**Supplemental Material for**

**“On Feeling Warm and Being Warm:**

**Daily Perceptions of Physical Warmth Fluctuate with Interpersonal Warmth”**

In the manuscript itself, we reported only those results which directly tested the hypotheses. This was done both because of space limitations and to keep the results sections easily accessible. In the interests of full disclosure, though, we report all additional results here. As noted in the manuscript, we centered each within-subject predictor around the participants’ mean score to properly separate within-subject and between-subject variance (Enders & Tofighi, 2007). To ensure the standard errors for the within-subject predictor variables were properly specified, we included corresponding random effects for these variables as well (Barr et al., 2013). Finally, these models utilized an autoregressive covariance structure to properly model serial correlations between the outcome measure across successive days. Analyses were conducted using SAS Proc Mixed (Singer, 1988).

In the tables below, we report the between-subject variance (i.e., level-two random effect for the intercept), within-subject variance (i.e., residual level-one variance), random-effects for any level-one predictor entered into the model, and the autoregressive effect. Both the between-subject variance and within-subject variance represent residual variance, as portions of each variance component have already been accounted for by predictors in the model. The random effect indicates whether the effect of a level-one predictor on the outcome exhibits significant variance across participants in the sample. The autoregressive effect indicates the magnitude of serial correlations between the outcome across successive days.

In some of the analyses reported below, the random effect is reported as zero and its corresponding standard error, Z value, and *p* value could not be estimated. This indicates a highly non-significant random effect. In each case where the random effect was clearly non-significant (*p* > .10), we also re-ran the model without the random effect. Invariably, there was no change in the direction or significance of the effect. These additional results are not reported in this supplement. Nonetheless, we felt it important to reassure the reader that this feature of the dataset had no impact on the main results of interest.

**Study 1**

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| *Table S1. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and Interpersonal Warmth.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.3145 | 0.04342 | 7.24 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.0286 | 0.007455 | 3.84 | <.0001 |
| Auto-Regressive Effect | 0.1446 | 0.02972 | 4.86 | <.0001 |
| Within-Subject Variance (residual) | 0.353 | 0.01413 | 24.98 | <.0001 |
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| *Table S2. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and Daily Agreeableness, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.295 | 0.04419 | 6.68 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.008799 | 0.007706 | 1.14 | 0.1268 |
| Auto-Regressive Effect | 0.1371 | 0.02883 | 4.76 | <.0001 |
| Within-Subject Variance (residual) | 0.5869 | 0.0233 | 25.18 | <.0001 |
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| *Table S3. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and the "Caring" Item from Interpersonal Warmth Scale, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.3315 | 0.04819 | 6.88 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.01497 | 0.008333 | 1.8 | 0.0362 |
| Auto-Regressive Effect | 0.1363 | 0.02949 | 4.62 | <.0001 |
| Within-Subject Variance (residual) | 0.5575 | 0.02237 | 24.92 | <.0001 |
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| *Table S4. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and the "Distant" Item from Interpersonal Warmth Scale, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.513 | 0.07428 | 6.91 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.0251 | 0.01381 | 1.82 | 0.0346 |
| Auto-Regressive Effect | 0.1011 | 0.02865 | 3.53 | 0.0004 |
| Within-Subject Variance (residual) | 0.9072 | 0.03567 | 25.43 | <.0001 |
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| *Table S5. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and the "Warm" Item from Interpersonal Warmth Scale, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.3208 | 0.04823 | 6.65 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.06661 | 0.01549 | 4.3 | <.0001 |
| Auto-Regressive Effect | 0.1382 | 0.02979 | 4.64 | <.0001 |
| Within-Subject Variance (residual) | 0.6569 | 0.02628 | 25 | <.0001 |
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| *Table S6. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and the "Cold" Item from Interpersonal Warmth Scale, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.5454 | 0.07588 | 7.19 | <.0001 |
| Random Effect for Felt Physical Warmth | -0.0869 | 0.02867 | -3.03 | 0.0024 |
| Auto-Regressive Effect | 0.0994 | 0.02055 | 4.84 | <.0001 |
| Within-Subject Variance (residual) | 0.08488 | 0.02956 | 2.87 | 0.0041 |
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| *Table S7. Additional Results from the Analysis Examining the Relationship between Objective Temperature and Felt Physical Warmth, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.8611 | 0.2515 | 3.42 | 0.0003 |
| Random Effect for Objective Temperature | 0.000158 | 0.000091 | 1.73 | 0.0422 |
| Auto-Regressive Effect | 0.1032 | 0.0277 | 3.72 | 0.0002 |
| Within-Subject Variance (residual) | 0.3987 | 0.01549 | 25.74 | <.0001 |
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| *Table S8. Additional Results from the Analysis Examining the Relationship between Objective Temperature and Interpersonal Warmth, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.7511 | 0.1343 | 5.59 | <.0001 |
| Random Effect for Objective Temperature | 0 | . | . | . |
| Auto-Regressive Effect | 0.1325 | 0.02749 | 4.82 | <.0001 |
| Within-Subject Variance (residual) | 0.3874 | 0.01443 | 26.84 | <.0001 |
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| *Table S9. Additional Results from the Analysis Examining the Relationship between Objective Temperature and Daily Agreeableness, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.9268 | 0.3203 | 2.89 | 0.0019 |
| Random Effect for Objective Temperature | 0.000115 | 0.000119 | 0.97 | 0.1662 |
| Auto-Regressive Effect | 0.1289 | 0.029 | 4.45 | <.0001 |
| Within-Subject Variance (residual) | 0.5751 | 0.02296 | 25.05 | <.0001 |
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| *Table S10. Additional Results from the Analysis Examining the Effect of Felt Physical Warmth & Objective Temperature on Interpersonal Warmth, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.315 | 0.04346 | 7.25 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.0286 | 0.00745 | 3.84 | <.0001 |
| Auto-Regressive Effect | 0.1435 | 0.02973 | 4.83 | <.0001 |
| Within-Subject Variance (residual) | 0.3528 | 0.01412 | 24.99 | <.0001 |
| Note: Since the Random Effect of Objective Temperature was clearly non-significant in prior analyses, it was dropped from this model. | | | | |
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| *Table S11. Additional Results from the Analysis Examining the Effect of Felt Physical Warmth & Objective Temperature on Daily Agreeableness, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.2947 | 0.04417 | 6.67 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.008944 | 0.007726 | 1.16 | 0.1235 |
| Auto-Regressive Effect | 0.1378 | 0.02885 | 4.78 | <.0001 |
| Within-Subject Variance (residual) | 0.5871 | 0.02333 | 25.16 | <.0001 |
| Note: Since the Random Effect of Objective Temperature was clearly non-significant in prior analyses, it was dropped from this model. | | | | |
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| *Table S12. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and Interpersonal Warmth on Weekdays Only, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.3152 | 0.04553 | 6.92 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.04261 | 0.01152 | 3.7 | 0.0001 |
| Auto-Regressive Effect | 0.1159 | 0.0411 | 2.82 | 0.0048 |
| Within-Subject Variance (residual) | 0.3454 | 0.0182 | 18.98 | <.0001 |
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| *Table S13. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and Daily Agreeableness on Weekdays Only, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.3194 | 0.04921 | 6.49 | <.0001 |
| Random Effect for Felt Physical Warmth | 0 | . | . | . |
| Auto-Regressive Effect | 0.08813 | 0.03892 | 2.26 | 0.0235 |
| Within-Subject Variance (residual) | 0.5156 | 0.02474 | 20.84 | <.0001 |
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| *Table S14. Additional Results from the Analysis Examining the Effect of Chronological Day of Study and Felt Physical Warmth on Interpersonal Warmth, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.2665 | 0.05334 | 5 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.02665 | 0.007294 | 3.65 | 0.0001 |
| Random Effect for Chronological Day | 0.000357 | 0.000347 | 1.03 | 0.1515 |
| Auto-Regressive Effect | 0.1276 | 0.03256 | 3.92 | <.0001 |
| Within-Subject Variance (residual) | 0.3453 | 0.01506 | 22.93 | <.0001 |
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| *Table S15. Additional Results from the Analysis Examining the Effect of Chronological Day of Study and Felt Physical Warmth on Daily Agreeableness, Study 1.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.2535 | 0.06406 | 3.96 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.01518 | 0.008661 | 1.75 | 0.0399 |
| Random Effect for Chronological Day | 0.001099 | 0.000589 | 1.87 | 0.0309 |
| Auto-Regressive Effect | 0.1213 | 0.03187 | 3.8 | 0.0001 |
| Within-Subject Variance (residual) | 0.5675 | 0.02467 | 23 | <.0001 |

**Study 2**

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| *Table S16. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and Interpersonal Warmth, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.2551 | 0.0357 | 7.14 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.03519 | 0.007413 | 4.75 | <.0001 |
| Auto-Regressive Effect | 0.2238 | 0.03051 | 7.33 | <.0001 |
| Within-Subject Variance (residual) | 0.3051 | 0.01275 | 23.94 | <.0001 |
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| *Table S17. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and Daily Agreeableness, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.2124 | 0.03175 | 6.69 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.01948 | 0.007467 | 2.61 | 0.0045 |
| Auto-Regressive Effect | 0.093 | 0.02915 | 3.19 | 0.0014 |
| Within-Subject Variance (residual) | 0.4879 | 0.01893 | 25.77 | <.0001 |
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| *Table S18. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and the "Caring" Item from Interpersonal Warmth Scale, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.3488 | 0.04853 | 7.19 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.04956 | 0.0114 | 4.35 | <.0001 |
| Auto-Regressive Effect | 0.09855 | 0.02995 | 3.29 | 0.001 |
| Within-Subject Variance (residual) | 0.5083 | 0.01968 | 25.83 | <.0001 |
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| *Table S19. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and the "Distant" Item from Interpersonal Warmth Scale, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.4209 | 0.06178 | 6.81 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.04247 | 0.01309 | 3.24 | 0.0006 |
| Auto-Regressive Effect | 0.1709 | 0.03053 | 5.6 | <.0001 |
| Within-Subject Variance (residual) | 0.7647 | 0.03081 | 24.82 | <.0001 |
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| *Table S20. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and the "Warm" Item from Interpersonal Warmth Scale, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.3481 | 0.05017 | 6.94 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.08191 | 0.01539 | 5.32 | <.0001 |
| Auto-Regressive Effect | 0.1648 | 0.03084 | 5.34 | <.0001 |
| Within-Subject Variance (residual) | 0.5367 | 0.02179 | 24.63 | <.0001 |
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| *Table S21. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and the "Cold" Item from Interpersonal Warmth Scale, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.3994 | 0.0579 | 6.9 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.06689 | 0.0148 | 4.52 | <.0001 |
| Auto-Regressive Effect | 0.1964 | 0.03034 | 6.47 | <.0001 |
| Within-Subject Variance (residual) | 0.6281 | 0.02568 | 24.46 | <.0001 |
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| *Table S22. Additional Results from the Analysis Examining the Relationship between Objective Temperature and Felt Physical Warmth, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.2352 | 0.04322 | 5.44 | <.0001 |
| Random Effect for Objective Temperature | 0.000212 | 0.000066 | 3.2 | 0.0007 |
| Auto-Regressive Effect | 0.09882 | 0.03269 | 3.02 | 0.0025 |
| Within-Subject Variance (residual) | 0.2936 | 0.01202 | 24.43 | <.0001 |
|  |  |  |  |  |
| *Table S23. Additional Results from the Analysis Examining the Relationship between Objective Temperature and Interpersonal Warmth, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.2004 | 0.04405 | 4.55 | <.0001 |
| Random Effect for Objective Temperature | 0 | . | . | . |
| Auto-Regressive Effect | 0.211 | 0.02911 | 7.25 | <.0001 |
| Within-Subject Variance (residual) | 0.3655 | 0.01444 | 25.31 | <.0001 |
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| *Table S24. Additional Results from the Analysis Examining the Relationship between Objective Temperature and Daily Agreeableness, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.1489 | 0.04412 | 3.37 | 0.0004 |
| Random Effect for Objective Temperature | 0.000001973 | 0.000072 | 0.03 | 0.489 |
| Auto-Regressive Effect | 0.09793 | 0.03049 | 3.21 | 0.0013 |
| Within-Subject Variance (residual) | 0.5112 | 0.02064 | 24.77 | <.0001 |
|  |  |  |  |  |
| *Table S25. Additional Results from the Analysis Examining the Effect of Felt Physical Warmth & Objective Temperature on Interpersonal Warmth, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.2547 | 0.03563 | 7.15 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.03498 | 0.007386 | 4.74 | <.0001 |
| Auto-Regressive Effect | 0.2227 | 0.03052 | 7.3 | <.0001 |
| Within-Subject Variance (residual) | 0.3049 | 0.01273 | 23.95 | <.0001 |
| Note: Since the Random Effect of Objective Temperature was clearly non-significant in prior analyses, it was dropped from this model. | | | | |
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| *Table S26. Additional Results from the Analysis Examining the Effect of Felt Physical Warmth & Objective Temperature on Daily Agreeableness, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.2123 | 0.03174 | 6.69 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.01949 | 0.007472 | 2.61 | 0.0045 |
| Auto-Regressive Effect | 0.09354 | 0.02917 | 3.21 | 0.0013 |
| Within-Subject Variance (residual) | 0.4883 | 0.01896 | 25.75 | <.0001 |
| Note: Since the Random Effect of Objective Temperature was clearly non-significant in prior analyses, it was dropped from this model. | | | | |
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| *Table S27. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and Interpersonal Warmth on Weekdays Only, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.2569 | 0.03664 | 7.01 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.03537 | 0.008865 | 3.99 | <.0001 |
| Auto-Regressive Effect | 0.1446 | 0.03898 | 3.71 | 0.0002 |
| Within-Subject Variance (residual) | 0.2969 | 0.01469 | 20.22 | <.0001 |
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| *Table S28. Additional Results from the Analysis Examining the Relationship between Felt Physical Warmth and Daily Agreeableness on Weekdays Only, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.2136 | 0.03349 | 6.38 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.02369 | 0.009692 | 2.44 | 0.0073 |
| Auto-Regressive Effect | 0.03536 | 0.03649 | 0.97 | 0.3325 |
| Within-Subject Variance (residual) | 0.4949 | 0.02313 | 21.4 | <.0001 |
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| *Table S29. Additional Results from the Analysis Examining the Effect of Chronological Day of Study and Felt Physical Warmth on Interpersonal Warmth, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.1746 | 0.04192 | 4.16 | <.0001 |
| Random Effect for Felt Physical Warmth | 0.03694 | 0.007716 | 4.79 | <.0001 |
| Random Effect for Chronological Day | 0.000311 | 0.000345 | 0.9 | 0.1837 |
| Auto-Regressive Effect | 0.2112 | 0.03387 | 6.24 | <.0001 |
| Within-Subject Variance (residual) | 0.2988 | 0.01412 | 21.16 | <.0001 |
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| *Table S30. Additional Results from the Analysis Examining the Effect of Chronological Day of Study and Felt Physical Warmth on Daily Agreeableness, Study 2.* | | | | |
| ***Effect*** | ***b*** | ***se*** | ***Z*** | ***p*** |
| Between-Subject Variance (residual) | 0.1755 | 0.04729 | 3.71 | 0.0001 |
| Random Effect for Felt Physical Warmth | 0.02009 | 0.0076 | 2.64 | 0.0041 |
| Random Effect for Chronological Day | 0.000595 | 0.000473 | 1.26 | 0.104 |
| Auto-Regressive Effect | 0.07417 | 0.0318 | 2.33 | 0.0197 |
| Within-Subject Variance (residual) | 0.4766 | 0.02002 | 23.81 | <.0001 |