

# More adolescents are gambling—with addiction

When does social betting become problem behavior?

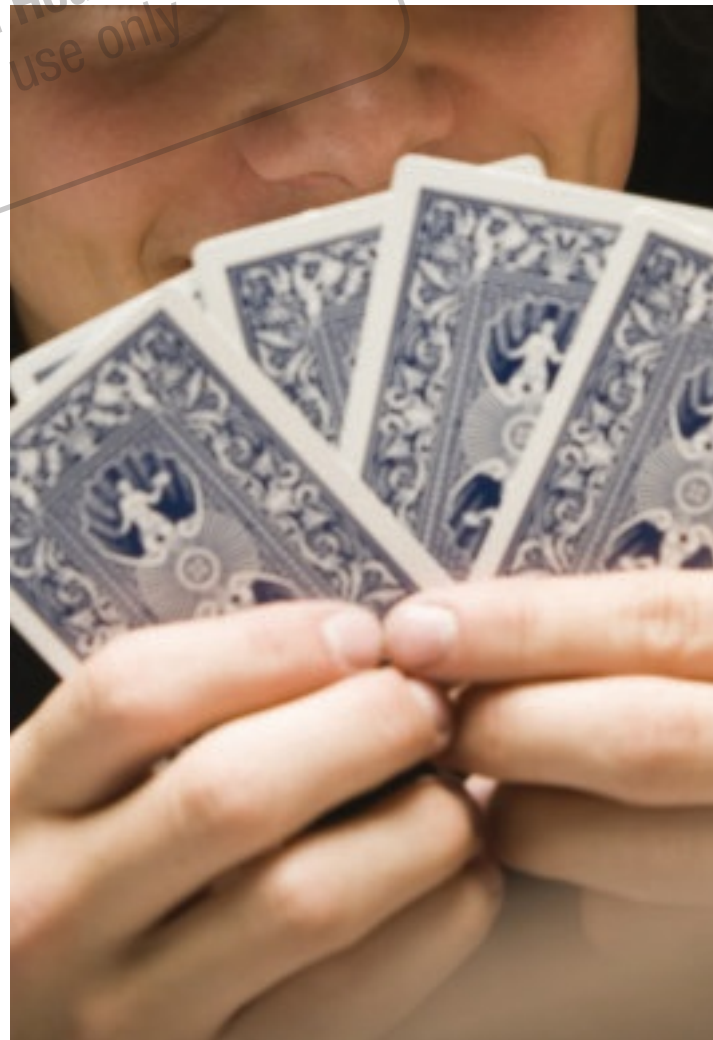
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**M**att, age 17, grew up in a household of gamblers. He learned to play poker from his father at age 8 and bet on sports with his friends in the 5th grade. For 2 years he has been playing poker three to four nights per week and watching a lot of televised poker. His parents worry he might be “addicted” to gambling and bring him for evaluation.

Easy access to gambling through casinos, lotteries, and Internet games has affected many social groups, particularly adolescents.<sup>1</sup> Teens such as Matt are more likely than adults to become pathological gamblers,<sup>2</sup> and they often have psychiatric disorders and antisocial behavior patterns that interfere with normal development. This article:

- suggests screening tools to identify problem teen gambling
- discusses how to use psychotherapy, medications, and other options to help gambling-obsessed adolescents change their high-risk behavior.



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continued



Table 1

### Adolescent gambling: From entertainment to mental illness

Behavior	Prevalence in U.S. teens (%)	Definition
<b>Social gambling</b>	80 to 85	Gambling socially for a limited amount of time with predetermined, acceptable losses
<b>Problem gambling</b>	10 to 14	Gambling for recreation at the expense of other developmental activities; may interfere with time management, productivity, and relationships
<b>Pathological gambling</b>	4 to 8	Persistent and recurrent gambling that disrupts personal, family, or vocational pursuits

Source: References 3, 10.

#### WHY ADOLESCENTS GAMBLE

Gambling activates the same neural reward pathways affected by cocaine and amphetamines.<sup>3</sup> Even so, many adolescents view gambling as less harmful than drugs<sup>4</sup> and consider it a rite of passage:

- 90% report having gambled for money
- 75% have gambled at home for money
- 85% of parents do not object to gambling behaviors, teens say.<sup>4,5</sup>

Adolescents gamble to win money and for excitement and entertainment, social acceptance, as a coping mechanism, or to feel a “rush.” Gambling is particularly attractive to adolescents who enjoy competing with peers. Being in a group that gambles offers a sense of community and shared experience.<sup>6</sup>

**Adolescent gambling behavior.** For approximately 85% of adolescents, gambling becomes no more than a social activity. For others, it can become problematic or even pathological (*Table 1*).<sup>5,7</sup> Approximately 4 to 8% of adolescents meet criteria for pathological gambling, compared with 1% of adults.

Adolescents’ higher rate might reflect pathological gambling’s natural course—peaking dur-

ing adolescence, then tapering during adulthood. Some adolescents may adapt their gambling behavior over time. Problem gambling tends to be more transient and episodic than pathological gambling, remitting when adolescents take on new responsibilities (such as with college, marriage, employment, or death of parents).<sup>8</sup>

#### CASE CONTINUED: ‘UP BIG-TIME’

Matt says he loves to gamble and believes he is more gifted at poker than his peers. He also recognizes his behavior could be addictive and admits lying to his parents about his gambling. He plays Internet poker 3 to 4 hours per day and claims he wins more often than he loses. “I’m up big time,” he boasts.

Matt denies going to casinos or using bookies. He says he is managing school and home responsibilities without difficulty. He denies mood or anxiety symptoms but admits using methylphenidate while gambling. He obtains the stimulant from friends at school and usually snorts it to get “a bigger rush.”

Matt is clearly at risk for problem gambling. He was exposed to gambling early, is becoming preoc-

continued on page 63

continued from page 60

cupied with it, lies about how much he gambles, and combines gambling with substance abuse. Compared with adults, adolescent gamblers progress more rapidly and can become problem gamblers within 12 to 14 months.<sup>2</sup>

Neurobiologic differences between adolescent and adult pathological gamblers are not well-defined. Adults show evidence of dysregulated dopamine, norepinephrine, and serotonin neurotransmission.<sup>9</sup> Neuroimaging in adult pathological gamblers shows perturbations in reward processing centers and frontal lobe structures that control inhibition. These factors have been examined little in adolescents.

### IDENTIFYING PROBLEM GAMBLING IN TEENS

Diagnostic “red flags” for problem gambling in adolescents include declining school performance, sleep disturbance, generalized anxiety or irritability, or possibly lack of response to general psychiatric treatment. Three tools can be useful for screening adolescents:

**The Lie-Bet Questionnaire**<sup>10</sup> is a 2-question screen for problem gambling:

- Have you ever lied to anyone important about how often you gamble?
- Have you ever had to increase your bet to get the same excitement from gambling?

Explore at-risk gambling with patients who respond positively to either question.

**The South-Oaks Gambling Screen**<sup>11</sup> is the standard pathological gambling screen for adults. Like the original, a revised version for adolescents (SOGS-RA) is based on and validated using DSM-III criteria (*see Related resources*). A score of 2 to 5 indicates at-risk gambling behaviors, and scores  $\geq 6$  indicate need for treatment.

**The Gamblers Anonymous questionnaire**<sup>12</sup> comprises 20 questions that identify negative social, physical, and emotional consequences of gambling behav-

iors (*Box, page 64*). Seven or more positive responses indicate probable pathological gambling. This screen has shown reliability in adolescents.

Use one or more of these quick screens with every adolescent presenting for treatment—especially in substance abuse treatment settings. When results are positive, probe for gambling behaviors and consequences. Rely on DSM-IV-TR criteria and clinical presentation to differentiate social gambling from pathological gambling.

Substance abuse at least triples an adolescent's risk of pathological gambling

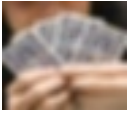
### BEHAVIORS AND COMORBIDITIES

**Negative consequences.** Pathological gambling often consumes 10 to 20 hours per week of the adolescent's time,<sup>13</sup> hurting school performance and delaying developmental milestones. Teen gamblers may abandon extracurricular school activities, and their few friends often gamble, too.

They are at risk for delinquency, criminal activity, and antisocial behaviors (such as selling drugs, engaging in prostitution)<sup>14</sup> unprotected sexual activity, drug use, reckless driving, and carrying weapons.<sup>15,16</sup>

**Psychiatric comorbidity** is the rule and often what brings adolescent gamblers to treatment. Substance abuse, major depression, attention-deficit/hyperactivity disorder, and personality disorders are most common (*Table 2, page 69*).<sup>17</sup> Adolescent substance abuse at least triples the risk of pathological gambling.<sup>18</sup>

Adolescent pathological gamblers have increased rates of suicidal ideation and suicide attempts.<sup>17</sup> They are at risk for other impulsive behaviors as well,<sup>19</sup> although they are unlikely to volunteer this information. The Minnesota Impulsive Disorders Interview can help identify comorbid pathological gambling, trichotillomania, kleptomania, pyromania, intermittent explosive disorder, compulsive buying, and compulsive sexual behaviors.<sup>19</sup> Screen for these comorbidities



Box

## Gamblers Anonymous 20 questions (GA-20) for compulsive gambling behaviors

Most compulsive gamblers will answer “yes” to at least 7 of these questions:

1. Did you ever lose time from work or school due to gambling?
2. Has gambling ever made your home life unhappy?
3. Did gambling affect your reputation?
4. Have you ever felt remorse after gambling?
5. Did you ever gamble to get money with which to pay debts or otherwise solve financial difficulties?
6. Did gambling cause a decrease in your ambition or efficiency?
7. After losing did you feel you must return as soon as possible and win back your losses?
8. After a win did you have a strong urge to return and win more?
9. Did you often gamble until your last dollar was gone?
10. Did you ever borrow to finance your gambling?
11. Have you ever sold anything to finance gambling?
12. Were you reluctant to use "gambling money" for normal expenditures?
13. Did gambling make you careless of the welfare of yourself or your family?
14. Did you ever gamble longer than you had planned?
15. Have you ever gambled to escape worry or trouble?
16. Have you ever committed, or considered committing, an illegal act to finance gambling?
17. Did gambling cause you to have difficulty in sleeping?
18. Do arguments, disappointments, or frustrations create an urge to gamble?
19. Did you ever have an urge to celebrate any good fortune by a few hours of gambling?
20. Have you ever considered self-destruction or suicide as a result of your gambling?

during the first sessions or if a patient does not respond to treatment of gambling behavior.

### TREATING ADOLESCENT GAMBLERS

Matt's answers to the gambling screening questionnaires (one “yes” to the Lie-Bet Questionnaire, a SOGS-RA score of 4, and a GA-20 Questions score of 5) indicate problem gambling but not pathological gambling. You recommend that he attend Gamblers Anonymous, but he refuses. He also rejects individual therapy or taking medications.

Matt acknowledges misusing methylphenidate, however, and agrees to consider an outpatient sub-

stance abuse program. He also agrees to six sessions with a gambling treatment specialist to learn about problem gambling's signs and symptoms, how to cope with betting losses, and how to reduce his preoccupation with gambling.

No guidelines exist for treating adolescent pathological gamblers, and specialized teen treatment programs are rare. Most services are provided in mental health or substance abuse settings, using adult treatments modified for adolescents.

**Cognitive behavioral therapy (CBT)** can be successful for highly motivated gamblers, although ado-

continued on page 69

continued from page 64

Table 2

## Risk factors for pathological adolescent gambling

Component	Risk factors
<b>Family history</b>	Family history of gambling problems; possible genetic influences (neurotransmitter activity, risk-taking behaviors, risk perception, heightened physical response to rewards)
<b>Psychiatric comorbidity</b>	Substance abuse, mood/anxiety disorders, ADHD
<b>Personality traits</b>	Low self-esteem, competitiveness, sensitivity to stress or rejection, peer influences, immaturity, suicidal tendencies
<b>Social factors</b>	Early-age exposure to gambling, having peers who gamble regularly, increased access to gambling (such as via the Internet), chaotic home environment (divorce, neglect, abuse)

ADHD: attention-deficit/hyperactivity disorder

lescents might not want to change their pathological behaviors. In case reports, four adolescents achieved remission after 6 months of CBT.<sup>20,21</sup> CBT appears to have long-term benefits for adults, but this has not been evaluated in teens. Even so, individual CBT may be ideal for adolescent gamblers because side effects are minimal.

**Gamblers Anonymous (GA)** in adults has shown a low retention rate and a 1-year abstinence rate of <8%.<sup>22</sup> Its effectiveness for adolescents lacks empiric support, but the 12-step program's availability, structure, and fellowship may be useful.

**Medications.** Consider medication as first-line treatment for adolescents with psychiatric comorbidity. Try psychosocial treatment first for those without psychiatric comorbidity; consider medication as second-line therapy if response to psychosocial treatment is inadequate.

No medications are FDA-approved for pathological gambling, and no studies have examined medication use for adolescent gamblers. Controlled trials with adults suggest some medications may reduce urges and cravings or decrease gambling behaviors. These include:

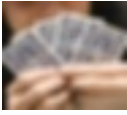
- selective serotonin reuptake inhibitors
- opioid antagonists such as naltrexone or its analogue nalmefene
- or mood stabilizers such as lithium, divalproex sodium, or possibly topiramate.<sup>23</sup>

Adult dosages do not need to be adjusted for adolescents with pathological gambling and comorbid psychiatric disorders.<sup>1,24</sup> Psychotropics could potentially increase pathological gambling behaviors, so monitor for changes.

**Working with families.** Many parents are aware of the destructive potential of substance abuse but not of gambling. They may feel shame that they did not recognize their teen's gambling problem or "control" their child's behavior. The adolescent may feel remorse for having bet with the parents' money.

Even when the family recognizes the teen's problem, denial or enabling can perpetuate the behavior. For teens such as Matt who learned to gamble at a home, advise the parents to abstain from gambling as well. Consider screening the parents for pathological gambling, given its high rate of heritability.

continued



## Teen gambling

Address guilt and shame by acknowledging that pathological gambling is a psychiatric disease caused by biological, psychological, and social factors—not dysfunctional family relations. Emphasize that treatment works. Because gambling is easily hidden, educate families about relapse signs, such as preoccupation with money, personality changes, or failing to fulfill family responsibilities.<sup>25</sup>

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### Related resources

- ▶ Wiebe JM, Cox BJ, Mehmehl BG. The South Oaks Gambling Screen Revised for Adolescents (SOGS-RA): further psychometric findings from a community sample. *J Gambl Stud* 2000;16(2-3):275-88.
- ▶ Gamblers Anonymous. [www.gamblersanonymous.org](http://www.gamblersanonymous.org).
- ▶ National Council on Problem Gambling. [www.ncpgambling.org](http://www.ncpgambling.org).
- ▶ International Centre for Youth Gambling Problems and High-Risk Behaviors. [www.youthgambling.com](http://www.youthgambling.com).

### DRUG BRAND NAMES

Nalmefene • Revex	Divalproex sodium • Depakote,
Naltrexone • ReVia	others
Lithium • Lithobid, others	Topiramate • Topamax

### DISCLOSURES

Dr. Fong receives grant/research support from Ortho McNeil Pharmaceutical and Somaxon Pharmaceuticals and is a speaker for Forest Pharmaceuticals.

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Probe for behavioral 'red flags' when screening tests show an adolescent at risk for problem gambling. Individual cognitive behavioral therapy may be ideal. Address denial and guilt in teens and their parents. Treat substance abuse or other psychiatric comorbidities, using psychotropics when indicated.

# BottomLine