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Possibilistic and probabilistic likelihood functions and their extensions: common features and specific characteristics. (English) [Zbl 1334.60004](#)
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Summary: We deal with conditional probability in the sense of de Finetti and with T -conditional possibility (with T a triangular norm). We prove that Dubois and Prade conditional possibility is a particular min-conditional possibility and then we compare the two notions of conditioning by an inferential point of view. Moreover, we study T -conditional possibilities as functions of the conditioning event, putting in evidence analogies and differences with conditional probabilities. This allows to characterize likelihood functions (and their aggregations) consistent either with a T -conditional possibility or a conditional probability. This analysis highlights many syntactical coincidences. Nevertheless the main difference is a weak form of monotonicity, which arises only in the possibilistic case.

MSC:

[60A05](#) Axioms; other general questions in probability
[60A86](#) Fuzzy probability

Cited in **10** Documents

Keywords:

[likelihood function](#); [coherence](#); [conditional probability](#); [DP-conditional possibility](#); [T-conditional possibility](#)

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