## VII. Conclusion

In this paper, we consider Bayesian change point estimation for exponential distribution parallel system under masked data. We fill in all the missing data of interest and introduce latent variables by sampling methods. We study the probability distributions and random generation methods of the missing lifetime data and latent variables. The full conditional distributions of all parameters are discussed. Bayesian estimations of parameters are studied by Gibbs sampling of MCMC methods. Our simulation results show that Bayesian parameter estimations are fairly accurate and the effect of simulation is good using MCMC methods. In this paper, we make statistical inference on the base of Gibbs sampling, so Bayesian approach is common and suitable for change point problem of other life distributions and has its value in popularization.

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