

Commentary on *Probabilistic Thinking: Presenting Plural Perspectives*

Egan J. Chernoff and Bharath Sriraman

Martin Gardner's writing is amazingly accurate and reliable. The fact that he made a mistake is simply a testimonial to the difficulty of the [Two Child] problem.

(Khovanova 2011, p. 1)

But, to my surprise, Erdős said, “No, that is impossible, it should make no difference”. . . Erdős objected that he still did not understand the reason why, but [after being shown a simulation of the Monty Hall Problem] was reluctantly convinced that I was right.

(Vazsonyi 1999, p. 18)

The above quotations and, more notably, the individuals involved, help cement the popular notion that probability is counterintuitive—just “Ask Marilyn”. However, as demonstrated throughout this volume, counterintuitiveness is but one of many different characteristics of probabilistic thinking.

Those of you familiar with research investigating probabilistic thinking in the field of mathematics education, might, at this point in the book, be expecting a “wish list” for future research, which has become customary (e.g., Kapadia and Borovcnik 1991; Jones et al. 2007; Shaughnessy 1992); however, we will not be adding to the list of wish lists. Instead, we have decided to, in this commentary, highlight some of the overarching themes that have emerged from the significant amount of research housed in this volume. Themes emerging from each of the four main perspectives—Mathematics and Philosophy, Psychology, Stochastics and Mathematics Education—are now commented on in turn.

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