulation
8. Self-focused emotions and tilt
9. Conclusions
EMOTIONS ASSOCIATED WITH PROBLEM GAMBLING

- Affective motivations of gambling: anxiety, stress, depression, boredom (e.g. Blaszczynski & McConaughy, 1989; Griffiths, 1995)
  - Individuals suffering from stress and anxiety prefer low-skill gambling, whereas depressed individuals prefer more skilled games (Coman et al., 1996)

- Gambling as emotion management (Ricketts & Macaskill, 2003; 2004)
  - Shutting off negative emotions
  - Need for intense arousal together with low tolerance of emotional distress
  - Need for (a sense of) achievement

- Little research on differences in the distinct emotions and emotion regulation strategies between problem and non-problem (either recreational or professional) gamblers during gambling.
PREVIOUS RESEARCH ON DISTINCT EMOTIONS IN PROBLEM AND NON-PROBLEM GAMBLING

■ Svartsjö et al., 2008: players at risk sought strong emotions from online poker, whereas players in the control group aimed at improving their skills and attaining long-term success.
  – Differences in HR and GSR before and after the play between players at risk and players in the control group.
  – No differences in the players’ distinct emotions.

■ Mageau et al., 2005; Ratelle et al., 2004: harmonious vs. obsessive passion for gambling.
  – Harmonious: feelings of amusement and fun, positive emotions
  – Obsessive: feelings of guilt, anxiety, negative emotions

■ Yi & Kanetkar, 2011: Problem gambling severity associates more with experiences of shame than with experiences of guilt.

■ Brochu et al., 2012: No differences between problem and non-problem gamblers
  – pleasure, excitement, pride, frustration, and stress among both
PREVIOUS RESEARCH ON EMOTION REGULATION IN PROBLEM AND NON-PROBLEM GAMBLING

- Scannell et al., 2000: Problem gambling associated with emotion-focused coping strategies
  - Coping with impaired control over gambling and emotions that motivate gambling, not with distinct emotions during gambling.

- Williams et al., 2012: Pathological gamblers reported less use of reappraisal as emotion regulation strategy and a greater lack of emotional clarity than healthy comparisons.

- Yi & Kanetkar, 2011: Problem gambling severity was more strongly associated with avoidant coping strategies after gambling loss than with non-avoidant coping strategies.

- Several studies associate problem gambling with impulsivity, which is characterized by a failure in self-regulation, including emotion regulation.


**MY HYPOTHESES**

- Problem gamblers differ from non-problem gamblers by having more frequent and/or intense *self-focused* emotions about themselves as *winners* or *losers* such as pride, shame, humiliation and anger in addition to *game-focused* emotions such as excitement, disappointment, and joy during gambling.
  - The self-focused emotions of problem gamblers associate with their cognitive distortions about skill and control that maintain and reinforce those emotions.
  - Negative self-focused emotions are more difficult and exhaustive to regulate than similar game-focused emotions as they demand either actual or symbolic undoing of the ‘harm’ inflicted on the self.

- Problem gamblers apply less adaptive emotion regulation strategies than non-problem gamblers during gambling.
  - Emotion-focused coping vs. problem-focused coping
  - Suppression vs. reappraisal among emotion-focused strategies

- Evidence from several separate studies
COGNITIVE DISTORTIONS ABOUT SKILL AND CONTROL

A. Games of pure chance (e.g. roulette, lottery, EGMs): beliefs in skill and control are categorically irrational.

B. Games of skill and chance (e.g. poker, sports betting): two types of cognitive distortions (Bjerg, 2010)
   a) About the role of skill and chance in the structure of the game
   b) About an individual player’s skills in the game
      – Bjerg: problem gamblers may have a realistic conception of a) but an unrealistic (inflated) conception of b)
      – Some problem gamblers may have unrealistic conceptions of both a) and b)
      – A difficult issue for players to judge as researchers and poker coaches are divided about the relative significance of skill and chance in poker (e.g. Croson et al., 2008; Denonno & Detterman 2008; Berthed, 2010; Levitt & Miles, 2011; Meyer et al., 2012)
      – The existence of ‘winning players’ and regularly winning ‘poker stars’ as evidence on the (significant) role of skill in poker for aspiring players.
Illusion of control and overestimation of skills

- On the one hand, allow players to take credit and pride of their wins and beating their adversaries (Sulkunen & Rantala, 2011)
- On the other hand, dispose players to anger, moral indignation, and humiliation upon prolonged periods of small losses or unlikely significant losses experienced as "insults" and/or "unfair" outcomes (Rosenthal, 1995; Palomäki et al., submitted)
- Anger and humiliation dispose players to *tilting*, characterized by deteriorated decision-making, loss of control over gambling, and chasing (Browne, 1989; Palomäki et al., 2012)
- Chasing is not merely directed at recouping monetary losses but also positive self-feelings by restoring a "fair balance" between wins and losses (Rosenthal, 1995; Palomäki et al., submitted)

Striving for correct play can elicit anger at own mistakes and disappointment in own suboptimal play even without severe cognitive distortions (Palomäki et al., submitted).

- Hypothesis: type of regulation distinguishes between problem and non-problem gamblers
STRATEGIES OF EMOTION REGULATION

Problem-focused vs. emotion-focused coping (Folkman & Lazarus, 1984)
- Problem-focused coping: changing the eliciting situation of a negative emotion by own action or by seeking social support.
- Emotion-focused coping: changing how the eliciting situation of a negative emotion is attended or appraised e.g. by distancing, denial, wishing well, or reappraisal.

Emotion regulation as a process (Gross, 1998)
- Antecedent-focused vs. response-focused strategies

Significant differences in the adaptiveness of reappraisal and suppression (John & Gross, 2007).
- Reappraisal permits the modification of the entire emotional sequence, including the valence and type of emotion, without notable physiological, cognitive, or interpersonal costs.
- Suppression modifies only response tendencies without reducing the experience of negative emotion, while consuming cognitive resources from other tasks.
PLAYERS’ CHALLENGES WITH EMOTION REGULATION

- How to savour positive emotions about wins while adaptively regulating negative emotions about losses and mistakes?

- Poker players have a systematic tendency to ascribe “wins to the superiority of their own skills and losses to ‘natural variance’, ‘a bad run of cards’, or simply ‘bad luck’” (Bjerg, 2011, 124).
  - An early reappraisal of loss as 'bad luck' protects the player from tilting in the short run. However, the strategy of attributing all losses to 'bad luck' is tilt-inducing in the long run as it results in an appearance that variance is always ‘working against’ the player (Tendler, 2011), which gives rise to moral indignation.
  - Reappraisal of loss in terms of ‘bad luck’ may be ineffective for players with inflated beliefs about skill. These players first feel angry or humiliated about their losses and then try to suppress these emotions by attributing losses to variance. Yet a late reappraisal amounts to suppression that increases the long-term risk of tilting.
  - A reappraisal of own mistake as an opportunity for learning may alleviate disappointment in self, especially when it is combined with problem-focused coping after the play session.
PATHWAYS FROM LOSING TO IMPASSIVE OR EMOTIONAL REACTION

FIGURE 2

SIGNIFICANT LOSS

"BAD BEAT" (i.e. an unlikely/"unlucky" loss)

"BAD PLAY" (i.e. noticing having made a mistake)

A
Impassive reaction: "It's just variance"

B
Emotional reaction: "I can't believe this, it's just so unfair to lose!"

C
Impassive reaction: "Shrug it off and work on your skills"

D
Emotional reaction: "I'm disappointed in myself for not playing as well as I should have"

E

Source: Palomäki, Laakasuo & Salmela, submitted

- Pathways for inexperienced (and problem) players: B, C (for problem players also E with suppression)
- Pathways for experienced (and non-problem) players: A, D, E (with reappraisal)
SELF-FOCUSED EMOTIONS AFTER TILT

- Disappointment in self, shame, depression, anxiety (Browne, 1989; Palomäki et al., submitted)
  - Arguably more common among problem gamblers who tilt more frequently and/or severely than non-problem gamblers

- Adaptiveness depends on the type of coping
  - Avoidant emotion-focused coping (e.g. suppression) increases the risk of tilting in the future as well
    - Associates more with problem than with non-problem gambling (Scannell et al., 2000; Yi & Kanetkar, 2011)
  - Problem-focused coping (e.g. active problem-solving; seeking social support) allows the subject to utilize emotions as motives for reflecting on his or her detrimental actions, thus promoting re-evaluation of future actions (Palomäki et al., submitted)
    - Associates more with non-problem than with problem gambling.
CONCLUSIONS

- Cognitive distortions about skill and controllability of games reinforce and maintain self-focused emotions that are more difficult to regulate than game-focused emotions during play.

- The more emotional credit a player takes for his or her wins, the harder his or her losses backfire in the form of negative self-focused emotions that increase the risk of chasing losses and positive self-feelings.
  - A pattern for problem gamblers who seek strong emotions from gambling and for players with skill-based identity.

- Cognitive-behavioural therapies correct erroneous or inflated beliefs about the controllability of games, thus reducing affective involvement with gambling.
  - Removal of self-focused emotions alleviates the task of emotion management during gambling.
  - Resemblance with Stoic therapy of the passions: treatment of emotions by the means of cognitive change.
  - Not recognized in cognitive-behavioural therapies of gambling.
THANKS TO

- Jussi Palomäki, MSc, University of Helsinki
- Michael Laakasuo, MSc, University of Helsinki; University of Amsterdam

YOU FOR YOUR KIND ATTENTION