

Abstract

The Attraction Effect refers to an inferior option a 's ability to increase the attractiveness of another alternative b after a is added to a choice set, such that a is exclusively dominated by b in the choice set. We consider three decision-making heuristics of which procedures incorporate the AE at different degrees. In the "Reference-independent Deterministic Choice" ("RIDC")'s procedure, the decision maker simply selects the alternative with the largest lower contour set (LCS). In the "Exogenous Reference-dependent Random Choice" ("Exogenous-RDRC")'s procedure, the decision maker draws a reference alternative, x , among dominated alternatives randomly and only considers alternatives that Pareto-dominate x , i.e., dominate x in all attributes. Then the decision maker randomly selects with equal probabilities one of the Pareto alternatives that Pareto-dominate x as her choice outcome. In the "Endogenous Reference-dependent Random Choice" ("Endogenous-RDRC")'s procedure, the decision maker selects any dominated alternative a as the reference alternative with a probability proportional to the number of Pareto alternatives in the upper contour set (UCS) of a , and then randomly selects with equal probabilities one of the Pareto alternatives that Pareto-dominate a as her choice. These heuristics' outcomes differ from each other in terms of the extent that they incorporate the Attraction Effect: RIDC incorporates it most strongly and the Exogenous-RDRC incorporates it the least. In addition, we provide axiomatic characterizations of the outcome sets of these heuristics to help uncover their most salient properties. We are also able to link the outcome sets of RIDC and Endogenous-RDRC to the Nash product as more alternatives are selected uniformly from a convex and compact set.