

21st April, 1952.

Dear Mr Sarhan,

I have your letter of the 8th April. As you say that that $\frac{\hat{\theta}}{x}$ last observation which I have mentioned to be a sufficient estimate is biased, I think you may have missed the point that its distribution in n random samples of a finite size is exactly known, so that whatever one's definition of bias, one can always adjust the primary estimate so as to obtain an unbiased estimate with the same precision.

The point, however, is that although in these cases the theory of large samples does not apply, even approximately, yet the solution to greatest likelihood has the full properties of sufficiency and contains the whole of the existing information.

Yours sincerely,