Print

Fixed and Random Effects

If the effect level can reasonably be assumed to represent a probability distribution, then the effect is random. Blocks, laboratories, clinics, study centers, workers, teachers, sires, and so on, typically (but not always) represent a sample (although often an imperfect sample) of a population with a probability distribution (normal).

The distinction between a fixed effect and a random effect might not always be clear in some situations. Some statisticians think that even if the levels of a factor were not randomly selected, the effect can still be considered random as long as the effects on the outcome are of a stochastic nature (Shabenberger, O. and Pierce, F. J. 2002).

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