

Alternative Definitions of Conditional Possibilistic Measures.

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Abstract: The aim of this paper is to survey and discuss, very briefly, some ways how to introduce, within the framework of possibilistic measures, a notion analogous to that of conditional probability measure in probability theory. The adjective “analogous” in the last sentence is to mean that the conditional possibilistic measures should play the role of a mathematical tool to actualize one’s degrees of beliefs expressed by an a priori possibilistic measure, having obtained some further information concerning the decision problem under uncertainty in question. The properties and qualities of various approaches to conditionalizing can be estimated from various points of view. Here we apply the idea according to which the properties of independence relations defined by particular conditional possibilistic measures are confronted with those satisfied by the relation of statistical (or stochastic) independence descending from the notion of conditional probability measure. For the reader’s convenience the notions of conditional probability and statistical independence are recalled in the introductory chapter.

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