

Supplementary Table 1. Demographic and traffic behaviour variables by ADHD symptom levels in the Traffic Study I sample.

	Low ADHD risk	High ADHD risk	Low hyperactivity/impulsivity	High hyperactivity/impulsivity	Low inattention	High inattention
Age, mean (SD)	23.3 (7.3)	23.0 (7.2)	23.1 (7.5)	23.4 (6.9)	23.5 (7.7)	22.9 (6.5)
Gender, male % (n)	34.6% (235)	39.3% (24)	36.8% (147)	32.8% (112)	36.1% (159)	33.3% (100)
Mileage driven past year (n=523) >10000 % (n)	28.0% (136)	18.9% (7)	28.3% (83)	26.1% (60)	30.3% (98)	22.5% (45)
Fast decision making (n=730), mean (SD)	18.3 (4.2)	17.7 (4.0)	18.1 (4.2)	18.4 (4.2)	18.9 (3.9)	17.3 (4.4)***
Excitement seeking (n=730), mean (SD)	19.0 (4.8)	20.0 (5.1)	18.9 (4.8)	19.4 (4.8)	18.9 (4.6)	19.4 (5.0)
Thoughtlessness (n=730), mean (SD)	15.2 (4.4)	16.9 (4.6)**	14.5 (4.2)	16.4 (4.4)***	14.8 (4.2)	16.3 (4.6)***
Disinhibition (n=730), mean (SD)	17.2 (4.2)	18.9 (5.0)**	16.5 (4.1)	18.3 (4.2)***	16.6 (4.0)	18.4 (4.3)***
DBQ Violations (n=566), z score mean (SD)	-0.03 (1.0)	0.4 (1.1)*	-0.2 (0.9)	0.2 (1.1)***	-0.1 (1.0)	0.1 (1.0)*
DBQ Errors (n=566), z score mean (SD)	-0.04 (1.0)	0.5 (1.1)***	-0.2 (0.9)	0.2 (1.1)***	-0.2 (0.9)	0.3 (1.0)***
Driving Anger Scale (n=568), z score mean (SD)	-0.02 (1.0)	0.3 (0.9)*	-0.1 (1.0)	0.2 (1.0)**	-0.1 (1.0)	0.1 (1.0)
Traffic accidents, % (n)	11.5% (78)	13.1% (8)	13.3% (53)	9.7% (33)	13.2% (58)	9.3% (28)
Traffic violations, % (n)	20.9% (142)	31.1% (19)	18.8% (75)	25.2% (86)*	22.4% (99)	20.7% (62)
High traffic risk, % (n)	28.2% (192)	36.1% (22)	26.5% (106)	31.7% (108)	30.6% (135)	26.3% (79)
<i>DATI</i> (n=339), 9R allele carriers % (n)	36.9% (114)	50.0% (15)	39.5% (77)	36.1% (52)	35.2% (70)	42.1% (59)

n in brackets in the variable column is the number of subjects with all valid data, presented only for variables with data not available for all included subjects (n = 741); * p < 0.05, ** p < 0.01, *** p < 0.001 statistically significant difference from the respective low ADHD symptom group.

Supplementary Table 2. Demographic and traffic behaviour variables by ADHD symptom levels in the Traffic Study II sample.

	Low risk ADHD	High risk ADHD	Low hyperactivity/ impulsivity	High hyperactivity/ impulsivity	Low inattention	High inattention
Age, mean (SD)	23.4 (8.5)	20.4 (5.6)***	23.8 (8.4)	21.8 (7.6)***	23.7 (8.5)	21.9 (7.4)***
Gender, male %	38.2% (310)	37.2% (68)	35.4% (192)	41.1% (186)	38.6% (208)	37.3% (170)
Mileage driven past year (n=465) >10000 % (n)	7.2% (27)	4.5% (4)	5.3% (13)	8.2% (18)	8.4% (21)	4.6% (10)
Fast decision making (n=987), mean (SD) (n)	17.9 (4.3)	17.2 (4.8)	17.5 (4.3)	18.0 (4.4)	18.3 (4.2)	17.1 (4.5)***
Excitement seeking (n=987), mean (SD) (n)	18.5 (5.1)	20.5 (5.1)***	17.7 (5.0)	20.2 (5.0)***	18.2 (5.2)	19.6 (5.0)***
Thoughtlessness (n=987), mean (SD) (n)	14.8 (4.6)	18.3(4.8)***	14.0 (4.5)	17.1 (4.7)***	13.9 (4.4)	17.2 (4.7)***
Disinhibition (n=987), mean (SD) (n)	16.8 (4.3)	20.1 (4.0)***	16.0 (4.4)	19.1 (3.8)***	15.9 (4.3)	19.2 (3.9)***
DBQ Violations (n=484), z score mean (SD) (n)	-0.03 (1.0)	0.1 (1.0)	-0.2 (0.7)	0.3 (1.2)***	-0.1 (1.1)	0.1 (0.9)
DBQ Errors (n=484), z score mean (SD) (n)	-0.1 (1.0)	0.3 (1.0)***	-0.3 (0.7)	0.3 (1.2)***	-0.2 (1.0)	0.2 (1.0)***
Driving Anger Scale (n=460), z score mean (SD) (n)	-0.1 (1.0)	0.4 (1.0)***	-0.2 (0.9)	0.2 (1.1)***	-0.2 (0.9)	0.2 (1.0)***
Traffic accidents, % (n)	10.3% (84)	8.2% (15)	7.9% (43)	12.4% (56)*	10.2% (55)	9.6% (44)
Traffic violations, % (n)	9.4% (76)	13.7% (25)	7.0% (38)	13.9% 63)***	9.8% (53)	10.5% (48)
High traffic risk, % (n)	17.0% (138)	18.6% (34)	13.5% (73)	21.9% (99)***	17.3% (93)	17.3% (79)
<i>DATI</i> (n=339), 9R allele carriers % (n)	40.1% (302)	32.9% (54)	39.4% (196)	38.1% (160)	40.5% (203)	36.8% (153)

n in brackets in the variable column is the number of subjects with all valid data, presented only for variables with data not available for all included subjects (n = 995); * p < 0.05, ** p < 0.01, *** p < 0.001 statistically significant difference from the respective low ADHD symptom group.

Supplementary Table 3. Predictors of high traffic risk in the Traffic Study I sample.

Independent variable	OR (95% CI)	Adjusted OR (95% CI) ¹	Adjusted OR (95% CI) ²	Adjusted OR (95% CI) ³
Age	0.97 (0.95 – 0.99)	0.97 (0.95 – 0.99)	0.97 (0.94 – 0.99)	0.97 (0.95 – 0.99)
Gender, male vs female	2.47 (1.78 – 3.42)	2.46 (1.77 – 3.41)	2.51 (1.81 – 3.49)	2.46 (1.77 – 3.41)
Mileage driven past year > 10 000 km vs less (n=523)	2.61 (1.75 – 3.89)	2.68 (1.79 – 4.00)	2.67 (1.79 – 3.99)	2.59 (1.74 – 3.86)
Intervention vs controls	0.93 (0.67 – 1.18)	0.94 (0.68 – 1.30)	0.92 (0.66 – 1.27)	0.92 (0.67 – 1.27)
Fast decision making score (n=730)	1.03 (0.99 – 1.07)	1.03 (0.99 – 1.07)	1.03 (0.99 – 1.07)	1.03 (0.99 – 1.07)
Excitement seeking score (n=730)	1.04 (1.00 – 1.07)	1.03 (1.00 – 1.07)	1.03 (1.00 – 1.07)	1.04 (1.00 – 1.07)
Thoughtlessness score (n=730)	1.02 (0.98 – 1.06)	1.02 (0.98 – 1.05)	1.01 (0.98 – 1.05)	1.02 (0.99 – 1.06)
Disinhibition score (n=730)	1.03 (0.99 – 1.06)	1.02 (0.98 – 1.06)	1.02 (0.98 – 1.06)	1.03 (0.99 – 1.07)
Driving Anger Scale score (n=568)	1.02 (1.01 – 1.03)	1.02 (1.01 – 1.03)	1.02 (1.01 – 1.03)	1.02 (1.01 – 1.03)
DBQ Violations, high vs low (n=566)	2.77 (1.93 – 3.97)	2.72 (1.89 – 3.91)	2.71 (1.88 – 3.90)	2.90 (2.01 – 4.18)
DBQ Errors, high vs low (n=566)	1.42 (1.00 – 2.03)	1.39 (0.97 – 1.99)	1.37 (0.96 – 1.96)	1.49 (1.04 – 2.14)
ADHD screening score, high vs low risk	1.43 (0.83 – 2.48)	-	-	-
ADHD hyperactivity/impulsivity, high vs low	1.29 (0.94 – 1.77)	-	-	0.74 (0.52 – 1.04)
ADHD inattention, high vs low	0.81 (0.58 – 1.12)	-	0.74 (0.52 – 1.04)	-

n in brackets in the variable column is the number of subjects with all valid data, presented only for variables with data not available for all included subjects (n = 741); ¹ adjusted for ADHD screen 0 vs 1; ² adjusted for hyperactivity/ impulsivity 50th percentile high vs low; ³ adjusted for inattention 50th percentile high vs low. Bold - significant predictor; odds ratio (OR) with 95 percent confidence intervals (CI).

Supplementary Table 4. Predictors of high DBQ Violations scores in in the Traffic Study I sample.

Independent variable	OR (95% CI)	Adjusted OR (95% CI)¹	Adjusted OR (95% CI)²	Adjusted OR (95% CI)³
Age	0.92 (0.89 – 0.95)	0.92 (0.89 – 0.95)	0.91 (0.89 – 0.94)	0.92 (0.89 – 0.95)
Gender, male vs female	3.66 (2.55 – 5.25)	3.64 (2.53 – 5.24)	3.86 (2.67 – 5.58)	3.79 (2.26 – 5.47)
Mileage driven past year > 10 000 km vs less (n=520)	2.79 (1.87 – 4.16)	2.90 (1.94 – 4.33)	2.89 (1.93 – 4.32)	3.03 (2.02 – 4.56)
Fast decision making score (n=559)	1.06 (1.02 – 1.11)	1.07 (1.03 – 1.11)	1.06 (1.02 – 1.10)	1.08 (1.03 – 1.12)
Excitement seeking score (n=559)	1.11 (1.07 – 1.15)	1.11 (1.07 – 1.15)	1.11 (1.07 – 1.15)	1.11 (1.07 – 1.15)
Thoughtlessness score (n=559)	1.04 (1.01 – 1.08)	1.04 (1.00 – 1.08)	1.03 (1.00 – 1.08)	1.04 (1.00 – 1.08)
Disinhibition score (n=559)	1.06 (1.02 – 1.10)	1.06 (1.01 – 1.10)	1.05 (1.01 – 1.09)	1.05 (1.01 – 1.10)
Driving Anger Scale score (n=564)	1.03 (1.02 – 1.04)	1.03 (1.02 – 1.04)	1.03 (1.02 – 1.04)	1.03 (1.02 – 1.04)
DBQ Errors, high vs low	3.09 (2.18 – 4.38)	3.00 (2.12 – 4.26)	2.92 (2.06 – 4.15)	2.95 (2.07 – 4.19)
ADHD screening score, high vs low risk	2.53 (1.31 – 4.86)	-	-	-
ADHD hyperactivity/impulsivity, high vs low	1.74 (1.24 – 2.43)	-	-	1.60 – (1.13 – 2.26)
ADHD inattention, high vs low	1.63 (1.16 – 2.30)	-	1.46 (1.03 – 2.08)	-

n in brackets in the variable column is the number of subjects with all valid data, presented only for variables with data not available for all included subjects (n = 566); ¹ adjusted for ADHD screen 0 vs 1; ² adjusted for hyperactivity/ impulsivity 50th percentile high vs low; ³ adjusted for inattention 50th percentile high vs low. Bold - significant predictor; odds ratio (OR) with 95 percent confidence intervals (CI).

Supplementary Table 5. Predictors of high traffic risk in the Traffic Study II sample.

Independent variable	OR (95% CI)	Adjusted OR (95% CI) ¹	Adjusted OR (95% CI) ²	Adjusted OR (95% CI) ³
Age	0.98 (0.96 – 1.00)	0.98 (0.96 – 1.01)	0.99 (0.96 – 1.01)	0.98 (0.70 – 1.36)
Gender, male vs female	3.67 (2.61 – 5.18)	3.68 (2.61 – 5.19)	3.61 (2.55 – 5.10)	3.68 (2.61 – 5.18)
Mileage driven past year >10 000 km vs less (n=465)	7.32 (3.43 – 15.64)	7.29 (3.41 – 15.57)	7.09 (3.31 – 15.21)	7.36 (3.43 – 15.76)
Intervention vs controls	0.68 (0.49 – 0.94)	0.68 (0.49 – 0.94)	0.67 (0.48 – 0.93)	0.68 (0.49 – 0.94)
Fast decision making score (n=987)	1.08 (1.04 – 1.12)	1.08 (1.04 – 1.12)	1.08 (1.04 – 1.12)	1.08 (1.04 – 1.12)
Excitement seeking score (n=987)	1.08 (1.04 – 1.12)	1.08 (1.04 – 1.12)	1.07 (1.03 – 1.11)	1.08 (1.05 – 1.12)
Thoughtlessness score (n=987)	1.02 (0.99 – 1.06)	1.02 (0.99 – 1.06)	1.00 (0.97 – 1.04)	1.03 (0.99 – 1.06)
Disinhibition score (n=987)	0.98 (0.95 – 1.02)	0.98 (0.94 – 1.02)	0.96 (0.92 – 1.00)	0.98 (0.94 – 1.02)
Driving Anger Scale score (n=460)	0.99 (0.98 – 1.00)	0.99 (0.98 – 1.00)	0.99 (0.97 – 1.00)	0.99 (0.98 – 1.00)
DBQ Violations, high vs low (n=484)	2.13 (1.32 – 3.44)	2.17 (1.34 – 3.51)	2.04 (1.25 – 3.31)	2.17 (1.34 – 3.52)
DBQ Errors, high vs low (n=484)	1.03 (0.64 - 1.64)	1.05 (0.65 – 1.69)	0.93 (0.58 – 1.51)	1.05 (0.65 – 1.70)
ADHD screening score, high vs low risk	1.11 (0.74 – 1.69)	-	-	-
ADHD hyperactivity/impulsivity, high vs low	1.80 (1.29 – 2.51)	-	-	1.97 (1.38 – 2.82)
ADHD inattention, high vs low	1.01 (0.72 – 1.40)	-	0.78 (0.55 – 1.12)	-

n in brackets in the variable column is the number of subjects with all valid data, presented only for variables with data not available for all included subjects (n = 995); ¹ adjusted for ADHD screen 0 vs 1; ² adjusted for hyperactivity/ impulsivity 50th percentile high vs low; ³ adjusted for inattention 50th percentile high vs low. Bold - significant predictor; odds ratio (OR) with 95 percent confidence intervals (CI).

Supplementary Table 6. Predictors of high DBQ Violations scores in the Traffic Study II sample.

Independent variable	OR (95% CI)	Adjusted OR (95% CI) ¹	Adjusted OR (95% CI) ²	Adjusted OR (95% CI) ³
Age	0.96 (0.94 – 0.98)	0.96 (0.94 – 0.99)	0.96 (0.94 – 0.99)	0.96 (0.94 – 0.99)
Gender, male vs female	0.73 (0.51 – 1.06)	0.74 (0.51 – 1.08)	0.73 (0.50 – 1.06)	0.74 (0.51 – 1.07)
Mileage driven past year > 10 000 km vs less (n=448)	3.18 (1.39 – 7.27)	3.30 (1.44 – 7.56)	3.03 (1.31 – 6.99)	3.44 (1.49 – 7.92)
Fast decision making (n=482)	1.03 (0.98 – 1.07)	1.03 (0.99 – 1.07)	1.03 (0.98 – 1.07)	1.03 (0.99 – 1.08)
Excitement seeking (n=482)	1.06 (1.02 – 1.10)	1.06 (1.02 – 1.10)	1.05 (1.01 – 1.09)	1.06 (1.02 – 1.10)
Thoughtlessness (n=482)	1.04 (1.00 – 1.08)	1.03 (0.99 – 1.07)	1.02 (0.98 – 1.06)	1.03 (0.99 – 1.07)
Disinhibition (n=482)	1.08 (1.04 – 1.13)	1.08 (1.03 – 1.13)	1.06 (1.02 – 1.11)	1.07 (1.03 – 1.13)
Driving Anger Scale (n=455)	1.04 (1.03 – 1.05)	1.04 (1.03 – 1.05)	1.04 (1.02 – 1.05)	1.04 (1.02 – 1.05)
DBQ Errors, high vs low	4.31 (2.94 – 6.32)	4.23 (2.87 – 6.23)	4.02 (2.27 - 5.92)	4.20 (2.85 – 6.20)
ADHD screening, high vs low risk	1.56 (0.99 – 2.45)	-	-	-
ADHD hyperactivity/impulsivity, high vs low	1.87 (1.30 – 2.68)	-	-	1.74 (1.18 – 2.56)
ADHD inattention, high vs low	1.50 (1.05 – 2.14)	-	1.23 (0.83 – 1.81)	-

n in brackets in the variable column is the number of subjects with all valid data, presented only for variables with data not available for all included subjects (n = 484); ¹ adjusted for positive ADHD screen 0 vs 1; ² adjusted for hyperactivity/ impulsivity 50th percentile high vs low; ³ adjusted for inattention 50th percentile high vs low. Bold - significant predictor; odds ratio (OR) with 95 percent confidence intervals (CI).