

The WAGER Vol. 9(26) - It Was the Best of Times, It Was the Best of Times: Gambling and Self-Deception... A Tale of Two Selves?

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Researchers often use the concept of self-deception to explain irrational and maladaptive human behavior; however, it has a long and muddled history in psychological science. Controversies over the definition, level of consciousness, and value of self-deception arise from the paradoxical nature of the word itself and have relegated self-deception to the list of topics few psychologists dare to adopt. Nevertheless, self-deception has a clear application to the addictions because of its relation to decision-making, denial, and belief perseverance.

Peterson et al. (2003) sidestep the debates over how a single self can hold two conflicting beliefs or how one part of the self can know something the other part does not, by operationally defining self-deception as the “failure to utilize evidence indicating that current expectations or beliefs are in error,” (Peterson et al., 2003, p.206). In other words, self-deception involves self-selected attention to information that confirms our goals and beliefs and self-imposed ignorance and failure to process information that does not. This week, the WAGER reviews research by Peterson and his colleagues (2003) suggesting that individuals’ tendencies towards self-deception relate to risky decision-making in gambling. The authors examined this relationship in children and adults: we restrict our review to the findings pertaining to children.

Participants were 171 boys, 13 years old, who had been part of a longitudinal study of aggression and anxiety since they were six years old. All boys took the Junior Eysenck Personality Questionnaire (JEPQ — Saklofske & Eysenck, 1978). The JEPQ is comprised of 97 YES/NO items that group into four scales: Neuroticism, Extraversion, Psychoticism, and Lie. The Eysenck Lie Scale includes items such as “I always practice what I preach,” and is commonly used as a measure of self-deception (Davies, French, & Keogh, 1998). From the 171 boys, the authors selected youths who scored in the upper quartile of the Lie subscale

as high self-deceivers (HSDs) and defined youths who scored in the lower quartile as low self-deceivers (LSDs)¹. All participants engaged in the Card Playing Task (CPT).

The CPT is a computerized task in which participants draw cards from a non-normal deck of 100 cards. Participants are told: (a) the deck is non-normal, (b) face cards earn them money (5 cents) and other cards lose them money (5 cents), and (c) they only need to decide whether to flip a card or quit the game. The task is structured such that participants obtain a large number of wins at the outset: wins decrease linearly over the course of the task. Maximum winnings (\$1.55) occur if individuals decide to stop playing about half way through the game.

Table 1: Mean (SD) Performance on the Card Playing Task by Self-deception Propensity

	Low Self Deceivers (n = 30)	High Self Deceivers (n = 28)
Cards Played**	75.53 (27.10)	90.25 (18.47)
Winnings*	\$0.67 (\$0.55)	\$0.31 (\$0.50)
All 100 Cards Played**	27%	68%

Note: Differences between groups on cards played and winnings were tested using ANCOVA controlling for physical aggression². The difference between groups on proportion of participants who played all hundred cards was tested using Chi Square.* $p < 0.05$, ** $p < 0.01$.

As Table 1 shows, HSDs earned significantly less money and played significantly more cards than LSDs. A greater proportion of HSDs than LSDs played until the end of the deck. Notably, the number of cards played did not relate to personality characteristics such as Extraversion, Neuroticism, or Psychoticism. The authors replicated these results in an adult sample.

High self-deception seems to be an important correlate of continuing to gamble in the face of increasing losses. This relationship lends support to Peterson et al.'s conceptualization of self-deception as inadequate processing of information that runs counter to one's self-image, beliefs, or goals. In the case of gambling, since the prospect of being a loser is less pleasant than that of being a winner, high self-deceivers might have focused their attention on their past winnings, ignoring the mounting evidence of their losses. Because the experiment set the deck to produce multiple wins early, those past wins were even more salient and could have been used by HSDs to discount the losses as flukes.

There are a few limitations to the current study. First of all, it is unclear whether the HSD boys were: (a) aware of their losses but convinced of their future success by their past wins, or (b) unaware that they were losing as much as they were. Asking the boys how much they thought they had won or lost might answer this question and provide information about the level of awareness at which the self-deception takes place. Secondly, the amount that it was possible to win (\$1.55) might not have made the game realistic enough to elicit actual betting behavior in some or all of the boys and might have had a systematic effect, affecting HSDs and LSDs differently.

Despite these limitations, Peterson et al. (2003) provide important evidence both for their conceptualization of self-deception as a failure to integrate self-conflicting information and for self-deception's potential role in disordered gambling. These results identify an additional, seldom-considered risk factor for gambling problems and raise questions about the relation of self-deception to impulse control variables that predict similar aspects of disordered gambling.

Comments on this article can be addressed to Sarah Nelson and Debi LaPlante.

Notes

1 The authors also compared High Self-Deceivers to all other youths - the results showed the same pattern but not as strong.

2 Because the boys' aggression, the average of teacher ratings from age 6 to 12, correlated with performance on the CPT, the authors used it as a covariate in all analyses of variance.

References

Davies, M. F., French, C. C., & Keogh, E. (1998). Self-deceptive enhancement and impression management correlates of EPQ-R dimensions. *Journal of Psychology*, 132(4), 401-406.

Peterson, J. B., DeYoung, C. G., Driver-Linn, E., Seguin, J. R., Higgins, D. M., Arseneault, L., et al. (2003). Self-deception and failure to modulate responses despite accruing evidence of error. *Journal of Research in Personality*, 37(3), 205-223.

Saklofske, D., & Eysenck, S. B. (1978). Cross-cultural comparison of personality:

New Zealand children and English children. *Psychological Reports*, 42(3, Pt 2).