Erratum to: Polynomial Regression with Response Surface Analysis: A Powerful Approach for Examining Moderation and Overcoming Limitations of Difference Scores

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Please note there was an error in the standard error formula for the significance test for a_4 (the surface that represents the curvature of the $X = -Y$ as related to Z line) in both the formula presented in our article and in the associated Excel file. We corrected it in the table to the right which contains the full set of formulas for a_1 through a_4 . We also corrected it in the spreadsheet that you can download to conduct and graph the analyses described in the original paper. To download a copy of the Excel spreadsheet for your use, please visit the following website www.springer.com/psychology/community+psychology/journal/10869. When you get to the website, go to the section on the right

The online version of the original article can be found under doi:[10.1007/s10869-010-9183-4](https://doi.org/10.1007/s10869-010-9183-4).

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Table 4 Formulas for calculating the significance tests of the surface values (a_1 through a_4)

Variable	Equation
a_1	$t = \frac{a_1}{\sqrt{(SE^2 b_1 + SE^2 b_2) + 2COVB_1 b_2}}$
a_2	$t = \frac{a_2}{\sqrt{(SE^2 b_3 + SE^2 b_4 + SE^2 b_5) + 2COVB_3 b_4 + 2COVB_4 b_5 + 2COVB_3 b_5}}$
a_3	$t = \frac{a_3}{\sqrt{(SE^2 b_1 + SE^2 b_2) - 2COVB_1 b_2}}$
a_4	$t = \frac{a_4}{\sqrt{(SE^2 b_3 + SE^2 b_4 + SE^2 b_5) - 2COVB_3 b_4 + 2COVB_3 b_5 - 2COVB_4 b_5}}$

Note. For the formulas listed above, recall from Table 2 that $a_1 = (b_1 + b_2)$ where b_1 is beta coefficient for perceived supervisor support (PSS) and b_2 is beta coefficient for perceived organizational support (POS). $a_2 = (b_3 + b_4 + b_5)$ where b_3 is beta coefficient for PSS squared, b_4 is cross product of PSS and POS, and b_5 is beta coefficient for POS squared. $a_3 = (b_1 - b_2)$. $a_4 = (b_3 - b_4 + b_5)$. Also recall that the BCOV subcommand in the SPSS syntax will provide the covariances needed for the “2cov” (two times the covariance) terms listed above

that says ‘For Authors and Editors’. Mouse over and click on the down arrow and you will see the Response Surface Analysis Excel sheet.