

The WAGER Vol. 9(10) - Attribution, Addiction, and Gambling: I think I can't, I think I can't

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A student who fails a math test can attribute that failure to any number of reasons. She might believe that she didn't study enough for the test or that her lack of sleep the night before contributed to her poor grade. Or maybe she attributes her failure to her complete and unchangeable stupidity at all school subjects, a conclusion that can lead to learned helplessness. Originally defined only in terms of behavioral responses to stimuli, (Seligman, Maier, & Geer, 1968), learned helplessness has since been reformulated in terms of the attributions people make (Abramson, Seligman, & Teasdale, 1978). When a person makes attributions for an unfavorable outcome that are personal (i.e., internal), unchanging (i.e., stable), and all-encompassing (i.e., global), as in the third example, these attributions often relate to depression and can lead to defeatist behavior when similar challenges arise. This week's WAGER reviews a study that demonstrates the relationship of attribution style (i.e., the tendency to explain events in a certain way) to relapse in people with gambling-related problems (McCormick & Taber, 1988).

McCormick and Taber drew their subject pool of 54 men (average age = 43.1) from military veterans receiving treatment at an inpatient treatment program for pathological gamblers. All subjects met the DSM-III diagnosis for pathological gambling (American Psychiatric Association, 1980) and were assessed for gambling severity both at intake to treatment and six months after treatment completion. Within 2 weeks of admission into treatment, researchers administered two psychological examinations: the Minnesota Multiphasic Personality Inventory (MMPI) and the Millon Multiaxial Clinical Inventory (MCMI), both of which assessed depression. Researchers also administered the Attributional Style Questionnaire (ASQ), consisting of 12 hypothetical events (6 positive outcomes and 6 negative outcomes). For each outcome, researchers

asked subjects to suggest a cause of the outcome, and then rate the cause on three 7-point scales according to internality, globality, and stability. The investigators combined these three ratings into one score representing a learned helplessness attributional style. A high score corresponded to a high rating of internal, stable, and global attributional factors. The researchers used the average of this score across all six negative outcome scenarios in their analysis of the ASQ composite score.

Table 1. Regression summary for 6-month follow-up severity of gambling (McCormick & Taber, 1988)

Variable	R ² change	F
Pretreatment Severity	.10	5.72*
MMPI Depression	.01	.57+
MCMJ Dysthymia	.01	.62+
ASQ composite score	.10	6.48*

* p < .02 + not significant

The subjects' measures of depression were correlated with subjects' overall ASQ score, $r_{\text{MMPI/ASQ}} = .24$, $p < .05$, $r_{\text{MCMJ/ASQ}} = .26$, $p < .05$. Depressed subjects rated their causes as personal, unchanging, and all-encompassing. However, as Table 1 shows, attributional style, not depression, was related to severity of gambling at six month follow-up. In this table portraying a hierarchical regression, "R² change" represents the extent to which each variable adds to the prediction of follow-up gambling severity. The "F" value provides information about the significance of that change. So, the severity of gambling before treatment significantly predicted the severity of gambling at follow-up, as one might expect. Depression did not add to the prediction of follow-up gambling severity. Attribution style, on the other hand, predicted follow-up gambling severity even when subjects' pretreatment gambling and level of depression are taken into account. A tendency to attribute outcomes to internal, stable, and global factors related to gambling relapse.

One limitation with this study involves the assessment of attributional style through the rating of hypothetical scenarios. Because a subject rated events that s/he did not directly experience, it is difficult to know whether these ratings reflect how subjects would explain their actual behavior. Moreover, this study combined all three factors associated with learned helplessness into a single "score." Perhaps, one particular factor is more influential in predicting future relapse than another.

Following the model of learned helplessness, gamblers in this study who exhibited higher ratings of depression also rated their attributions as more personal, unchanging, and all-encompassing. The authors predicted that levels of depression would predict relapse. Instead they found that while attribution style and depression were related, only attribution predicted relapse. These results encourage more research on the relationship between mood and attribution style and their influence on addiction-related behavior. Future research should also address the relationship between positive mood, attributions, and gambling behavior. Attributions for positive events might be an even better predictor than attributions for negative events of gambling relapse in particular; such a finding might distinguish gambling relapse from substance abuse relapse.

Comments on this article can be addressed to Michael V. Stanton.

References

Abramson, L. Y., Seligman, M. E., & Teasdale, J. D. (1978). Learned helplessness in humans: critique and reformulation. *Journal of Abnormal Psychology, 87*(1), 49-74.

American Psychiatric Association. (1980). *DSM-III: Diagnostic and statistical manual of mental disorders* (Third ed.). Washington, D.C.: American Psychiatric Association.

McCormick, R. A., & Taber, J. I. (1988). Attributional style in pathological gamblers in treatment. *Journal of Abnormal Psychology, 97*(3), 368-370.

Seligman, M. E., Maier, S. F., & Geer, J. H. (1968). Alleviation of learned helplessness in the dog. *Journal of Abnormal Psychology, 73*(3), 256-262.