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CORRIGENDUM

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Regrettably, errors were found in the definition of commonality analysis (In p. 266 and in Box 2) as it appeared in the published paper by (J. G. Prunier et al. 2015). Corrections are presented below.

Commonality partitions are not orthogonal nonoverlapping parts, except in the case of uncorrelated predictors.

Example and references given below serve as supporting data.

1. Mood (1971, p. 196–197)

Commonality partitions are “not orthogonal” and although the *F* test for uniqueness coefficients can be used, the “tests are not independent”.

2. Craeger (1971, p. 673), referencing to Mood’s partitioning methods

Commonality “partitions are additive (i.e. not orthogonal) because the ‘unique parts’ are determined by regression and the rest are determined by subtraction from the total”

3. Example

Although Thompson (2006, p. 278) indicated that commonality analysis partitions Multiple R^2 into “constituent, nonoverlapping parts”, it can be demonstrated that commonality coefficients may indeed overlap. Take the case of r(DV,IV1) = 0.5, r(DV,IV2) = 0 and r(IV1,IV2)=0.5, the uniqueness coefficients for IV1 and IV2 (0.333, 0.083, respectively) sum to a value greater than the Multiple R^2 of 0.333. This example suggests that although the commonality coefficients sum to Multiple R^2 because of the additive principle previously discussed, the “unique” predictive ability of IV1 and IV2 appear to overlap.

REFERENCE

Prunier, J. G., Colyn, M., Legendre, X., Nimon, K. F., & Flamand, M. C. (2015). Multicollinearity in spatial genetics: Separating the wheat from the chaff using commonality analyses. *Molecular Ecology*, *24*, 263–283.

