Treatment Indications for Problem Gambling
NCPG Annual Conference
July 14, 2012
Louis Weigele, LISW-S, NCGC-II

Mood Modification

- Wood and Griffiths (2007) – Qualitative study
  - Lack of theoretical foundation regarding the causes of problem gambling
- Hypothesized that poor coping skills contributing variable for a number of individuals who develop gambling problems.
- Results of their study indicated a primary goal of mood modification to escape from and cope with problems of daily living
- For some, mood modification was primary goal
- For others; modification of mood became the goal
- Supports the theory that individuals may engage initially in gambling activities for a variety of reasons
- But as they develop a problem related to gambling, escape becomes a primary goal

Coping

- Limited number of qualitative studies have spoken to problem gamblers, particularly those examining gambling as a means of coping
- Results indicated participants gambled to escape unpleasant emotions and to alter mood
- Mood alteration found to result either
  - Through dissociation occurring though altering arousal levels
  - Or engaging in fantasy about being a successful gamblers and eliminating their problems in this fashion
- For some, the mood alteration, the “buzz”, was the primary goal of gambling providing the escape
- Filling a void and avoiding problems and responsibilities were also reasons for gambling (Woods & Griffiths, 2007).
### Arousal

- Cocco, Sharpe and Blaszczynski (1995) quantitative study 25 individuals with dx of pathological gambling
- Compared horse track bettors and poker machine players in the context of arousal theory
- Examined anxiety, preferred states of arousal, and preferred methods of gambling
- Significant difference in age of beginning to gamble
  - Horse track bettors beginning at an earlier age than poker machine players
- Suggested that machine gamblers had higher levels of anxiety and preferred lower levels of arousal than horse track bettors.

### Cognitive Distortions

- Ladouceur researched the cognitive distortions
- Participants engaged in the use of laboratory based video lottery terminals (VLT’s)
- Hypothesis of the study anticipated a higher level of erroneous predictions for PG, however no significant difference found
- Indicated that erroneous perceptions of anticipated results exist in both pathological and non-pathological gamblers
- Did indicate that pathological gamblers verbalized their beliefs more frequently
- Suggests greater intensity of focus and possible connection to higher levels of dissociation suggested by other studies

### Pathways Model

- Blaszczynski and Nower (2002) developed Pathways Model of problem and pathological gambling
- Three distinct pathways that lead to problems of gambling
- Bio-psycho-social-ecological model
- Applying any traditional theoretical models to all problem and pathological gamblers is too limiting to be useful
- Employs a broad, systematic approach of identifying specific subtypes
- Each subtype influenced by different factors but display similar phenomenological features
- Works to integrate biological, personality, developmental, cognitive, learning theory and environmental factors
2002 research review

- Sharpe (2002) conducted a review of empirical research
- Discusses both acquisition of disorder as well as factors that maintain the disorder
- Reviewed studies that indicated differences in impulsivity in PG
- Studies also indicated genetic influences
- Also indicated neurotransmitter involvement in individuals experiencing gambling problems
- Identified studies that indicated relationships between PG and depression
- Reviewed availability of gambling and types of games played by the gambler
- Discussed relationships with PG and arousal and cognitive functions

Intervention Research?

- Despite recent increase in attention to problem gambling, relatively few empirical studies have been published
- Particularly true in the United States
- Lack of a strong body of randomized treatment interventions studying problem gambling has been identified in recent studies (Nower, 2009; Gooding & Tarrier, 2009)
- Nower, in report to the National Council on Problem Gambling (NCPG) stated, “Unlike several other countries with legalized gambling, the United States has largely left gambling regulation to the states and, in turn, a majority of states have expanded gambling opportunities without providing designated funding to address the serious adverse consequences of problem gambling.”

2011

- Issuance in 2011 of a protocol for a review of interventions with the following objectives:
  - To evaluate evidence for the efficacy and durability of any form of psychological treatment for pathological and problem gambling
  - To evaluate treatment options for pathological and problem gambling to inform evidence based clinical practice
  - To assess the methodological features and risk of bias in existing research to inform the methodological and conceptual development of future research in the field (Anderson et al., 2011)
Recent Review of Intervention Studies

- Recent review of studies confirmed the findings described above
- Total of seventeen intervention studies were reviewed
- Search conducted using Academic Search Complete, ISTOR, Web of Knowledge and PsycINFO
- Search of Cochrane Collaboration also conducted
- Key terms - gambling, problem gambling, pathological gambling, treatment, intervention and research
- Articles reviewed by title to determine if intervention research was the primary focus of the study
- Articles reviewed by abstract and methodology to determine if the research was on the intervention appropriate to this review
- Of resultant studies, one was a pre/post treatment outcome study, three are quasi-experimental studies using comparison groups, eleven studies are randomized controlled trials and two are systematic reviews and meta-analysis studies
- Predominately recent with fifteen of the studies having been published after 2005
- Studies were conducted in six countries
  - Six studies coming from both Australia and Canada, two studies from the United States, and one study each from The United Kingdom, Spain and Sweden

CBT

- Eleven studies involved delivery of cognitive behavioral therapy (CBT) as either primary treatment service or experimental condition
- CBT examines the belief systems of individuals (schemas) and challenges the assumptions (cognitive distortions) that the individual draws from those belief systems
- CBT has been shown to be more effective than wait list controls and has been the therapy most studied in the treatment of problem gambling (Toneatto & Dragonetti, 2004; Ladouceur et al., 2003)
- CBT however may be delivered employing a wide variety of treatment models and methods
- CBT may be manualized and delivered in a group setting
- Also may be delivered by individuals with a wide range of training and experience
- Important to understand the specifics of the service delivered in each particular study

MI

- Eight studies have component of motivational enhancement
- Developed by Miller and Rollnick (1991) MI is employed as both a separate therapy and a way to encourage individuals to seek traditional treatment
- Employed recently as a directive, client-centered counseling method to explore and resolve ambivalence about gambling behaviors
- Included in this are brief advice interventions that were employed in four studies. Two of those studies included a one session MI-based intervention (Hodgins, Currie, Currie, & Fick, 2009; Diskin & Hodgins, 2009). On session employed a ten-minute advice with a workbook then mailed to the recipient (Hodgins, Currie, & el-Guebaly, 2001)
- Study by Petry, Weinstock, Ledgerwood, and Morasco et al. (2008) included a brief MI session that also had MI and CBT components.
Some issues

- Four studies included evaluations of brief treatment, six include evaluations of motivational enhancement, and seven include CBT as an intervention.
- While CBT has been indicated as an effective treatment for problem gambling, the number of replicated studies has been limited (Ledgerwood & Petry, 2005).
- Recently motivational interviewing and other motivation enhancement methods have been implemented into problem gambling assessments and interventions to address low engagement, retention and treatment completion rates.

Problems and Indications

- Results of the eleven studies in the randomized control group represent many of the challenges and some of the progress taking place in gambling intervention research.
- Studies with greatest clinical strength examine brief interventions.
- These were easily randomized and did not experience the losses of power resulting from attrition to the same degree as studies involving greater intensity and duration of treatment.
- Study by Petry et al. (2008) which had a possible total of four sessions began to show signs of attrition.
- In the BI studies were outcomes that indicated equal and at times greater benefit for less structured, less intense conditions of single session and assessment only conditions compared to more structured longer term interventions.
- Additional indication is that participants who received no intervention other than an assessment often showed significant reductions in gambling behaviors that were maintained during the course of the study follow-up periods.
- Important differences were noted in the structures of the interventions.

How Much Treatment?

- Results for all RCT studies indicated reductions in problematic gambling behaviors for the interventions.
- Of particular interest were findings that indicated improvement in problem gambling behaviors for all groups in the study including the control assessment only and wait-list groups.
Dosage

• Greatest dose may not be necessary to produce the strongest outcomes (Petry et al., 2008 and Hodgins et al., 2001, 2009)
• Two most recent studies indicated that for less severe problem gamblers brief interventions of one session were more effective than more comprehensive, extended treatment

Intervention Efficacy

• Of other RCT studies included in this review, two studies comparing CBT to a waitlist control found that CBT interventions resulted in significant improvement in reducing problem gambling behaviors (Sylvain et al., 1997; Dowling, Smith & Thomas, 2006)
• Outcomes of the four studies comparing individual and group treatment, or MI and CBT indicated that all interventions significantly reduced problem gambling behaviors

Compliance and Integrated Treatment

• Study on compliance by Milton et al. indicted that compliance enhancement interventions improved treatment completion but that did not indicate greater effectiveness in reducing gambling in follow-up evaluations
• Study of an integrated therapy for comorbid anger and problem gambling indicated an efficacy for the integrated treatment compared to TAU of CBT
• Reductions were significant for TAU and intervention in gambling and anger
• However, effect of integrated treatment was also significant for substance use reduction and the effects were greater regarding reducing problematic gambling behavior and anger (Korman et al., 2008).
### Issues and Challenges

- Surprisingly few RCT’s
- Small study sizes
- Inconsistent methodology
- Do all pathways lead to the same place?
- Treatment attrition
- Treatment engagement
- Reduction or abstinence?

### Options

- Develop ability to apply multiple methods
  - CBT
  - MI
  - BI
  - Workbook
  - Other
- Examples and discussion