

Bilag A (19)

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Sendt: 7. juni 2005 10:01
Vedhæft: Formel for Rpbs.pdf
Emne: Formel

Kære Tom Latrup-Pedersen.

Hermed formelen for udregning af punkt-biseriale korrelationer.

Både det tidligere nævnte dødsfald og den kendsgerning af min nuværende forsøgsassistent har været udenbys indtil i dag, har forhindret mig i at kommentere spørgsmålet om de 52-62 forsøgspersoner, som daterer sig tilbage til 2001. Jeg skal meget snart komme tilbage til dette aspekt efter at have snakket med assistenten.

Venlig hilsen
Helmuth Nyborg

9. The point-biserial correlation (r_{pbz}) is simply a Pearson product-moment correlation that expresses the relationship between a metric variable (e.g., test scores) and a dichotomous variable (in this case sex, quantitized as male = 1, female = 0). As the value of r_{pbz} is reduced by the amount of inequality in the sample sizes of males and females, it was corrected for this inequality where such an inequality in N s exists. Also, as r_{pbz} is reduced by an inequality of male and female standard deviations in test scores, the r_{pbz} was adjusted accordingly. Adjustments for the inequality of N s and SD s are accomplished simultaneously by use of the following formula for r_{pbz} :

$$r_{pbz} = d/2\sqrt{(d^2/4) + 1},$$

where d is the mean difference (males - females) divided by the averaged male and female standard deviations ($\bar{\sigma}$), calculated as $\bar{\sigma} = \sqrt{\sigma_m^2 + \sigma_f^2}/2$.

Frederick Jensen, A.R. (1998) *The g factor: The science of mental ability*: Westport, CT. Praeger.
(p. 542, note 9).