


CORRECTION

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Correction to: Predicting the accuracy of genomic predictions

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After publication of [1], several errors in references to equations were noted.

In the Methods section entitled “ M_e for the reference population”, reference to Eqs. (6), (7), and (9) must be replaced by Eqs. (5), (6), and (8) in the sentence: “These two accuracies can then be combined to predict r_G , using either the Fisher approach (Eqs. (5) and (6)) or the Index approach (Eq. (8)).”

In the subsequent paragraph, (3)(b), reference to Eq. (6) must be replaced by Eq. (4) in the sentence: “Using the Index approach, r_D^2 can be computed from the observed r_G and r_A , using Eq. (9), which can then be used to compute θ_D for a given value of q_D^2 using Eq. (4).”

Also, in Appendix 2, the off-diagonals in the matrix must be multiplied by $r_A r_D$ in:

$$\begin{bmatrix} b_A \\ b_D \end{bmatrix} = \begin{bmatrix} r_A^2 & r_{\hat{g}_A, \hat{g}_D} r_A r_D \\ r_{\hat{g}_A, \hat{g}_D} r_A r_D & r_D^2 \end{bmatrix}^{-1} \begin{bmatrix} r_A^2 \\ r_D^2 \end{bmatrix}$$

which then results in:

$$= \frac{1}{r_A r_D (1 - r_{\hat{g}_A, \hat{g}_D}^2)} \begin{bmatrix} r_A r_D - r_D^2 r_{\hat{g}_A, \hat{g}_D} \\ r_A r_D - r_A^2 r_{\hat{g}_A, \hat{g}_D} \end{bmatrix}$$

In the next line, the square is missing on the left-hand-side of: $r_{\hat{g}_A, \hat{g}_D}^2 = r_A^2 r_D^2$

In the last line, the subscript in $cov(\hat{g}_D, g_{DG})$ should be G instead of DG, i.e.

$$r_G^2 = \begin{bmatrix} b_A \\ b_D \end{bmatrix}' \begin{bmatrix} cov(\hat{g}_A, g_G) \\ cov(\hat{g}_D, g_G) \end{bmatrix}$$

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Reference

1. Dekkers JCM, Su H, Cheng J. Predicting the accuracy of genomic predictions. *Genet Sel Evol*. 2021;53:55. <https://doi.org/10.1186/s12711-021-00647-w>.

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