

Measurement Models Matter: How Retrospective Calendar Versus Global Reports Yield Different Estimates of Treatment Outcome

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Retrospective reports are less accurate than objective measures of behavior and must be interpreted with consideration of the amount of distortion and error introduced by this methodology. The Gambling-Timeline Followback (G-TLFB) method is the gold standard retrospective assessment tool that is designed to minimize such error by asking for a specific recall of precise gambling behavior day-by-day using recall aids as compared to a global summation over time (e.g., how many gambling days in last month, how much money gambled in the last month). It remains an empirical question whether this difference in measurement format, G-TLFB versus global reports, alters the estimates of gambling treatment efficacy. Eighteen studies were identified for inclusion in a meta-analysis to explore this question. A mixed-effects subgroup analysis indicated that the effect of treatment relative to nonactive control on gambling frequency at posttreatment was significantly lower for studies using the G-TLFB ($g = -0.20$) than studies using other assessments ($g = -0.71$). There was no significant difference in the effect of treatment relative to nonactive control on gambling intensity at posttreatment between studies using the G-TLFB ($g = -0.22$) and studies using other assessments ($g = -0.38$).

Implications: The G-TLFB yields more conservative and likely more precise estimates of the effect of gambling treatment on gambling frequency but not intensity than other retrospective assessments. The use of global retrospective assessments to assess gambling frequency and intensity may overestimate effects of gambling treatment on gambling frequency.

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