

Expertise and Anchoring Bias in Medical Decision Making

Aron Liaw

UC San Francisco, San Francisco, California, United States

Matthew Welsh

University of Adelaide, Adelaide, South Australia, Australia

Hillary Copp

UC San Francisco, San Francisco, California, United States

Benjamin Breyer

UC San Francisco, San Francisco, California, United States

Abstract

Anchoring bias describes the tendency to base an estimate around a previously given value, the anchor. Herein, a cohort of 124 medical providers and trainees, from medical students to practicing physicians, were shown to display anchoring bias when faced with medical scenarios including an anchoring value in the form of a prior assessment. Anchoring bias did not vary significantly with participants level of training although tolerance to risk did. However, they showed increased reliance on the anchor when its source had greater expertise. Analyses showed no correlation between anchoring susceptibility and participants preference for Rationality or Intuition as measured by the Decision Styles Scale. The results suggest that medical decisions can be vulnerable to anchoring effects, particularly when the anchor is sourced from an authoritative source. Given that authoritative sources should be more knowledgeable, this is reasonable, but will hold true regardless of the accuracy of the anchoring value.