

NOTE ON THE DISTRIBUTION OF MEANS OF SAMPLES OF N DRAWN FROM A TYPE A POPULATION

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Recently in this journal, Dr. George A. Baker has found "the distribution of the means of samples drawn at random from a population represented by a Gram-Charlier series."¹ It is the purpose of this note to call attention to the fact that by the use of the semi-invariant notation Dr. Baker's results may be reached in very many fewer steps.

Let the parent population be represented by

$$(1) \quad f(x) = \phi(x) \left[1 + \frac{a_3}{\sigma_x^3} H_3 \left(\frac{x}{\sigma_x} \right) + \frac{a_4}{\sigma_x^4} H_4 \left(\frac{x}{\sigma_x} \right) + \dots + \frac{a_k}{\sigma_x^k} H_k \left(\frac{x}{\sigma_x} \right) \right]$$

in which

$$(2) \quad \phi(x) = \frac{1}{\sigma_x \sqrt{2\pi}} e^{-\frac{x^2}{2\sigma_x^2}}$$

¹Vol. 1, No. 3 (Aug., 1930), pp. 199-204.