## The WAGER Vol. 10(5) - Growing Pains: The progression of gambling problems from adolescence to young adulthood

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Growing Pains: The progression of gambling problems from adolescence to young adulthood

Researchers (Gupta & Derevensky, 1998; Jacobs, 2003; Shaffer, Hall, & Vander Bilt, 1999) have noted higher past-year prevalence rates of problem gambling among young people than among adults. Difference in the past-year prevalence could be due to a decrease in problem gambling with greater maturity. The differences might also be due to real differences between young people and adults or more basic measurement problems (e.g., inaccurate adolescent estimates and lack of commonality across populations in defining gambling problems). Without prospective study, any of these interpretations is possible. This week, the WAGER examines a longitudinal study by Winters, Stinchfield, Botzet and Slutske (2005) that identifies and compares the course of at-risk and problem gambling during the transition from adolescence to young adulthood. This study uses a methodological and data analytic approach similar to Slutske, Jackson, and Sher's (2003) prospective study reviewed previously in WAGERs 8(26) 8(27), and 8(28).

Researchers recruited 350 young people to participate in a longitudinal study.1 Of these, 305 participants completed telephone assessments at all three time periods: T1 (1992), T2 (1994), and T3 (1997-1998). Interviewers obtained parental consent for minor participants. Among other measures of gambling involvement and frequency, the assessment consisted of the South Oaks Gambling Screen for adolescents (SOGS-RA) (Winters, Stinchfield, & Fulkerson, 1993) at T1 and T2, and the South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1987) at T3. Mean age of participants at each of the three time periods was 16, 17.6, and 23.8. To allow comparison across waves, the researchers used only the 12 items that they considered equivalent between the SOGS and SOGS-RA to define three gambling severity groups: No problem gambling (N) = a score of 0 or 1; At-risk

gambling (A) = a score of 2 or 3; and Problem gambling (P) = a score of 4 or more.

Based on these groupings, researchers assigned labels to four possible courses of gambling problem progression: resistors – those grouped as non-problem gamblers at all of the three time points; persistors – those consistently grouped as either at-risk or problem gamblers; desistors – those who changed from either problem gambling or at-risk gambling to non-problem gambling without a return to their previous state; and new incidence cases – those who were non-problem gamblers at T1 but advanced to at-risk or problem gambling behavior during one or both of the later time periods. Table 1, using the letter designations, N, A, and P, for the groups (defined above) presents the courses of gambling severity over the three time periods.

Table 1. Frequencies of gambling severity group trajectories across the three time periods (N=305).

Group	n	%	Group	n	%
Resistors (NNN)	182	59.7	New Incidence Cases	63	20.7
Persistors	11	3.6	NNA	45	
AAA	4		NNP	1	and the s
AAP	1		NAP	1	1919193
APA	0		NPP	4	127 728
APP	1		NPA	3	
PAA	1		NAA	9	1500000
PAP	0		Other	8	2.6
PPA	2		NAN	3	12/20/24
PPP	2		NPN	3	1021193
Desistors	41	13.4	ANA	0	
ANN	23		ANP	2	anded (in)
AAN	15		PNA	0	12000
APN	1		PNP	0	
PAN	2			100	200
PPN	0		TOTAL	305	100
PNN	0		* (0) * (0)	100	8888

Table adapted from Winters et al., 2005.

**Note:** N = no problem gambling; A = at-risk gambling; P = problem gambling classifications made using SOGS-RA and SOGS)

As Table 1 shows, most cases (60%) fell into the resistor category, indicating no problem gambling at any point during the study. The next largest group was "new incidence cases" which represented 21% of all cases. Only 3% of participants qualified as persistors, maintaining at-risk or problem gambling throughout all three time periods. Thirteen percent of participants fell into the desistors group, beginning as either at-risk or problem gamblers, but completing the study as non-problem gamblers. Almost 93% of desistors were never classified as problem

gamblers during the study; as shown in Table 1, these participants had a code of either ANN or AAN.

If we define adolescence as time periods T1 and T2, and we define adulthood as time period T3, then the data show that researchers classified 25% (77 of 305) of the adolescent sample as either at-risk or problem gamblers, and they classified 25% (76 of 305) of the adult sample as at-risk or problem gamblers. However, the rate of problem gambling (not at-risk) among adults is two-thirds the rate of problem gambling among adolescents (12 adults or 4% compared to 19 adolescents or 6%).

The study suggests that, although the percentage of at-risk or problem gamblers does not change between adolescence and young adulthood (25% for both), the percent of problem gambling does change (6% to 4%). Moreover, given the percentage of desistors (13%) and new incidence cases (21%), many young people dramatically change their gambling behavior between adolescence and adulthood. Also, fewer young adults qualify for problem gambling compared to adolescents. This parallels earlier work investigating prevalence estimates of problem gambling (Shaffer et al., 1999). This research also suggests that a substantial number of young people (8%) qualify as problem gamblers (as defined by the SOGS-RA and the SOGS) at some point between adolescence and young adulthood. It is notable that about 89% of those who reported at-risk level SOGS-RA scores at T1 never escalated to more serious gambling problems at T2 and T3; this implies that those who score as at-risk might either (a) not be at risk in the near future for more serious gambling problems or (b) not be at risk at all.

The design of this study offers important advantages over the cross-section studies commonly used to examine youth gambling. The longitudinal design of this study allows analysis of two important aspects of youth gambling behavior. With this design, researchers can document not only prevalence, but also incidence rates at each assessment period. A limitation of this study is that the researchers evaluated participants with the SOGS-RA at time periods T1 and T2, but used the original SOGS at T3. Though they only used equivalent items, it is possible that slight differences between these items could partially account for the change in problem gambling behavior between T2 and T3. Finally, obtaining parental consent for minors, though necessary, might have influenced participants to under report gambling-related problems.

Gambling problem progression during adolescence appears to be a dynamic phenomenon. This study confirms the shifting natural history of gambling problems, as the few existing longitudinal studies on gambling behavior previously have suggested (Shaffer & Hall, 2002; Slutske et al., 2003; Winters, Stinchfield, Botzet, & Anderson, 2002). Winters et al. remind us once again that future research needs to employ more longitudinal designs, using an individual level of analysis, to consider both the lifetime and past-year measures of gambling severity.

What do you think? Comments on this article can be addressed to Michael Stanton.

## **Notes**

1. A previous article by Winters and colleagues (Winters et al., 2002), reviewed in WAGER 7(17), reports prevalence rates across the three waves of data for this sample.

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