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Commentary - Approaching Gambling As A Verbal Event: A Commentary On Fantino & Stolarz-Fantino (2008)

Simon Dymond
University of Wales, Swansea, S.O.Dymond@swansea.ad.uk

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COMMENTARY

APPROACHING GAMBLING AS A VERBAL EVENT: A COMMENTARY ON FANTINO & STOLARZ-FANTINO (2008)

Simon Dymond
Swansea University

Fantino and Stolarz-Fantino's thought provoking and scholarly article grapples with the complexity of understanding the behavior of gambling in direct contingency terms. The basic processes and variables involved in gambling have long been the subject of attention in the operant lab, and the authors do an exemplary job of illustrating how the basic research on choice and delay discounting has relevance for understanding the seemingly perplexing choices that gamblers often make. Yet, Fantino and Stolarz-Fantino's article makes it clear that more is needed. Something additional is required to elucidate anomalous findings and highlight the applied implications of a functional analytic account of gambling behavior. In this brief commentary, I will directly address the issue of this erstwhile elephant in the room: the role of verbal behavior in initiating and maintaining gambling. The very nature of verbal stimuli play such a prominent role in gambling behavior that what is now needed is a new way of approaching gambling as a verbal event.

The authors state that the salience of contingencies in everyday gambling suggests, "additional factors are involved in the decision to gamble." Identifying these factors, one of which is a preference for short-term gain, may go some way towards explaining why some people, but not others, go on to develop a gambling problem. An additional factor might be the structural characteristics (Parke & Griffiths, 2006) or physical, nonarbitrary features of the gambling activity and the context in which gambling takes place (Hoon, Dymond, Jackson & Dixon, 2007, 2008). The background color, sounds, and flashing visual displays of slot machines are prime examples of structural features, and it now widely accepted that the gambling context may provide cues conducive to both initiating and maintaining gambling.

This is exactly what the preliminary work conducted in our lab shows (Hoon et al., 2007, 2008). Specifically, we have shown that background color readily exerts nonarbitrary contextual control over choices for concurrently available slot machines of identical payout probability. That is, a background color that acquires contextual functions of "more than" increases response allocation to the slot machine that shares the same color, despite the matched probabilities. Indeed, Rockloff and Dyer (2007) showed a social facilitation effect over gambling induced by the presence of misleading sight and sound (i.e., nonarbitrary) stimuli, with separate stimuli being shown to be less effective. Such demonstrations of nonarbitrary contextual control have been demonstrated numerous times in the literature on relational responding. Indeed, a nonhuman model of this generalized nonarbitrary performance should be possible, and

Address Correspondence to:
Simon Dymond Ph.D., BCBA-D
Department of Psychology
Swansea University
Singleton Park
Swansea
SA2 8PP
Fax: +44 1792 295679
E-mail: s.o.dymond@swansea.ac.uk

may even be desirable, in order to fully inform our understanding of the transition from direct-acting, nonarbitrary discriminative control, readily shown with nonhumans, to emergent or derived, arbitrary control, which is something that nonhumans appear to have great difficulties with, despite heroic research efforts.

The Hoon et al. (2007; 2008) studies on situational factors do not, however, demonstrate derived, verbal control over concurrent slot machine choice. The performance was not derived, in the technical sense that the background colors did not participate in preestablished derived stimulus relations. When a stimulus obtains its functions based, at least in part, on participation in derived relations or relational frames, it is said to be functioning verbally (Dymond & Rehfeldt, 2000; Dymond & Whelan, 2007). It does not take a great leap of imagination to consider how such verbal functions might extend the analysis of situational factors in gambling. Consider, for instance, someone entering a casino. Choice of which slot machine, or of which form of gambling (roulette, craps, poker, etc.) to play is likely to be influenced by derived, verbal functions such as rules and self-rules like "loosest slots in the house" and "I feel lucky", along with formal features of the context (e.g., lights, colors, sounds, and names of slots machines). In gambling, stimulus functions such as these likely participate in multiple, contextually controlled derived relations. Gamblers' relational histories with various stimulus functions may come to exert control over choices and override the effects of programmed contingencies. And because not all objects and events in a derived relation need to be directly experienced, the potential for gambling to be controlled by increasingly complex and ever more remote contingencies is tremendous and far-reaching. But this is, importantly, an empirical issue.

There is other evidence that verbal functions play a central role in gambling. As Fantino and Stolarz-Fantino point out, research showing a continuum of discounting rates based on the commodity being discounted, with money anchored at the low end, hints that human choices for money "serve an exchange function rather than a *direct* function". It may be useful to conceptualize such exchange functions as based in part on the derived functions that money can buy.

Finally, there are numerous reasons why contingencies "*should* conspire against the tendency to gamble", but the fact is they do not, which suggests that gambling is maintained through derived, verbal functions. The role of verbal behavior in gambling behavior or, more technically, the participation of stimulus and response functions in relational frames, must become the focus of study in its own right (Dixon & Delaney, 2006). This endeavor is only just beginning, but its implications for basic and applied research, as well as the potential for forming alliances with other scientific disciplines such as neuroscience offer tremendous opportunities for behavior analysis.

REFERENCES

Dixon, M. R., & Delaney, J. (2006). The impact of verbal behavior on gambling behavior. In P. M. Ghezzi, C. A. Lyons, M. R. Dixon, and G. R. Wilson (Eds.), *Gambling: Behavior theory, research and application* (pp. 171-190). Reno, NV: Context Press.

Dymond, S., & Rehfeldt, R. (2000). Understanding complex behaviour: The transformation of stimulus functions. *The Behavior Analyst, 23*, 239-254.

Dymond, S., & Whelan, R. (2007). Verbal relations and the behaviour analysis of gambling. *Analysis of Gambling Behavior, 1*, 19-20.

Hoon, A., Dymond, S., Jackson, J. W., & Dixon, M. R. (2007). Manipulating contextual control over simulated slot machine gambling. *Analysis of Gambling Behavior, 1*, 109-122.

Hoon, A., Dymond, S., Jackson, J. W., & Dixon, M. R. (2008). Contextual control of slot machine gambling: Replication and extension. *Journal of Applied Behavior Analysis, 41*, 467-470.

Parke, J., & Griffiths, M. D. (2007). The role of structural characteristics in gambling. In G. Smith, D. Hodgins, and R. Williams (Eds.), *Research and*

measurement issues in gambling studies (pp. 211-243). New York: Elsevier.

Rockloff, M. J., & Dyer, V. (2007). An experiment on the social facilitation of gambling behavior. *Journal of Gambling Studies, 23*, 1–12.