Supplementary Material

*Cognition*. The reaction to difficulty index at intervention (*p* = .768, BF10 = .232), session (*p* = .592, BF10 = .254), session\*intervention (*p* = .731, BF10 = .056) did not change. The simple reaction time at intervention (*p* = .678, BF10 = .241), session (*p* = .834, BF10 = .227), session\*intervention (*p* = .265, BF10 = .055); outliers’ answers at intervention (*p* = .645, BF10 = .245), session\*intervention (*p* = .632, BF10 = .230); simple reaction time dispersion at intervention (*p* = .541, BF10 = .248), session\*intervention (*p* = .938, BF10 = .266) for the alertness function did not change.

Similar results were found for the executive speed at intervention (*p* = .792, BF10 = .230), session (*p* = .835, BF10 = .227), session\*intervention (*p* = .218, BF10 = .051); choice errors on precision at intervention (*p* = .453, BF10 = .286), session (*p* = .777, BF10 = .281), session\*intervention (*p* = .115, BF10 = .065); reaction time dispersion with categorization at intervention (*p* = .173, BF10 = .517), session (*p* = .824, BF10 = .228), session\*intervention (*p* = .522, BF10 = .112) for the orientation/ selective attention function.

Moreover, speed categorization at intervention (*p* = .283, BF10 = .375), session (*p* = .842, BF10 = .227), session\*intervention (*p* = .475, BF10 = .083); cognitive load at intervention (*p* = .803, BF10 = .229), session (*p* = .969, BF10 = .223), session\*intervention (*p* = .311, BF10 = .051); Go/NoGo speed at intervention (*p* = .951, BF10 = .223), session (*p* = .966, BF10 = .223), session\*intervention (*p* = .577, BF10 = .049) for the executive control function did not change.

The total numbers of errors at intervention (*p* = .838, BF10 = .227), session (*p* = .838, BF10 = .227), session\*intervention (*p* = .494, BF10 = .049); anticipatory errors at intervention (*p* = .733, BF10 = .235), session (*p* = .792, BF10 = .230), session\*intervention (*p* = .902, BF10 = .053); erroneous errors at intervention (*p* = .353, BF10 = .326), session (*p* = .647, BF10 = .244), session\*intervention (*p* = .155, BF10 = .079); inhibition errors at intervention (*p* = .353, BF10 = .326), session (*p* = .647, BF10 = .244), session\*intervention (*p* = .155, BF10 = .122); cognitive load errors at intervention (*p* = .715, BF10 = .237), session (*p* = .878, BF10 = .225), session\*intervention (*p* = .368, BF10 = .050); conjoint errors at intervention (*p* = .473, BF10 = .279), session (*p* = .473, BF10 = .279), session\*intervention (*p* = .101, BF10 = .068) did not change.

*HRV.* None of the differences in the following measures reached significance: HR at intervention (*p* = .131, BF10 = .417), session\*intervention (*p* = .125, BF10 = .605); RR intervals at intervention (*p* = .134, BF10 = .583), session\*intervention (*p* = .155, BF10 = .629); SDNN at intervention (*p* = .519, BF10 = .265), session (*p* = .117, BF10 = .629); RMSSD at intervention (*p* = .165, BF10 = .505), session (*p* = .639, BF10 = .244); pNN50 at intervention (*p* = .245, BF10 = .398), session (*p* = .732, BF10 = .234), session\*intervention (*p* = .032, BF10 = .090); LF at intervention (*p* = .841, BF10 = .227), session (*p* = .257, BF10 = .391), session\*intervention (*p* = .075, BF10 = .084); HF at intervention (*p* = .165, BF10 = .505), session (*p* = .639, BF10 = .244); LF/HF ratio at intervention (*p* = .814, BF10 = .229), session (*p* = .735, BF10 = .235), session\*intervention (*p* = .256, BF10 = .051); SD1 at intervention (*p* = .165, BF10 = .505), session (*p* = .639, BF10 = .244); SD2 at intervention (*p* = .606, BF10 = .249), session (*p* = .104, BF10 = .687); SD ratio at intervention (*p* = .523, BF10 = .268), session (*p* = .943, BF10 = .223), session\*intervention (*p* = .693, BF10 = .061); α1 at intervention (*p* = .588, BF10 = .254), session (*p* = .884, BF10 = .225), session\*intervention (*p* = .388, BF10 = .057); α2 at intervention (*p* = .469, BF10 = .282), session (*p* = .982, BF10 = .009), session\*intervention (*p* = .189, BF10 = .141); SampEn at intervention (*p* = .288, BF10 = .372), session (*p* = .925, BF10 = .224), session\*intervention (*p* = .708, BF10 = .079).

*Monitoring sleep*. Among the unique session, no significant differences were detected for total time recording at time (*p* = . 256, BF10 = .506), intervention (*p* = .199, BF10 = .591), time\*intervention (*p* = . 533, BF10 = . 306); total sleep time at time (*p* = .275, BF10 = .483), intervention (*p* = .142, BF10 = .733), time\*intervention (*p* = .548, BF10 = .359); sleep onset latency at time (*p* = .103, BF10 = .885), intervention (*p* = .190, BF10 = .590), time\*intervention (*p* = .404, BF10 = .542); wake after sleep at time (*p* = .195, BF10 = .615), intervention (*p* = .845, BF10 = .298), time\*intervention (*p* = .955, BF10 = .177); total awake time during recording at time (*p* = .809, BF10 = .305), intervention (*p* = .502, BF10 = .361), time\*intervention (*p* = .861, BF10 = .105); minutes of N1 sleep stage at time (*p* = .786, BF10 = .307), intervention (*p* = .679, BF10 = .320), time\*intervention (*p* = .966, BF10 = .095); minutes of N2 sleep stage at time (*p* = .428, BF10 = .388), intervention (*p* = .318, BF10 = .455), time\*intervention (*p* = .964, BF10 = .176); minutes of N3 sleep stage at time (*p* = .618, BF10 = .328), intervention (*p* = .097, BF10 = .956), time\*intervention (*p* = .351, BF10 = .131); minutes of non-rapid eyes movement sleep stage at time (*p* = .665, BF10 = .321), intervention (*p* = .099, BF10 = .967), time\*intervention (*p* = .638, BF10 = .297); minutes of rapid eyes movement sleep stage at intervention (*p* = .440, BF10 = .288), time\*intervention (*p* = .513, BF10 = .365); percentage of N1 sleep stage at time (*p* = .525, BF10 = .353), intervention (*p* = .310, BF10 = .462), time\*intervention (*p* = .898, BF10 = .161); percentage of N2 sleep stage at time (*p* = .511, BF10 = .356), intervention (*p* = .544, BF10 = .346), time\*intervention (*p* = .269, BF10 = .118); percentage of N3 sleep stage at time (*p* = .349, BF10 = .433), intervention (*p* = .515, BF10 = .356), time\*intervention (*p* = .800, BF10 = .149); percentage of non-rapid eyes movement sleep stage at intervention (*p* = .440, BF10 = .174), time\*intervention (*p* = .871, BF10 = .027); percentage of rapid eyes movement sleep stage at time (*p* = .137, BF10 = 1.000), intervention (*p* = .914, BF10 = .288), time\*intervention (*p* = .519, BF10 = .386); sleep efficiency at time (*p* = .594, BF10 = .334), intervention (*p* = .115, BF10 = .873), time\*intervention (*p* = .875, BF10 = .298); sleep onset in seconds at time (*p* = .525, BF10 = .352), intervention (*p* = .593, BF10 = .335), time\*intervention (*p* = .249, BF10 = .112); latency to persistent sleep at time (*p* = .183, BF10 = .595), intervention (*p* = .108, BF10 = .836), time\*intervention (*p* = .183, BF10 = .518); mean respiration rate during the night at time (*p* = .813, BF10 = .305), intervention (*p* = .772, BF10 = .308), time\*intervention (*p* = .640, BF10 = .096); mean respiration rate during total awake time during recording epochs at time (*p* = .711, BF10 = .315), intervention (*p* = .681, BF10 = .319), time\*intervention (*p* = .431, BF10 = .099); mean respiration rate during N1 epochs at time (*p* = .542, BF10 = .348), intervention (*p* = .637, BF10 = .327), time\*intervention (*p* = .525, BF10 = .114); mean respiration rate during N2 epochs at time (*p* = .760, BF10 = .310), intervention (*p* = .879, BF10 = .300), time\*intervention (*p* = .662, BF10 = .091); mean respiration rate during N3 epochs at time (*p* = .950, BF10 = .298), intervention (*p* = .790, BF10 = .307), time\*intervention (*p* = .487, BF10 = .087); mean respiration rate during rapid eyes movement epochs at time (*p* = .809, BF10 = .305), intervention (*p* = .911, BF10 = .343), time\*intervention (*p* = .566, BF10 = .103).

Among the repeated session, no significant differences were detected for total recording time at time (*p* = . 172, BF10 = .282), intervention (*p* = .102, BF10 = .382); total sleep time at time (*p* = .142, BF10 = .351), intervention (*p* = .157, BF10 = .332); sleep onset latency at time (*p* = .785, BF10 = .314), intervention (*p* = .493, BF10 = .366), time\*intervention (*p* = .048, BF10 = .118); wake after sleep onset at time (*p* = .579, BF10 = .351), intervention (*p* = .102, BF10 = .903); total awake time during recording at time (*p* = .816, BF10 = .310), intervention (*p* = .948, BF10 = .303), time\*intervention (*p* = .701, BF10 = .097); minutes of N1 sleep stage at time (*p* = .480, BF10 = .362), intervention (*p* = .932, BF10 = .303), time\*intervention (*p* = .010, BF10 = .112); minutes of N2 sleep stage at time (*p* = .444, BF10 = .391), intervention (*p* = .365, BF10 = .429), time\*intervention (*p* = .085, BF10 = .157); minutes of N3 sleep stage at time (*p* = .328, BF10 = .405), intervention (*p* = .081, BF10 = 1.000), time\*intervention (*p* = .416, BF10 = .457); minutes of non-rapid eyes movement sleep stage at time (*p* = .188, BF10 = .622), intervention (*p* = .098, BF10 = .927); minutes of rapid eyes movement sleep stage at time (*p* = .524, BF10 = .356), intervention (*p* = .984, BF10 = .303), time\*intervention (*p* = .085, BF10 = .104); percentage of N1 sleep stage at time (*p* = .749, BF10 = .311), intervention (*p* = .234, BF10 = .537), time\*intervention (*p* = .211, BF10 = .170); percentage of N2 sleep stage at time (*p* = .916, BF10 = .304), intervention (*p* = .984, BF10 = .303), time\*intervention (*p* = .525, BF10 = .094); percentage of N3 sleep stage at time (*p* = .362, BF10 = .444), intervention (*p* = .218, BF10 = .595), time\*intervention (*p* = .366, BF10 = .250); percentage of non-rapid eyes movement sleep stage at time (*p* = .461, BF10 = .391), intervention (*p* = .404, BF10 = .418), time\*intervention (*p* = .995, BF10 = .164); percentage of rapid eyes movement sleep stage at time (*p* = .607, BF10 = 345), intervention (*p* = .405, BF10 = .415), time\*intervention (*p* = .994, BF10 = .136); sleep efficiency at time (*p* = .468, BF10 = .384), intervention (*p* = .445, BF10 = .393), time\*intervention (*p* = .201, BF10 = .149); sleep onset in seconds at time (*p* = .554, BF10 = .354), intervention (*p* = .710, BF10 = .324), time\*intervention (*p* = .329, BF10 = .112); latency to persistent sleep at time (*p* = .716, BF10 = .322), intervention (*p* = .315, BF10 = .445); mean respiration rate during the night at time (*p* = .583, BF10 = .345), intervention (*p* = .979, BF10 = .303), time\*intervention (*p* = .910, BF10 = .101); mean respiration rate during total awake time during recording epochs at time (*p* = .708, BF10 = .322), intervention (*p* = .989, BF10 = .303), time\*intervention (*p* = .687, BF10 = .120); mean respiration rate during N1 epochs at time (*p* = .729, BF10 = .319), intervention (*p* = .950, BF10 = .304), time\*intervention (*p* = .962, BF10 = .098); mean respiration rate during N2 epochs at time (*p* = .518, BF10 = .365), intervention (*p* = .824, BF10 = .311), time\*intervention (*p* = .955, BF10 = .110); mean respiration rate during N3 epochs at time (*p* = .695, BF10 = .324), intervention (*p* = .543, BF10 = .353), time\*intervention (*p* = .246, BF10 = .113); mean respiration rate during rapid eyes movement epochs at time (*p* = .292, BF10 = .342), intervention (*p* = .905, BF10 = .304), time\*intervention (*p* = .953, BF10 = .105).

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