

Cognitive-Behavioral Therapy for Pathological Gambling

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April 30, 2008

Overview

- Background on pathological gambling (PG)
- Principles of cognitive-behavioral therapy (CBT)
- Summary of CBT for PG
- Outcome data on common factors discussed in CBT treatment sessions for PG

Background on Pathological Gambling (PG)

- PG is an impulse control disorder characterized by persistent and recurrent maladaptive gambling
- PG is associated with serious problems: family, social, financial, legal, medical, psychiatric, and substance abuse

Prevalence Rates

- General Population:
 - 95% Recreational Gamblers or Non-Gamblers
 - 4% Problem Gamblers
 - 1% Pathological Gamblers
- Higher rates in certain segments of the population
 - SUD patients
 - Psychiatric patients
 - Medical patients
 - Incarcerated
 - Adolescents

Problems Related to PG

- Psychosocial:
 - Financial debt
 - Family conflict
 - Substance Abuse (Alcohol, Other Drugs)
 - Depression/Anxiety
 - Suicidal Thoughts
- Medical:
 - PG is more common among primary care patients than in the general population
 - Higher rates of heart disease and liver disease
 - More medical utilization

Shaffer & Korn (2002); Morasco et al., (2006)

Psychiatric Problems Associated with PG

- With PG, comorbidity is the rule, rather than the exception
 - ~75% have a history of an alcohol use d/o
 - ~40% have a history of a substance use d/o
 - ~60% have a history of nicotine dependence
 - ~50% have a history of a mood disorder
 - ~40% have a history of an anxiety disorder
 - ~60% have a history of a personality disorder

Petry et al. (2005)

Diagnostic Criteria for Pathological Gambling

1. Preoccupation
2. Tolerance
3. Failure to Control
4. Withdrawal Symptoms
5. Escape Problems
6. Chasing Losses
7. Lies/Conceals
8. Illegal Acts
9. Jeopardize job, relationships, education
10. Relies on others for money

Need 5 of 10 criteria for DSM-IV diagnosis

Problems in Treatment for PG

- Limited data are available regarding the effectiveness of treatments for PG.
- Only 7-12% of people with a gambling disorder ever receive treatment (Slutske, 2006).
- Once started 30-50% of PGs prematurely drop out of treatment.

Treatment Options for PG

- Peer support
- Inpatient treatment
- Pharmacotherapy
- Outpatient treatment
 - Brief advice
 - Psychotherapy

Gamblers' Anonymous (GA)

- 12-step support-group approach
- Modeled after Alcoholics' Anonymous
- Most utilized treatment for PG
- Data regarding the effectiveness of GA are limited:
 - ~20% drop out after the first meeting
 - 1 year after entry in GA, only 8% maintained abstinence (Stewart & Brown, 1988)
 - Other data suggest that patients in other forms of treatment who also participate in GA are more likely to remain abstinent than patients who only engage in one treatment (Petry, 2003)

Inpatient Treatment

- Several descriptive studies suggest inpatient treatment results in a reduction in gambling behavior.
- No well-conducted randomized trials of inpatient treatment have been conducted.

Pharmacotherapy

- No medication has been approved by the FDA for the treatment of PG
- Studies have examined:
 - Opioid antagonists, such as naltrexone (Dannon et al., 2005) and nalmefene (Grant et al., 2006), have received the most empirical support
 - SSRIs with positive data include fluvoxamine (Hollander et al., 1998) and paroxetine (Kim et al., 2002)
 - Lithium may be helpful for PGs with comorbid bipolar disorder (Hollander et al., 2005)

Brief Advice

- Gamble to have fun, not make money.
- Only gamble what you can afford to lose.
 - Pay monthly bills first.
 - Set \$\$ limit for each gambling session and stick to the limit.
 - Set a time limit for each gambling session.
- Leave checks, credit cards, and ATM cards at home.
- Take your winnings home.
- Casinos/Video Lottery machines are not in the business to lose money.

Petry, Weinstock, Ledgerwood, & Morasco (2008)

Psychotherapy

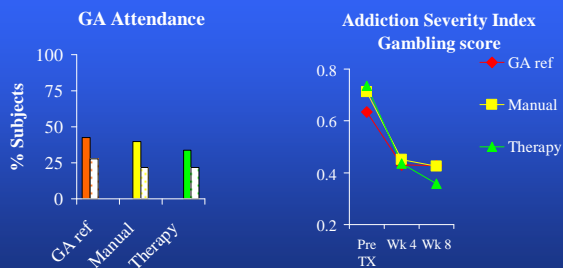
- Motivational Enhancement Therapy
 - Based on the transtheoretical model of behavior change
 - MET > Self-help workbook, referral to GA, or wait-list condition (Hodgins et al., 2001; Hodgins et al., 2004).
- Cognitive Therapy and Cognitive-Behavioral Therapy
 - Most studied treatments for PG (Ladouceur et al., 2001; Petry et al., 2006; Sylvain et al., 1997)
 - Treatment is similar to CBT for alcohol or SUDs

CBT Treatment Study

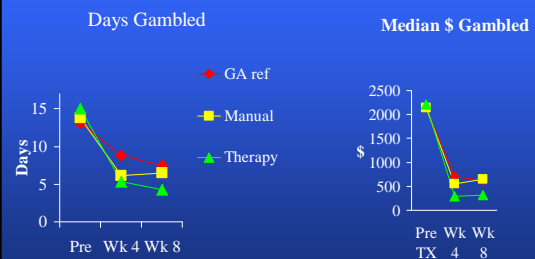
- 231 individuals who met DSM-IV criteria for current PG were randomly assigned to one of three conditions:
 - Gamblers Anonymous referral
 - CBT workbook
 - Individual CBT
- Patients were assessed at baseline, 1 month later, post-treatment, and at 6- and 12-month follow-ups

Petry et al., (2006)

Results

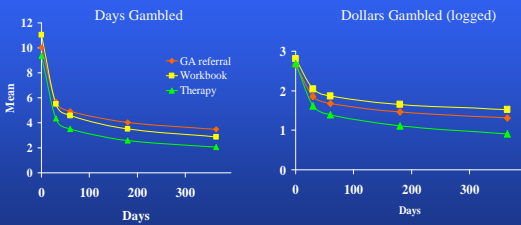


Treatment Outcomes



Petry et al., (2006)

Long-Term Follow-Up



Outline of CBT for PG

- Symptoms of PG are learned behavior patterns that result in maladaptive coping.
- Identify cognitions that contribute to gambling
- Identify ways of coping with urges to gamble
- Encourage lifestyle changes and rearranging the environment to make gambling less reinforcing
- Develop interpersonal and coping skills
- Treatment model is cumulative.

Style of CBT Sessions

- Collaborative relationship
 - Goals, homework
- Collaborative empiricism
 - Design coping experiments together
- Socratic questioning
- Guided discovery
 - Ask/design experiments, don't tell/debate

Structure of a CBT Sessions

- 8 weekly individual 50-minute sessions
- Sessions begin with a check-in
- Review previous week gambling on graph
- Review of previous week's homework
- Discuss the new skill module for the week
- Introduce new homework assignment
- Self-reward contracting

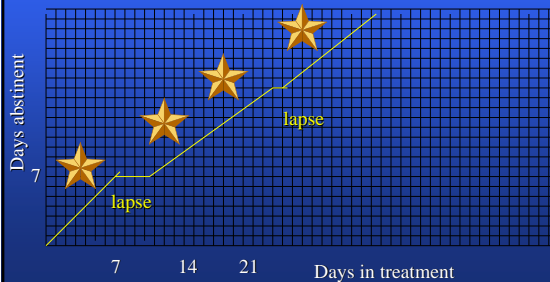
CBT Session Topics

- 1) Triggers
- 2) Functional analysis
- 3) Pleasant activities
- 4) Seemingly irrelevant decisions
- 5) Coping with urges
- 6) Assertiveness training/refusal skills
- 7) Correcting irrational thinking
- 8) Relapse prevention

Tracking Progress and Rewarding Yourself



Tracking Progress



Session 1: Triggers to Gamble

- Places where you are likely to gamble
- People you are likely to gamble with
- Times or days when you are likely to gamble
- Activities that increase the likelihood of gambling
- Emotions or feelings that make it likely you will gamble

Identify When You Do NOT Gamble

- Places where you don't gamble
- People you do not gamble with
- Times or days when you are less likely to gamble
- Activities that you do when you are not gambling
- Emotions or feelings that don't make you feel like gambling

Most Commonly Reported Triggers

<u>Category</u>	<u>Example</u>	<u>%</u>
Lack of structured time	Feel bored; Have extra time; Nothing to do	51%
Negative mood	Feel depressed; Bad day at work; Anxious	45%
Reminders of gambling	Advertisement; Sports on TV; See favorite gambling place	37%
Access to money	Payday; Have extra \$	33%
Financial concerns	Chasing losses; Bills	18%

Morasco et al., (2007)

Summary of Session 1

- Introduce self
- Have client describe gambling history and history of treatment
- Introduce CBT – what is it all about?
- Explain what a trigger is
- Take client through the trigger exercise
- Plan homework
- Tracking form
- Rewarding oneself

Case Example: Joel

Joel is a 52 year-old college educated male. He works in sales. He is married and has two teen-age children. His wife, Maggie, is a flight attendant. By all accounts, they are a "normal" middle-class family living and working in the Pacific Northwest.

Joel started gambling regularly when he was in college, primarily playing cards with friends in the dorm. He was a pretty good card player and generally would win up to a few hundred extra dollars per month. Every year he and friends would plan a spring break trip and go to the casinos in Las Vegas. Occasionally Joel would also bet on sports, earning up to a few hundred dollars more. During this time, his betting generally did not get out of control, though there were a few times he had to sell some of his stuff to repay his debts.

Shortly after college, Joel met Maggie and his gambling decreased. He was a biology major in college and he got a good job in sales for a prestigious pharmaceutical company. After a few years, Joel and Maggie were married and had two children.

Joel's gambling during this time was largely limited to betting when he played golf, during major sporting events, and 2-3 times a year when he hung out with his college friends.

Recently, Joel lost his job at the pharmaceutical company and was out of work for six months. During this time, he became increasingly frustrated with not finding as good of a job as he had before. He suffered a bout of depression and would spend much of his time just hanging around the house.

Maggie encouraged Joel to get out more, and he began going out to lunch or dinner with friends. Many of his friends liked to play video poker, and they started going to restaurants to have a few drinks and play video poker after finishing their meals. While the amount wagered started off low, they gradually increased in size and frequency.

At first, Joel did pretty well when he played video poker. He generally only bet what he intended. Sometimes he would come out ahead and win several hundred dollars at a time. Gradually the size of his bets increased and he started "chasing" his losses. Joel didn't mind the losses too much. He missed the money, but liked the excitement of betting and he found that playing kept his mind off his problems for a while.

Maggie started to notice that their finances were getting worse. However, she attributed it to Joel's being out of work. She wasn't too worried because she knew he would find another job soon. Her salary was enough to cover the mortgage and major bills.

Sometimes Joel would come home from outings with his friends appearing even more dejected. She just figured it was due to his frustration with not finding a job. Other times though, he came home really excited and he would buy her expensive gifts.

Joel eventually found another job. He began working in sales for a used car company. The pay wasn't as good as his pharmaceutical job, and he was frustrated that the work was not as prestigious. However, Joel figured the car sales job was only temporary. He would keep looking for another pharmaceutical job and was only doing this to start earning a regular paycheck.

Although Joel was disappointed, Maggie happy because all the bills were able to be paid on time again. Sometimes Joel would make several big sales in a day and earn a large commission. During these times, he felt "on top of the world." On these days, Joel liked to go out to celebrate with his co-workers.

Other times, Joel would go several days or even weeks without making a sale, and he would experience a return of his depressive symptoms. He felt bad for not contributing enough to the household income, he was disappointed in himself, and he began to put more pressure on himself to earn more.

Gradually, Joel was spending more and more time playing video poker. He frequently went to a bar over his lunch break. Instead of waiting to play until after his meal, he would go straight to his favorite machine, and maybe order something later on. He also increased the number of times per week he went to play video poker after work. He began to lose more money. As he lost more, he became more desperate and would start making larger bets. Even on days when he earned a large sales commission, he would frequently go to the video machines to try and make more.

Maggie noticed that Joel was having a rough time, but he wouldn't talk with her about his problems. She knew things were bad when she tried to fill her car up with gas and their credit card was denied. She looked into the finances and found out that many of the bills were not getting paid on time, if at all. She confronted Joel, but he told her not to worry about it. After a few months, there were still unpaid bills.

Joel and Maggie started arguing over finances. Joel felt guilty for not earning enough money, but he couldn't handle Maggie yelling at him. When they'd fight, Joel would go to the nearest bar that had video poker to cool off for a while.

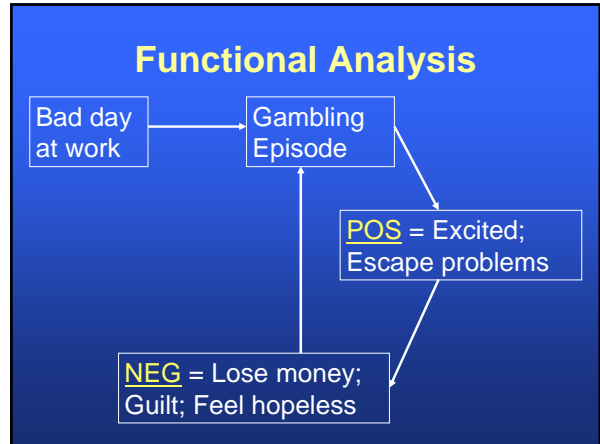
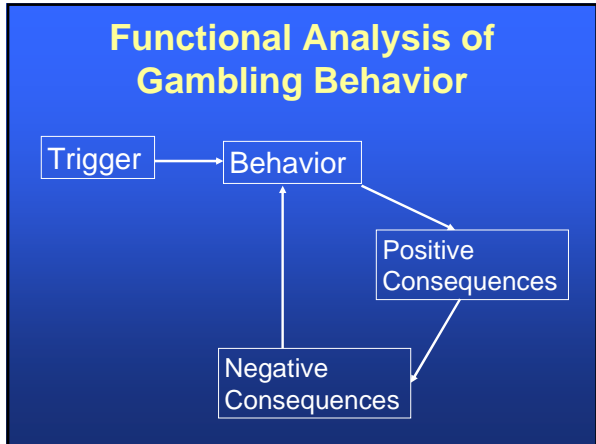
After several months of arguing, Maggie pleads with Joel to get some help. Though he doesn't think his gambling is causing his problems, he agrees to start treatment to make his wife happy. He presents for therapy and you are his provider.

Session 1 with Joel

- Triggers:
 - Having a "big day" at work
 - A bad day at work
 - When he's depressed / after arguing with wife
 - Thinking about finances
- Safe:
 - Spending time with his kids
 - Sundays at home
 - First thing in the morning
 - When kayaking / hiking / camping

Session 2: Functional Analysis

- Discuss concept of gambling as a habit
- List top triggers for gambling
- Positive consequences of gambling
- Negative consequences of gambling
- Identify the ways in which the negative consequences of gambling ultimately lead to more gambling
- Put it all together



Most Commonly Reported Positive Consequences

Category	Example	%
Positive mood	Feel great if I win; The rush; Excitement	80%
Escape	Take mind of problems; Get away; Distraction	53%
Social Opportunity	Talk with others; Something to do	26%
Make money	Puts money in my pocket	26%

Most Commonly Reported Negative Consequences

Category	Example	%
Negative mood	Lose self-worth; Hate myself; Hopeless/Dep	62%
Lose money	No money left	47%
Financial problems	Owe money; Debts piling up; Can't pay bills	43%
Problems with spouse or family	Wife is mad; Less time w/ family; Divorce; Lost trust	37%

- ### Session 3: Increasing Pleasant Activities
- Pleasant events checklist
 - Identify activities that are done alone or with others
 - Differentiate between spontaneous and planned activities
 - Plan high-risk times in the coming week
 - Identify people and times to try different activities

Most Commonly Reported High-Risk Times for Gambling

Category	Example	%
Specific day of the week	Weekends	33%
Mood dependent	Feel bored; Stressed out; Lonely	30%
Unstructured time	Day off w/out kids; After work; Nothing to do	27%
Access to money	Paid; Extra cash in wallet	22%
Gambling cue	Lotto commercial; Dinner at casino; Game on TV	19%

Help Problem-Solve New Activities for High-Risk Times

What are some situations in the coming week where you will be at increased risk of gambling?

High-risk time	Alternative activity
1) _____	1) _____
2) _____	2) _____
3) _____	3) _____

Problem-Solving with Joel

High risk times	Alternative activity
1. When feeling depressed (<i>spontaneous</i>)	Hiking with wife Walking the dog
2. After work (<i>planned</i>)	Cooking. Time w/ kids
3. Argument w/ wife (<i>spontaneous</i>)	Watch basketball Gardening
4. Home alone / bored (<i>planned & spont</i>)	Rent movie. Go to museum

Session 4: Seemingly Irrelevant Decisions (SIDs)

- Define SIDs
 - Choices that seem unrelated to gambling, but in fact are related
- Identify past SIDs
 - Going to lunch with gambling friends
 - Keeping gambling paraphernalia
- Develop ways to rearrange the environment
 - Throw away paraphernalia
- Develop coping methods for future

Coping Strategies

(What to do if you encounter a trigger?)

Trigger	Possible alternative bx.	Difficulty of alt bx (1-10)
Find extra cash in coat pocket	-Talk about feelings -Give \$ to spouse	10 3
Get in argument with spouse	Hang out with brother	2
Home alone and bored	Rent a movie	8
Want to celebrate	Take family out to dinner	5

Most Commonly Reported Coping Strategies in Session 4

Category	Example	%
Distraction	Do something fun; Keep busy; ↑ pleasant events	45%
Avoid triggers	Pay bills right away; Avoid restaurants with video poker machines	40%
Social support	Talk w/ spouse, family	26%
Cognitive skills	Consider consequences; Gambling refusal	21%

Session 5: Urge Surfing and Coping with Cravings

- Normalize gambling urges
- Urge surf
- Coping Mechanisms
 - Avoidance
 - Distracting activities
 - Social support
 - Challenge your thoughts

Most Commonly Reported Physical and Emotional Cravings

(When you want to gamble, how do you feel?)

Category	Example	%
Specific bodily reaction	Heart pounds; Headache; Tightness in stomach	36%
Nonspecific bodily reaction	Jittery feeling all over; Feel flushed; "Pressure"	30%
Emotions	Stressed; Anxious; Excited	25%
Thoughts	Negative flashbacks; Dreams of winning	25%

Planning for Triggers

Trigger	Coping Strategies
1. See sign on drive home	-Take a different route home
2. Going to dinner with gambling friend	-Bring along social support -Tell friend you don't gamble -Don't go
3. Bad day at work	-Talk with spouse -GA meeting -Go to the gym

Session 6: Assertiveness Training

- Three response styles for handling offers to gamble or interpersonal triggers:
 - Passive
 - Aggressive
 - Assertive
- Identify situations (past and future)
- Practice, role play

Passive Responding

Involves "giving in" when conflicts arise. Passive people tend not to express their thoughts and feelings. This response style can lead to not getting needs met, and resulting anxiety, depression, and/or anger.

Aggressive Responding

Involves doing what one wants, regardless of needs or wants of others. Aggressive people may often get what they want, but do so to the detriment of others. This may result in isolation and/or frustration.

Assertive Responding

This response style involves expressing opinions, feelings, and wants. Assertive people avoid threats or negative statements, and ask for input and suggestions from others. Assertive people can say NO when necessary, but they do so in a way that makes them feel good about their decisions.

Assertiveness Training

- Discuss situations in the past that client did not respond assertively.
 - This may or may not have directly involved gambling.
- Problem-solve how the situation could have been handled differently.
- Identify situations/interactions in the coming week in which it might be helpful to be more assertive.

Most Commonly Reported Situations in which Assertiveness Skills are Needed

Category	Example	%
Not applicable	Gamble alone; Not pressured by others	48%
Social pressure	Visitor in town; Only thing I do w/ friend is gamble; Someone asks	39%
Environmental cue	Work meeting/dinner at casino; Bachelor party	20%
Gaming industry cue	Receive free offers from casino; See ads on TV	12%

Joel's Problem-Solving on Assertiveness

- Start saying NO when colleagues invite him for lunch
- Have an honest conversation with wife about finances
- Tell Maggie that he has also been battling depression and this is a difficult time for him also
- Tell other friends/colleagues that he does not gamble any more and to not invite him again

Session 7: Changing Irrational Thinking

- Discuss 3 gambling-specific irrational thoughts that often lead to gambling:
 - Over-estimating the odds of winning
 - Gambler's Fallacy
 - Availability Illusion
- Review client's personal self-deceptions
- Differentiate between thoughts that are due to inside causes vs. outside causes

Over-Estimating the Odds of Winning

What are the odds of winning a million dollars in the lottery?



Over-Estimate the Odds of Winning

The odds of:

Winning \$1 million	1 in 13,000,000
Killed in car accident	1 in 53,000
Choking to death	1 in 68,000
Struck by lightning	1 in 2,000,000

Gambler's Fallacy

Kim is the mother of seven girls and is again pregnant. She is hoping for a son this time. The odds are also clearly in her favor. Even her physician tells her that her chances of having another girl are less than 1 in 200.

However, when she has the baby, it is another girl. How can this be?



Gambler's Fallacy

The probability of having eight girls prior to having had any children is: $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$. This equals 1 in 256.

But the odds of any one baby being a boy are 1 in 2.

The gender of past babies has nothing to do with the gender of future babies.

Gambling Example of the Gambler's Fallacy

- I'm going to flip a coin, and I want you to guess if it will out heads or tails.
- Do you want to see the results of the past 5 tosses?
- H T H H H
- Which is most likely to occur, heads or tails?

Gambler's Fallacy

- Gambler's often think that past performance predicts future performance:
 - Being on a hot streak (good luck)
 - Due for a win after a bunch of losses (bad luck)
- How can both wins and losses predict future winning?

Availability Illusion

- Is the letter "K" more likely to appear as the first letter or the third letter in words?

Availability Illusion



- "K" is twice more likely to appear as the third letter, but it's easier to think of words beginning with "K."

Availability Illusion

- Many gamblers can easily recall their big wins and people they know who won large sums of money.
- It is easy to forget about all the people they know who've never won big.
- And all the times they pushed the button or played cards and didn't win.

Joel's Self-Deceptions

- Gambler's Fallacy
 - This was the first time that he truly identified that he does in fact use winning streaks to indicate he is "due for a win", as well as noting that having lost a bunch recently signals a win is around the corner.

Joel's Self-Deceptions

- Availability Illusion
 - More than remembering his big wins and forgetting his numerous losses (which he also did), Joel remembered the resulting feelings from his big wins. He frequently gambled in hopes of getting those positive feelings again.
 - When Joel heard about others hitting it big, it served as a trigger for him. "If they can win, why not me!"

Most Commonly Reported Self-Deceptions that Promote Gambling

Category	Example	%
Betting strategies	New dealer; Deck change; Always win right when I start	48%
Luck	Feel lucky; Tuesdays are lucky; I have good luck	38%
Based on statistics	Have a system; Research	24%
Due a win/on a winning streak	Have to win sometime; Feel like I can't lose	24%

Session 8: Relapse Prevention

- Provide information about the factors that are most associated with relapse
 - Can be both negative and positive events
- Have the client identify situations in the future that could lead to a relapse
- Problem-solve methods for coping with future triggers
- Personal emergency reminder sheet
- What to do if experience a lapse

Most Commonly Reported Coping Mechanisms in Session 8

Category	Example	%
Social support	Call wife/husband; Talk with friends	67%
Professional/para-professional supp.	Talk w/ therapist; Pastor; GA meeting	43%
Cognitive skills	Functional analysis; Think of consequences; Urge surf	31%
Distraction	Keep busy; Alt bx.	26%
Avoid	Give \$ to spouse; Avoid gambling friends	19%

Relapse Prevention with Joel

Future situations that could lead to a relapse:

- (1) another depressive episode
- (2) either he or his wife losing their job
- (3) death of his parents

Planning:

- (1) get treatment for depression early; talk w/ Maggie
- (2) recognize this as a vulnerable time; return to GA; perhaps take a "temp" position to help make ends meet
- (3) have the money transferred directly to retirement accounts; consult with a financial planner

Personal Emergency Reminder Sheet

- Leave the situation
- Put off the decision to gamble for 15 min.
- Challenge thoughts
- Think of and do something unrelated to gambling. Review list of alt. activities
- Remind myself of my successes
- Remind self of what I have to lose
- Call support persons

Lapse versus Relapse

- Get rid of all gambling paraphernalia
- Realize 1 slip does not equal relapse
- Call social support contact(s)
- Conduct functional analysis; identify triggers that precipitated gambling episode
- Develop coping strategy plan for future events
- Identify any illogical thoughts associated with the slip

Conclusion with Joel

In the course of treatment, Joel markedly increased his participation in numerous social and leisurely activities. He had begun exercising regularly, started "dating" his wife again, did several activities with his adolescent kids, and was making plans to go for a weekend vacation to the coast (if he met his goals).

As a result of these activities, his urges to gamble did not occur as frequently.

When he did have the urge to gamble, he would use a series of coping statements that he had developed, including reminding himself of what would happen if he returned to gambling, remembering the negative things that resulted from gambling, identifying the positive things that occurred as a result of not gambling, and also identifying that it was just an urge and he could tolerate it without gambling (urge surfing).

During particularly difficult times, he got support from his wife. He also discussed the triggers in his sessions with his therapist and was able to identify where the urges were coming from and recognized that he needed to get his needs met in other ways.

Acknowledgements

- Evergreen Council on Problem Gambling
- Nancy Petry, Ph.D.
- Jeremiah Weinstock, Ph.D.
- David Ledgerwood, Ph.D.
- Linda Maddy, MSW
- Kelly Buckman, MSW
- Katherine Elder, Ph.D.

Thank you!