For the ratio features, ANOVA showed that the main effects of SA levels were all significant (*ps* < 0.05) except six features, including *α/β*1, *σ*1*/β*1, *σ*2*/β*1, (*α*+*σ*1)/*β*1, *(σ*1*+σ*2*)/β*1, *(α+σ*1*+σ*2*)/β*1, and *α/(β*1*+β*2*)*. Detailed table format of ratios can be found in Table 1 below.

Table 1 ANOVA results of ratios for the two SA groups

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Waves  (μV2) | Region × laterality × SA group | | | Region × SA group | | | Laterality × SA group | | | SA group | | |
| ***F*** | ***p*** | ***η*2** | ***F*** | ***p*** | ***η*2** | ***F*** | ***p*** | ***η*2** | ***F*** | ***p*** | ***η*2** |
| *θ/β*1 | 2.253 | .070 | .093 | .150 | .861 | .007 | 2.532 | .091 | .103 | 9.137 | .006\* | .293 |
| *θ/β*2 | 1.956 | .108 | .082 | .214 | .808 | .010 | 1.876 | .165 | .079 | 13.733 | .001\* | .384 |
| *θ/β*3 | 2.131 | .084 | .088 | .126 | .882 | .006 | 1.413 | .254 | .060 | 15.523 | .001\* | .414 |
| *α/β*1 | .657 | .623 | .029 | 1.217 | .306 | .052 | 1.052 | .358 | .046 | 2.396 | .136 | .098 |
| *α/β*2 | .251 | .908 | .011 | 3.390 | .043\* | .134 | 1.307 | .277 | .056 | 5.558 | .028**\*** | .202 |
| *α/β*3 | .627 | .645 | .028 | 2.153 | .128 | .089 | 1.061 | .355 | .046 | 7.389 | .013**\*** | .251 |
| *σ*1*/β*1 | .441 | .779 | .020 | 1.239 | .300 | .053 | .672 | .516 | .030 | 2.971 | .099 | .119 |
| *σ*1*/β*2 | .448 | .650 | .020 | 6.276 | .004\* | .222 | .531 | .592 | .024 | 6.219 | .021**\*** | .220 |
| *σ*1*/β*3 | .469 | .758 | .021 | 6.364 | .004\* | .224 | 1.032 | .365 | .045 | 10.278 | .004\* | .318 |
| *σ*2*/β*1 | 2.111 | .086 | .088 | 5.639 | .007\* | .204 | 2.411 | .102 | .099 | 3.088 | .093 | .123 |
| *σ*2*/β*2 | 1.032 | .395 | .045 | 6.564 | .003\* | .230 | 1.419 | .253 | .061 | 6.833 | .016\* | .237 |
| *σ*2*/β*3 | .834 | .504 | .037 | 6.067 | .005\* | .216 | 1.621 | .209 | .069 | 12.002 | .002\* | .353 |
| *β*1*/β*2 | .379 | .823 | .017 | 1.436 | .249 | .061 | 2.484 | .095 | .101 | 10.029 | .004\* | .313 |
| *β*1*/β*3 | .030 | .998 | .001 | 1.752 | .185 | .074 | .164 | .849 | .007 | 15.850 | .001\* | .419 |
| *β*2*/β*3 | .776 | .544 | .034 | .652 | .526 | .029 | 1.109 | .339 | .048 | 8.151 | .009\* | .270 |
| *(θ+α)/β*1 | 1.450 | .224 | .062 | .259 | .773 | .012 | 2.384 | .104 | .098 | 7.740 | .011\* | .260 |
| *(θ+α)/β*2 | 1.138 | .344 | .049 | 1.089 | .345 | .047 | 2.016 | .145 | .084 | 11.999 | .002\* | .353 |
| *(θ+α)/β*3 | 1.369 | .251 | .059 | .698 | .503 | .031 | 1.554 | .223 | .066 | 13.795 | .001\* | .385 |
| *(α+σ*1*)/β*1 | .720 | .580 | .032 | 1.821 | .174 | .076 | 1.160 | .323 | .050 | 2.957 | .100 | .118 |
| *(α+σ*1*)/β*2 | .386 | .818 | .017 | 7.111 | .002\* | .244 | 1.153 | .325 | .050 | 6.381 | .019\* | .225 |
| *(α+σ*1*)/β*3 | .625 | .646 | .028 | 4.241 | .021\* | .162 | 1.292 | .285 | .055 | 8.861 | .007\* | .287 |
| *(σ*1*+σ*2*)/β*1 | .814 | .520 | .036 | 2.368 | .106 | .097 | 1.142 | .329 | .049 | 3.175 | .089 | .126 |
| *(σ*1*+σ*2*)/β*2 | .672 | .613 | .030 | 7.752 | .001\* | .261 | .837 | .440 | .037 | 6.650 | .017\* | .232 |
| *(σ*1*+σ*2*)/β*3 | .624 | .646 | .028 | 6.987 | .002\* | .241 | 1.329 | .275 | .057 | 11.238 | .003\* | .338 |
| *(σ*2*+β*1*)/β*2 | .474 | .755 | .021 | 4.496 | .017\* | .170 | 1.356 | .268 | .058 | 7.865 | .010\* | .263 |
| *(σ*2*+β*1*)/β*3 | .371 | .829 | .017 | 4.280 | .020\* | .163 | .689 | .507 | .030 | 13.692 | .001\* | .384 |
| *(β*1*+β*2*)/β*3 | .249 | .910 | .011 | 1.660 | .202 | .070 | .075 | .928 | .003 | 15.312 | .001\* | .410 |
| *(θ+α+σ*1*)/β*1 | 1.357 | .255 | .058 | .586 | .561 | .026 | 2.384 | .104 | .098 | 7.534 | .012\* | .255 |
| *(θ+α+σ*1*)/β*2 | 1.061 | .381 | .046 | 2.375 | .105 | .097 | 1.981 | .150 | .083 | 11.389 | .003\* | .341 |
| *(θ+α+σ*1*)/β*3 | 1.181 | .325 | .051 | 1.486 | .237 | .063 | 1.800 | .177 | .076 | 13.719 | .001\* | .384 |
| *(α+σ*1*+σ*2*)/β*1 | .913 | .460 | .040 | 2.520 | .092 | .103 | 1.426 | .251 | .061 | 3.188 | .088 | .127 |
| *(α+σ*1*+σ*2*)/β*2 | .516 | .724 | .023 | 8.463 | .001\* | .278 | 1.269 | .291 | .055 | 6.814 | .016\* | .236 |
| *(α+σ*1*+σ*2*)/β*3 | .698 | .595 | .031 | 5.156 | .010\* | .190 | 1.428 | .251 | .061 | 9.724 | .005\* | .307 |
| *(σ*1*+σ*2*+β*1*)/β*2 | .497 | .738 | .022 | 6.815 | .011\* | .237 | .868 | .427 | .038 | 7.214 | .014\* | .247 |
| *(σ*1*+σ*2*+β*1*)/β*3 | .472 | .756 | .021 | 6.022 | .005\* | .215 | 1.033 | .364 | .045 | 12.342 | .002\* | .359 |
| *(σ*2*+β*1*+β*2*)/β*3 | .474 | .755 | .021 | 3.928 | .027\* | .152 | .543 | .585 | .024 | 14.553 | .001\* | .398 |
| *(θ+α+σ*1*+σ*2*)/β*1 | 1.497 | .210 | .064 | .910 | .369 | .040 | 2.551 | .089 | .104 | 7.456 | .012\* | .253 |
| *(θ+α+σ*1*+σ*2*)/β*2 | 1.097 | .363 | .047 | 3.084 | .056 | .123 | 2.022 | .145 | .084 | 11.149 | .003\* | .336 |
| *(θ+α+σ*1*+σ*2*)/β*3 | .698 | .595 | .031 | 5.156 | .010\* | .190 | 1.428 | .251 | .061 | 9.724 | .005\* | .307 |
| *(α+σ*1*+σ*2*+β*1*)/β*2 | .425 | .790 | .019 | 7.821 | .001\* | .262 | 1.313 | .279 | .056 | 7.171 | .014\* | .246 |
| *(α+σ*1*+σ*2*+β*1*)/β*3 | .601 | .663 | .027 | 4.906 | .012\* | .182 | 1.233 | .301 | .053 | 10.383 | .004\* | .321 |
| *(σ*1*+σ*2*+β*1*+β*2*)/β*3 | .517 | .723 | .023 | 5.627 | .007\* | .204 | .963 | .390 | .042 | 13.034 | .002\* | .372 |
| *(θ+α+σ*1*+σ*2*+β*1*)/β*2 | .990 | .418 | .043 | 3.029 | .059 | .121 | 2.001 | .147 | .083 | 11.265 | .003\* | .339 |
| *(θ+α+σ*1*+σ*2*+β*1*)/β*3 | 1.060 | .381 | .046 | 2.008 | .146 | .084 | 1.680 | .198 | .071 | 14.017 | .001\* | .389 |
| *(α+σ*1*+σ*2*+β*1*+β*2*)/β*3 | .629 | .643 | .028 | 4.675 | .014\* | .175 | 1.144 | .328 | .049 | 10.707 | .003\* | .327 |
| *(θ+α+σ*1*+σ*2*+β*1*+β*2*)/β*3 | 1.076 | .374 | .047 | 1.991 | .149 | .083 | 1.595 | .214 | .068 | 14.150 | .001\* | .391 |
| *θ/(β*1*+β*2*)* | 2.124 | .084 | .088 | .064 | .938 | .003 | 2.253 | .117 | .093 | 12.292 | .002\* | .358 |
| *α/(β*1*+β*2*)* | .385 | .819 | .017 | 2.021 | .145 | .084 | 1.152 | .326 | .050 | 4.007 | .058 | .154 |
| *σ*1*/(β*1*+β*2*)* | .371 | .829 | .017 | 2.934 | .064 | .118 | .564 | .573 | .025 | 4.734 | .041\* | .177 |
| *σ*2*/(β*1*+β*2*)* | 1.301 | .276 | .056 | 7.903 | .001\* | .264 | 1.805 | .176 | .076 | 5.405 | .030\* | .197 |
| *θ/(β*2*+β*3*)* | 2.031 | .097 | .085 | .169 | .845 | .008 | 1.585 | .216 | .067 | 14.985 | .001\* | .405 |
| *α/(β*2*+β*3*)* | .389 | .816 | .017 | 2.892 | .066 | .116 | 1.113 | .338 | .048 | 6.517 | .018\* | .229 |
| *σ*1*/(β*2*+β*3*)* | .431 | .786 | .019 | 6.916 | .008\* | .239 | .678 | .513 | .030 | 8.277 | .009\* | .273 |
| *σ*2*/(β*2*+β*3*)* | .894 | .471 | .039 | 6.715 | .003\* | .234 | 1.432 | .250 | .061 | 9.635 | .005\* | .305 |
| *β*1*/(β*2*+β*3*)* | .195 | .940 | .009 | 1.747 | .186 | .074 | .921 | .406 | .040 | 14.742 | .001\* | .401 |
| *(θ+α)/(β*1*+β*2*)* | 1.262 | .291 | .054 | .563 | .573 | .025 | 2.257 | .117 | .093 | 10.589 | .004\* | .325 |
| *(α+σ*1*)/(β*1*+β*2*)* | .463 | .763 | .021 | 3.956 | .026\* | .152 | 1.115 | .337 | .048 | 4.788 | .040\* | .179 |
| *(σ*1*+σ*2*)/(β*1*+β*2*)* | .640 | .635 | .028 | 5.283 | .009\* | .194 | .930 | .402 | .041 | 5.173 | .033\* | .190 |
| *(θ+α)/(β*2*+β*3*)* | 1.216 | .310 | .052 | .929 | .403 | .041 | 1.716 | .192 | .072 | 13.219 | .001\* | .375 |
| *(α+σ*1*)/(β*2*+β*3*)* | .464 | .762 | .021 | 5.984 | .005\* | .214 | 1.128 | .333 | .049 | 7.709 | .011\* | .259 |
| *(σ*1*+σ*2*)/(β*2*+β*3*)* | .613 | .654 | .027 | 8.006 | .001\* | .267 | .980 | .384 | .043 | 9.048 | .006\* | .291 |
| *(σ*2*+β*1*)/(β*2*+β*3*)* | .368 | .831 | .016 | 4.729 | .014\* | .177 | .821 | .447 | .036 | 11.389 | .003\* | .341 |
| *(θ+α+σ*1*)/(β*1*+β*2*)* | 1.154 | .337 | .050 | 1.441 | .248 | .061 | 2.221 | .121 | .092 | 10.154 | .004\* | .316 |
| *(α+σ*1*+σ*2*)/(β*1*+β*2*)* | .608 | .658 | .027 | 5.890 | .005\* | .211 | 1.299 | .283 | .056 | 5.204 | .033\* | .191 |
| *(σ*1*+σ*2*+β*1*)/(β*2*+β*3*)* | .444 | .776 | .020 | 7.026 | .002\* | .242 | .831 | .442 | .036 | 10.036 | .004\* | .313 |
| *θ/(β*1*+β*2*+β*3*)* | 2.261 | .069 | .093 | .075 | .928 | .003 | 1.945 | .155 | .081 | 13.945 | .001\* | .388 |
| *α/(β*1*+β*2*+β*3*)* | .449 | .773 | .020 | 2.220 | .121 | .092 | 1.072 | .351 | .046 | 5.111 | .034\* | .189 |
| *σ*1*/(β*1*+β*2*+β*3*)* | .409 | .802 | .018 | 4.396 | .018\* | .167 | .640 | .532 | .028 | 6.581 | .018\* | .230 |
| *σ*2*/(β*1*+β*2*+β*3*)* | 1.223 | .307 | .053 | 8.058 | .001\* | .268 | 1.753 | .185 | .074 | 8.016 | .010\* | .267 |
| *(θ+α)/(β*1*+β*2*+β*3*)* | 1.365 | .253 | .058 | .659 | .522 | .029 | 1.992 | .149 | .083 | 12.136 | .002\* | .356 |
| *(α+σ*1*)/(β*1*+β*2*+β*3*)* | .517 | .723 | .023 | 4.564 | .016\* | .172 | 1.117 | .336 | .048 | 6.190 | .021\* | .220 |
| *(σ*1*+σ*2*)/(β*1*+β*2*+β*3*)* | .663 | .619 | .029 | 6.904 | .002\* | .239 | 1.003 | .375 | .044 | 7.351 | .013\* | .250 |

\* *p* < .05