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Hsu, P. L.

On the distribution of roots of certain determinantal equations.

Ann. Eugenics **9**, (1939). 250–258

The present paper gives a complete demonstration of Fisher's result mentioned in the above review, and also handles the case in which $p > n_1$. Further, if the $p(p+1)/2$ covariances (about a fixed point) s_{ij} of the p variables are such that $||s_{ij}||$ is always non-singular and if their distribution depends only on the latent roots of $||s_{ij}||$, the general distribution of the latent roots themselves is deduced. Finally, it is shown that Hotelling's canonical correlations between two sets of random variables are distributed as the square roots of the θ 's, the form of the distribution function of the θ 's being derived under the condition that only the first set of variables be normally distributed.

Reviewed by *C. C. Craig*

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