CORRECTION TO "AN APPLICATION OF INFORMATION THEORY TO MULTIVARIATE ANALYSIS, II"

By S. Kullback

The George Washington University

In the paper cited in the title (*Ann. Math. Stat.*, Vol. 27 (1956):

p. 122, line 7, delete 'maximizing information' and replace by 'discriminating between a null hypothesis and the alternative hypothesis by using that distribution corresponding to the alternative hypothesis which for the sample values provides the least information for discrimination';

p. 123, line 3, between 'information' and 'in' insert 'for linear discriminant functions';

p. 124, line 6, same as p. 122, line 7 above;

p. 124, line 11, change 'maximum' to 'minimum';

p. 124, line 13, change 'maximizing' to 'minimizing';

p. 124, (3.8), add '$a = \int \frac{ye^{ty}g_2(y)\,d\gamma(y)}{M_2(t)} = \frac{\frac{dM_2(t)}{dt}}{M_2(t)}$';

p. 125, line 3, delete 'maximum' and replace by 'minimum I^*';

p. 125, immediately following (3.12) add 'It is readily verified that $g^*(y)$ is normal when $g_2(y)$ is normal.';

p. 130, line 23, insert '(' between '=' and '$X_{(1)}$'.

ABSTRACTS OF PAPERS

(*Abstracts of papers submitted for the Seattle meeting of the Institute, August 20–27, 1956*)

1. **On the Studentized Largest and Smallest χ^2**, K. V. Ramachandran, University of Baroda, India.

Let $s_1^2, s_2^2, \cdots, s_k^2$ be k independent χ^2 variables with m d.f. each. Let s^2 be another independent χ^2 variable with n d.f. Then the Studentized largest χ^2 is defined as: $u = s^2_{\max}/s^2$, where $s^2_{\max} = \max(s_1^2, s_2^2, \cdots, s_k^2)$. Similarly the Studentized smallest χ^2 is defined as: $v = s^2_{\min}/s^2$, where $s^2_{\min} = \min(s_1^2, s_2^2, \cdots, s_k^2)$. Using methods given in an earlier paper the upper and lower 5 percent points of u and v are given for different values of m, n and k. These statistics have been found to be useful in several situations including control of quality, simultaneous confidence interval estimation, testing for normality against uniform distribution, etc. (Received April 16, 1956.)

2. **The Linear Hypothesis, Information, and the Analysis of Variance, (Preliminary Report)**, Chester H. McCall, Jr., The George Washington University.

The concepts of "information" (designated by "i") and "mean information per observation" (designated by "I") for differentiation between two hypotheses first appeared in