The WAGER, Vol. 17(4) – Bad behavior makes for bad bets? Early childhood temperament as a predictor of later disordered gambling

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Research suggests that negative emotionality and impulsivity are risk factors for disordered gambling. In a previous WAGER (WAGER 17(2)), we reviewed a recent study linking impulsive behavior at age 7 to lifetime gambling problems. This week, the WAGER reviews a study that extends those results further, examining the link between temperament at age 3 and disordered gambling in adulthood (Slutske, Moffitt, Poulton, & Caspi, 2012).

Method

- Participants, recruited as part of a longitudinal study of health and behavior, included 91% of all people born in a single town in New Zealand between April 1972 and March 1973 (N=1,037). Nine hundred fifty-nine of those participants (93%) participated both at age 3 and at age 21 and/or 32.
- At age 3, researchers classified participants into one of five temperament groups based on their observed behavior: Undercontrolled (e.g., restless, impulsive, emotionally labile); Inhibited (e.g., fearful, shy); Confident (e.g., shows little caution, quick adjustment); Reserved (e.g., shy, but not as shy as participants classified as inhibited); or Well-adjusted (i.e., not particularly high or low on any measured temperament variable).
- At 21, researchers classified participants who spent $50 or more within a single month during the past year and answered yes to at least one of the South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987) items as disordered gamblers. At 32, researchers classified participants who answered yes to at least one of the Sydney Laval Universities Gambling Screen (SLUGS; Blaszczynski, Ladouceur, & Moodie, 2008) items and

endorsed at least one of the National Opinion Research Center DSM-IV Screen (NODS; Gerstein et al., 1999) items as disordered gamblers.
- The researchers conducted logistic regressions comparing age-3 temperament groups on disordered gambling outcome (i.e., disordered gambling at either age 21 or 32), controlling for sex, childhood IQ, and age-3 family SES.

Results

- Children who had undercontrolled temperament at age three were significantly more likely than those in the well-adjusted group to exhibit disordered gambling at age 21, $\chi 2(1, N = 930) = 6.98$, $p = .008$, and age 32, $\chi 2(1, N = 948) = 7.30$, $p = .007$. This association remained significant after controlling for sex, IQ, and SES.
- The rates of disordered gambling in the other temperament groups were not significantly different from the rates in the well-adjusted group.

Table 1: Percentage of adults who met the criteria for disordered gambling as a function of temperament at age 3 (adapted from Slutske et al., 2012)

Temperament	Percent classified as disordered gamblers in adulthood		
	Male	Female	Overall
Undercontrolled	39%	12%	28%
Inhibited	24%	18%	22%
Confident	22%	11%	16%
Reserved	27%	5%	16%
Well-Adjusted	19%	6%	13%

Note. Percentages are approximate, derived from the Figures in Slutske et al. (2012).

Limitations

- Researchers classified individuals who endorsed *any* gambling problems at *either* age 21 or age 32 as disordered gamblers; DSM-IV requires endorsement of 5+ criteria to qualify for pathological gambling. The associations between childhood temperament and a more stringent definition of disordered gambling might be different, or even absent.
- Because the researchers did not measure disordered gambling until adulthood, this study had limited ability to trace the development of gambling behaviors and problems over time.
- The researchers controlled for socioeconomic status and intelligence in their analyses, but not for other, additional factors that could have influenced the etiology of disordered gambling.

Discussion

The results of this study are in line with previous evidence that low impulse control and high negative affect can predict vulnerability to disordered gambling behavior. Poor self-control has been implicated in a range of negative life outcomes, including poor physical health, low income, substance use disorder, and criminality (Moffitt et al., 2011). Future research should work on refining the nature of the relationship between early childhood impulse control and gambling, to determine whether there are unique associations with gambling or whether early impulse control problems simply put children at risk for a range of risky behaviors.

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What do you think? Please use the comment link below to provide feedback on this article.

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