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HAZARDS AND FALLACIES OF
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HAZARDS AND FALLACIES OF STATISTICAL METHOD* IN PSYCHOLOGICAL MEASUREMENT

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Statistical method in psychological measurement is an invaluable aid, first, in the organization and summarization of numerical results, and, second, in the comparison of these results as summarized. The immediate purposes of such organization and comparison are usually twofold: the measurement of human abilities and the inquiry into and possible discovery of essential relations between measureable manifestations of psychological phenomena.

Most fundamentally, we of course aim in psychological measurement to obtain results which will validly serve as evidence for generalizations about human nature. It should be obvious that the valid interpretation of statistical results is dependent upon a knowledge of what is measured as well as of the conditions of measurement, and that this dependence becomes greater as we attempt to establish propositions of greater *generality*. We wish to generalize but unfortunately generalizing is harassed by hazards and fallacies, ever present for the untutored or the unwary.

Vigilant attention to the rôle of error and fallacy in psychological measurement cannot be overemphasized. Current psychological literature having recourse to statistical method too often bears witness to the importance of this statement, especially in the frequent misuse of probable error estimates and in the tendency to generalize about everything on the basis of statistical results having little or no relevance to anything. It seems to us appropriate, therefore, to bring together and summarize briefly the chief hazards and fallacies which we should try to avoid. Their avoidance will certainly be an easier task if we have them out in the open where we can see them clearly.

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