tion" might be a diminution which increases in absolute value with decreasing distance, such an assumption would not be preferred, in view of the experimental data relating size matches to the age of the observer. Children and adults produce the same matches—that is, make a correction for distance of the same magnitude—for close observation distances. It is only by increasing distance that differences are obtained, as manifested by the more rapid falling off of the tendency toward constancy for the younger as compared to the older subjects. We have interpreted these data to imply the following relationship: the younger the subject and the greater the distance of observation, the smaller the magnitude of the correction. We suggested also that experience plays a role in this correction, although we are not certain whether it is mediated by visual or proprioceptive cues. The data obtained in the dark room, which presented some visual cues due to scattered light from the projector beams, do not permit us to make a decision at this time.

The suggestion that one investigate the role of perceived distance, with perceived size considered as a secondary effect, is both logical and tempting. Experimentally, however, it has proved to be relatively easy to obtain reliable measures of perceived size but extremely difficult to measure perceived distance, especially with children. For this reason, we prefer to avoid speculating as to whether perceived size or perceived distance is the more basic variable, and to emphasize the dependent variable of matched size, which can be assessed experimentally. We know for certain that as physical distance is increased, size matches become less veridical, but we are not able, due to methodological limitations, to determine whether these data result from a failure of perceived size or of perceived distance.

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Correlation

The recent Stetten and Hearon report, "Intellectual level measured by Army Classification Battery and serum uric acid concentration" [*Science* **129**, 1737 (1959)], gives a coefficient of correlation of +.0759, which the authors in effect say is statistically significant. From this result the authors conclude that "a low level of positive correlation . . . does indeed exist between the score attained in the ACB test and the level of uric acid in blood serum in the population studied."

Leaving aside the unusual device of reporting an estimate like this to four decimal places, we have here a coefficient of correlation of about .08. Even though the result is statistically significant, it is very doubtful that the conclusion follows. This is evidently a case of confusing statistical significance with practical or scientific significance. If the coefficient is squared, the result yields an estimate of the percentage of the common factor variance shared by the two variables. Squaring it, we get .0064, or about 0.6 percent. Thus, to be generous, it can be said that the variables of this study share about 1 percent of their variance in common! (Incidentally, the assumption of normality is not necessary for computing r, as the authors imply [see M. D. Nefzger and J. Drasgow, *Am. Psychologist* **12**, 623 (1957)]).

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In our earlier publication we found and reported a small but statistically significant correlation between score achieved in the Army Classification Battery and serum uric acid concentration in the population studied. Kerlinger apparently agrees with these findings but questions our conclusion, which is merely a restatement of these findings, that the correlation coefficient obtained is positive, small, and significantly different from zero. There is no confusion in our report between "statistical" and "practical" significance, since we have used the term *significant* only in its statistical sense. The correlation was originally examined for what appeared to us to be adequate reasons, stated in our earlier communication, and the value of r, though small, was considered worthy of publication, since it answered a question raised by Haldane [J. B. S. Haldane, *Nature* **176**, 169 (1955)].

The interpretation of the answer is left to the reader. The improvement of the estimation of one variable from the knowledge of its correlation with the other is small by any test, including the statistic r^2 employed by Kerlinger, and it was never our intention to suggest replacement of intelligence testing by serum urate analyses. Although not helpful in the prediction of one variable from knowledge of the other, the correlation might provoke inquiry into a possible biological basis. Incidentally, it was neither stated nor implied that the assumption of normality is necessary for computing r. The assumption is necessary, however, as we have clearly stated, for the test of significance which we employed.

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