determining the mathematical expectations of its terms, we get a convergent series, say:

$$\sigma_{r'}^{\prime 2} = \frac{t_1'}{N} + \frac{t_2'}{N^2} + \frac{t_3'}{N^3} + \cdots \tag{4}$$

From Slutsky's theorem, mentioned before, it follows that if N increases the ratio of σ_r^2 and $\sigma_{r'}^{\prime 2}$ will tend to unity. Moreover, if we take N sufficiently large, it will always be possible to fulfill the following inequalities:

$$\left|\frac{t_k'}{t_k}\right| > 1 - \epsilon_k \qquad (k = 1, 2, \cdots n)$$

where ϵ_k $(k = 1, 2, \cdots n)$ and n are arbitrary. Therefore, when n and N are sufficiently large the ratio between the first n terms of the infinite series (3) and the true value of σ_r^2 will differ from 1 by an arbitrary small number. Though the series (3) is divergent for any N, however large, the first n terms of this series will give an approximation of σ_r^2 by taking N sufficiently large.

In this paper we have shown that the procedures which have been followed by the Biometric School and Tschuprow to establish formulas for the standard errors of correlation and regression coefficients and in analogous problems can be made rigorous by the use of conditionally aleatory variables. It was found that their infinite expansions are divergent for some of the values of the random variables involved, however large the number of observations (N) may be. Yet it could be demonstrated, that the first n terms of these series will give an approximation, as close as is wanted, if N is sufficiently large. For practical purposes the case $n = 1$ is the most important.

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A NOTE ON FIDUCIAL INFERENCE

By R. A. Fisher

In a recent paper [1] Bartlett has written a further justification of his criticism of the test of significance for the difference between means of two samples from normal populations not supposedly of equal or related variance. This test was originally put forward by W. V. Behrens [2], and later [3] found to be very simply derivable by the method of fiducial probability.

It is unfortunate that Bartlett did not restate his own views on this topic without making misleading allusions to mine. Thus, on p. 135 in [1]:

"It is sufficient to note that the distribution certainly provides us with an exact inference of fiducial type, as Fisher himself confirmed [9], p. 375."

I do now know, and Bartlett does not specify, what unguarded statement of mine could be used to justify this assertion. From the time I first introduced