



IS SPEEDING A FORM OF GAMBLING BEHAVIOR?

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Background:

Speeding is a major contributor to motor vehicle injuries and deaths, especially among younger drivers. While impulsivity has been linked to the neurobiology of gambling,^{1,2} how fast gamblers drive over the posted speed limits (speeding) has not been specifically evaluated. In our clinical experience, pathological gambling patients often describe speeding as embodying a sense of winning (i.e. beating time, boredom, police, and other cars as if on a raceway).



The picture on the right is captioned *Thrill Hill "Airborn" Incident 3-14-97 in Ford Thunderbird*. The teen driver and his 4 teenage passengers were speeding in an attempt to make the car airborne. All of the teens were wearing seatbelts and none were seriously injured in this accident.

http://www.car-accidents.net/pages/accident_story/6-10-01.html

Methods

We have completed the first statewide survey of gambling and problem gambling in Florida adolescents ages 13 to 17 (n=1,051). This phone survey asked respondents about gambling activities, demographic questions, and speeding. Self-reported speeding and intent to speed have been shown to correlate with actual driving speed. High risk speeding for the purposes of this study was defined as driving ≥ 10 miles/hour (mph) over the posted speed limit during the past year.

Results

A simple correlation analysis (ages 15 to 17) revealed that speeding as measured by miles per hour (mph) self-reported over the speed limit, is significantly related with gambling behavior as well as with alcohol, tranquilizers, marijuana, cocaine, and stimulants/amphetamine usage. All the p-values were less than 0.001. When all the factors were put together in a linear prediction equation, four factors have the greatest influence. They are: past year gambling tendency (1.72mph/category increase with 0 =nongambler; 1 = low-risk gambler; 2 = at-risk gambler; and 3 = problem/pathological gambler, $p<0.002$); age (2.42mph/1yr increase, $p<0.0001$); trouble with the police due to drinking (4.66mph/times reported trouble, $p=0.002$) and tranquilizer usage (0.09mph/day of usage, $p<0.0001$).

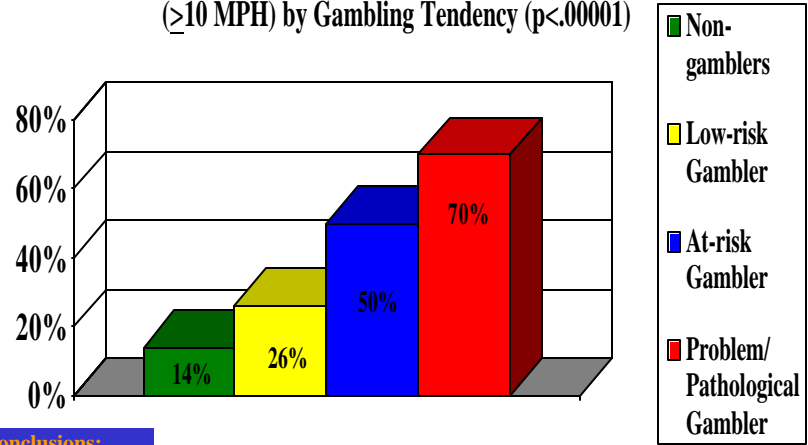
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Results continued

Interestingly, gender had no significant effect on speeding ($p=0.499$) in this study. Limitations include that respondents were asked "on the average" how fast they drive which could over- or under-represent highway or city driving. Furthermore, speeding was self-reported and not externally validated. However, self-reported speeding and intent to speed have also been shown to correlate with actual driving speed.

High Risk Speeding by Gambling Tendency

Percentage of Adolescents Engaged in High Risk Speeding (≥ 10 MPH) by Gambling Tendency ($p<0.00001$)



Conclusions:

Our data indicates a relationship between gambling and speeding; non-gambling adolescents reported speeding significantly less than all other gambling groups, and the incidence of high-risk speeding progressively increased with worsening gambling behavior. Speeding is a form of risk-taking behavior that appears similar to gambling. The participation in potentially dangerous activities with little regard for consequences is a common characteristic of adolescents, and the hallmark of impulse control disorders such as gambling. The hypothesis that speeding is therefore a form of gambling behavior in adolescents is supported by the results of this study.

References:

1. Chambers RA, Potenza MN. Neurodevelopment, impulsivity, and adolescent gambling. *J Gambling Studies* 2003;19: 53-84.
2. Potenza MN, Steinberg MA, Skudlarski P, et al. Gambling urges in pathological gambling: a functional magnetic resonance imaging study. *Arch Gen Psychiatry* 2003;60: 828-836.

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