

TABLE I
STATISTICAL RESULTS OF IMMEDIATE EFFECT ON PSD AT DIFFERENT REGIONS

Band	Metric	Immediate Effect (F (p-value))			Post-hoc (t (p-value))			
		Time	Session	Interaction	N_{T2} vs. A_{T2}	N_{T3} vs. A_{T3}	N_{T2} vs. N_{T3}	A_{T2} vs. A_{T3}
Delta	Frontal	0.157 (0.695)	1.123 (0.299)	1.862 (0.184)	1.697 (0.101)	0.365 (0.718)	1.412 (0.169)	0.593 (0.558)
	Central	0.329 (0.571)	1.732 (0.199)	0.083 (0.776)	1.033 (0.311)	1.212 (0.236)	0.171 (0.866)	0.525 (0.604)
	Parietal	2.860 (0.102)	0.300 (0.589)	2.867 (0.102)	1.189 (0.245)	0.173 (0.864)	2.836 (0.009)	0.068 (0.946)
Theta	Frontal	0.157 (0.695)	0.061 (0.807)	1.663 (0.208)	0.663 (0.513)	0.234 (0.817)	1.203 (0.239)	0.457 (0.652)
	Central	0.052 (0.822)	0.111 (0.741)	3.686 (0.065)	0.407 (0.687)	0.863 (0.395)	1.254 (0.221)	1.228 (0.230)
	Parietal	0.014 (0.908)	0.413 (0.708)	7.454 (0.011)	0.768 (0.449)	1.192 (0.243)	1.625 (0.116)	1.949 (0.062)
Alpha	Frontal	1.729 (0.200)	3.015 (0.094)	0.804 (0.378)	1.337 (0.192)	1.877 (0.071)	0.416 (0.681)	1.592 (0.123)
	Central	0.282 (0.599)	4.674 (0.040) ▽	6.298 (0.018)	1.391 (0.176)	2.780 (0.010)	1.313 (0.200)	1.829 (0.078)
	Parietal	4.188 (0.051)	2.521 (0.124)	0.130 (0.721)	1.373 (0.181)	1.647 (0.111)	1.230 (0.229)	1.529 (0.138)
Beta	Frontal	2.174 (0.152)	0.193 (0.664)	8.501 (0.007)	0.094 (0.926)	0.935 (0.358)	0.494 (0.626)	2.982 (0.006)
	Central	0.008 (0.930)	0.612 (0.441)	0.342 (0.564)	0.667 (0.510)	0.868 (0.393)	0.274 (0.786)	0.423 (0.676)
	Parietal	0.024 (0.879)	0.468 (0.389)	1.436 (0.241)	0.694 (0.494)	1.026 (0.314)	0.803 (0.429)	0.802 (0.430)

Note: Two-way repeated-mean ANOVA was performed for immediate effect. N represents No-break session and A represents ASMR-break session. Significant effects were shown in **bold**; ▽, No-Break < ASMR-Break.

TABLE II
STATISTICAL RESULTS OF GENERAL EFFECT ON PSD AT DIFFERENT REGIONS

Band	Metric	Immediate Effect (F (p-value))			Post-hoc (t (p-value))			
		Time	Session	Interaction	N_{T1} vs. A_{T1}	N_{T4} vs. A_{T4}	N_{T1} vs. N_{T4}	A_{T1} vs. A_{T4}
Delta	Frontal	6.561 (0.016) ↑	2.683 (0.113)	0.311 (0.581)	1.532 (0.137)	1.342 (0.191)	2.168 (0.039)	1.596 (0.122)
	Central	4.828 (0.037) ↑	1.235 (0.276)	1.118 (0.300)	0.504 (0.619)	1.413 (0.169)	0.961 (0.345)	2.481 (0.020)
	Parietal	8.853 (0.006) ↑	0.069 (0.795)	1.353 (0.255)	0.340 (0.737)	0.798 (0.432)	1.459 (0.156)	2.935 (0.007)
Theta	Frontal	5.206 (0.031) ↑	0.691 (0.413)	0.001 (0.977)	0.712 (0.483)	0.779 (0.443)	1.672 (0.106)	2.027 (0.053)
	Central	8.991 (0.006) ↑	0.011 (0.919)	0.502 (0.485)	0.346 (0.732)	0.192 (0.849)	2.536 (0.017)	2.378 (0.025)
	Parietal	1.851 (0.185)	0.012 (0.915)	0.462 (0.503)	0.302 (0.765)	0.125 (0.902)	0.859 (0.398)	1.562 (0.130)
Alpha	Frontal	7.145 (0.013) ↓	3.314 (0.080)	0.058 (0.811)	1.731 (0.095)	1.617 (0.117)	1.885 (0.070)	2.205 (0.036)
	Central	5.042 (0.033) ↓	4.139 (0.052)	0.775 (0.387)	1.907 (0.067)	1.934 (0.064)	1.134 (0.267)	2.286 (0.030)
	Parietal	4.913 (0.035) ↓	1.458 (0.238)	2.943 (0.098)	0.593 (0.558)	1.516 (0.141)	0.868 (0.393)	2.619 (0.014)
Beta	Frontal	12.739 (0.001) ↓	0.074 (0.788)	1.825 (0.188)	0.109 (0.914)	0.720 (0.478)	3.612 (0.001)	1.718 (0.097)
	Central	9.832 (0.004) ↓	0.683 (0.416)	0.005 (0.944)	0.791 (0.436)	0.822 (0.418)	2.381 (0.025)	2.931 (0.007)
	Parietal	10.493 (0.003) ↓	1.040 (0.317)	0.061 (0.806)	0.961 (0.345)	1.064 (0.297)	2.207 (0.036)	3.775 (0.001)

Note: Two-way repeated-mean ANOVA was performed for general effect. N represents No-break session and A represents ASMR-break session. Significant effects were shown in **bold**; ↑, $T1 > T4$; ↓, $T1 < T4$.

TABLE III
STATISTICAL RESULTS OF IMMEDIATE EFFECT ON NETWORK METRICS

Band	Metric	Immediate Effect (F (p-value))			Post-hoc (t (p-value))			
		Time	Session	Interaction	$N_{T2} \text{ vs. } A_{T2}$	$N_{T3} \text{ vs. } A_{T3}$	$N_{T2} \text{ vs. } N_{T3}$	$A_{T2} \text{ vs. } A_{T3}$
Delta	C	0.026 (0.762)	0.018 (0.895)	0.094 (0.762)	0.342 (0.735)	0.032 (0.974)	0.046 (0.964)	0.402 (0.691)
	L	3.043 (0.092)	0.089 (0.767)	0.701 (0.410)	0.862 (0.396)	0.198 (0.845)	1.776 (0.087)	0.770 (0.448)
	σ	1.615 (0.215)	0.484 (0.492)	0.726 (0.402)	0.946 (0.353)	0.210 (0.835)	1.591 (0.123)	0.213 (0.833)
	E_{glob}	1.186 (0.286)	0.166 (0.687)	0.361 (0.553)	0.746 (0.451)	0.057 (0.955)	1.098 (0.282)	0.511 (0.614)
	E_{loc}	0.358 (0.555)	0.001 (0.992)	0.069 (0.794)	0.160 (0.874)	0.102 (0.919)	0.587 (0.562)	0.376 (0.710)
Theta	C	0.023 (0.879)	0.227 (0.637)	0.508 (0.482)	0.018 (0.986)	0.703 (0.488)	0.552 (0.585)	0.614 (0.544)
	L	0.228 (0.637)	1.040 (0.317)	0.056 (0.815)	0.677 (0.504)	0.959 (0.346)	0.098 (0.923)	0.510 (0.614)
	σ	0.301 (0.587)	2.479 (0.127)	7.198 (0.012)	2.889 (0.008)	0.530 (0.600)	2.474 (0.020)	1.766 (0.089)
	E_{glob}	0.022 (0.883)	0.238 (0.630)	0.001 (0.971)	0.450 (0.656)	0.365 (0.718)	0.062 (0.951)	0.138 (0.891)
	E_{loc}	0.002 (0.962)	0.093 (0.763)	0.597 (0.447)	0.192 (0.849)	0.619 (0.541)	0.558 (0.582)	0.693 (0.494)
Alpha	C	0.003 (0.959)	0.458 (0.504)	0.380 (0.543)	0.908 (0.372)	0.199 (0.844)	0.357 (0.724)	0.512 (0.613)
	L	1.280 (0.268)	0.653 (0.426)	0.250 (0.621)	0.463 (0.647)	1.015 (0.319)	0.996 (0.328)	0.547 (0.589)
	σ	0.779 (0.385)	0.035 (0.853)	0.025 (0.875)	0.046 (0.964)	0.272 (0.788)	0.522 (0.606)	0.802 (0.430)
	E_{glob}	0.675 (0.419)	0.234 (0.633)	0.012 (0.915)	0.426 (0.674)	0.412 (0.683)	0.460 (0.649)	0.701 (0.489)
	E_{loc}	0.104 (0.749)	0.127 (0.725)	0.196 (0.662)	0.507 (0.616)	0.050 (0.961)	0.082 (0.935)	0.603 (0.552)
Beta	C	0.012 (0.912)	0.114 (0.738)	0.464 (0.501)	0.030 (0.976)	0.641 (0.527)	0.238 (0.814)	0.419 (0.679)
	L	0.130 (0.721)	0.105 (0.749)	0.662 (0.423)	0.189 (0.852)	0.945 (0.353)	0.771 (0.447)	0.231 (0.819)
	σ	0.852 (0.364)	0.044 (0.835)	0.018 (0.895)	0.059 (0.953)	0.278 (0.783)	0.803 (0.429)	0.564 (0.577)
	E_{glob}	0.006 (0.941)	0.001 (0.978)	1.562 (0.222)	0.558 (0.581)	0.785 (0.439)	0.649 (0.522)	0.570 (0.574)
	E_{loc}	0.001 (0.977)	0.054 (0.818)	1.474 (0.235)	0.339 (0.737)	0.973 (0.339)	0.598 (0.555)	0.552 (0.586)

Note: Two-way repeated-mean ANOVA was performed for immediate effect. N represents No-break session and A represents ASMR-break session. Significant effects were shown in **bold**.

TABLE IV
STATISTICAL RESULTS OF GENERAL EFFECT ON NETWORK METRICS

Band	Metric	General Effect (F (p-value))			Post-hoc (t (p-value))			
		Time	Session	Interaction	$N_{T1} \text{ vs. } A_{T1}$	$N_{T4} \text{ vs. } A_{T4}$	$N_{T1} \text{ vs. } N_{T4}$	$A_{T1} \text{ vs. } A_{T4}$
Delta	C	3.147 (0.087)	0.049 (0.827)	1.504 (0.231)	0.761 (0.453)	0.819 (0.420)	0.480 (0.635)	3.257 (0.003)
	L	10.409 (0.003)↓	0.711 (0.407)	1.704 (0.203)	0.178 (0.860)	1.189 (0.245)	1.443 (0.160)	3.953 (0.001)
	σ	6.238 (0.019)↓	0.275 (0.604)	1.326 (0.260)	1.337 (0.192)	0.272 (0.788)	1.276 (0.213)	2.800 (0.009)
	E_{glob}	8.363 (0.007)↑	0.211 (0.650)	1.817 (0.189)	0.407 (0.687)	1.040 (0.308)	1.449 (0.159)	4.073 (<0.001)
	E_{loc}	5.928 (0.022)↑	0.345 (0.562)	1.546 (0.224)	0.421 (0.677)	1.058 (0.300)	0.955 (0.348)	4.122 (<0.001)
Theta	C	16.044 (<0.001)↑	0.350 (0.559)	0.214 (0.648)	0.248 (0.806)	0.649 (0.522)	3.143 (0.004)	2.904 (0.007)
	L	14.738 (0.001)↓	0.972 (0.333)	0.236 (0.631)	0.575 (0.570)	0.899 (0.377)	3.058 (0.005)	3.283 (0.003)
	σ	3.166 (0.086)	1.824 (0.188)	0.392 (0.537)	1.969 (0.059)	0.508 (0.615)	0.898 (0.377)	1.712 (0.098)
	E_{glob}	14.821 (0.001)↑	1.640 (0.211)	0.046 (0.831)	1.461 (0.155)	0.831 (0.413)	2.789 (0.010)	3.471 (0.002)
	E_{loc}	15.947 (<0.001)↑	0.885 (0.355)	0.031 (0.861)	0.835 (0.411)	0.749 (0.461)	2.938 (0.007)	3.331 (0.003)
Alpha	C	1.361 (0.254)	0.054 (0.819)	3.121 (0.089)	1.230 (0.229)	0.786 (0.439)	1.881 (0.071)	0.202 (0.842)
	L	2.144 (0.155)	0.000 (0.985)	1.499 (0.231)	0.659 (0.515)	0.598 (0.555)	1.988 (0.057)	0.251 (0.804)
	σ	4.285 (0.048)↓	0.062 (0.805)	0.779 (0.385)	1.094 (0.284)	0.393 (0.697)	1.976 (0.058)	0.770 (0.448)
	E_{glob}	2.490 (0.126)	0.001 (0.974)	1.787 (0.193)	0.767 (0.450)	0.781 (0.442)	1.999 (0.056)	0.457 (0.651)
	E_{loc}	1.704 (0.203)	0.028 (0.868)	2.276 (0.143)	1.079 (0.290)	0.683 (0.500)	1.964 (0.060)	0.090 (0.929)
Beta	C	3.450 (0.074)	0.005 (0.944)	0.899 (0.352)	0.922 (0.365)	0.483 (0.633)	2.491 (0.019)	0.684 (0.500)
	L	3.378 (0.077)	0.003 (0.959)	2.125 (0.156)	0.912 (0.370)	0.949 (0.351)	2.333 (0.027)	0.445 (0.660)
	σ	1.698 (0.204)	0.012 (0.915)	0.089 (0.767)	0.068 (0.946)	0.305 (0.763)	0.700 (0.490)	1.233 (0.228)
	E_{glob}	3.827 (0.061)	0.000 (0.985)	0.780 (0.385)	0.768 (0.449)	0.498 (0.622)	2.347 (0.027)	0.800 (0.431)
	E_{loc}	3.998 (0.056)	0.001 (0.971)	0.744 (0.396)	0.786 (0.439)	0.508 (0.615)	2.467 (0.020)	0.810 (0.425)

Note: Two-way repeated-mean ANOVA was performed for general effect. N represents No-break session and A represents ASMR-break session. Significant effects were shown in **bold**.