

Table 4. Comparison of cognitive function between MMD and healthy controls.

	HC (n=23)			MMD (n=49)			t value	P value
IQ								
GK	9.35	±	2.328	8.45	±	2.923	1.293	.200
SI	11.13	±	1.660	9.76	±	2.689	2.660	.010
VP	12.70	±	2.032	10.61	±	2.388	3.612	.001
BD	10.65	±	2.534	9.04	±	3.341	2.050	.044
IQ	106.2609	±	9.44316	97.2708	±	14.36519	3.161	.002
PM								
TBPM	12.30	±	2.704	9.06	±	3.761	4.164	.000
EBPM	14.22	±	2.110	12.14	±	3.208	2.823	.006
Total scores	26.52	±	3.860	21.20	±	6.232	4.431	.000
RBANS domains								
IM	87.43	±	11.317	79.94	±	15.715	2.048	.044
VD	79.26	±	13.084	75.49	±	10.017	1.347	.182
VF	94.04	±	8.931	83.27	±	14.319	3.896	.000
AT	108.70	±	8.977	93.76	±	15.625	5.129	.000
RM	90.04	±	10.227	81.41	±	15.381	2.820	.006
SS	459.48	±	34.927	413.86	±	53.027	4.341	.000
TSIS	88.57	±	8.727	77.63	±	12.667	3.737	.000
PP	.2530	±	.16751	.1260	±	.13700	3.412	.001
Stroop								
Word	.13	±	.344	.29	±	.645	-1.329	.188
Time(s)	13.7748	±	1.78760	16.7614	±	5.33025	-3.523	.001

Color	.43	±	.788	.94	±	1.573	-1.810	.075
Time(s)	19.4809	±	4.18185	23.2898	±	7.92940	-2.664	.010
word interference	.26	±	.689	.53	±	1.043	-1.128	.263
Time(s)	16.6096	±	4.21034	20.7227	±	10.94209	-1.738	.087
Color interference	1.83	±	1.193	2.94	±	3.044	-2.221	.030
Time(s)	36.8770	±	8.68854	47.8300	±	24.38207	-2.790	.007
CPT								
Correct numbers	76.57	±	24.654	57.53	±	23.259	3.177	.002
Error numbers	19.22	±	15.568	17.69	±	11.497	.467	.642
Omission numbers	32.70	±	20.805	49.10	±	26.366	-2.856	.006
Response time	6995.00	±	754.882	7649.45	±	869.658	-3.100	.003
WCST								
TA	103.04	±	22.894	109.53	±	21.264	-1.178	.243
CR	64.39	±	15.447	56.69	±	21.132	1.744	.087
PCR	.6565	±	.19255	.5564	±	.25221	1.856	.069
TE	38.65	±	28.056	52.84	±	35.668	-1.677	.098
PE	.3435	±	.19255	.4436	±	.25221	-1.856	.069
PR	23.26	±	25.857	35.14	±	32.033	-1.555	.124
PPR	.1988	±	.19568	.2875	±	.24130	-1.540	.128
PE	6.0455	±	6.99985	7.6383	±	11.59915	-.594	.554
PPE	.0957	±	.18864	.1024	±	.19186	-.140	.889
NPE	27.78	±	22.306	40.73	±	32.515	-1.970	.053
PNPE	.2478	±	.15897	.3412	±	.23730	-1.970	.053
CLR	58.30	±	17.468	51.71	±	22.365	1.360	.179

PCLR	.6056	±	.22717	.5162	±	.27181	1.368	.176
CC	4.74	±	1.912	4.10	±	2.114	1.228	.224
TCFC	19.70	±	14.775	20.78	±	23.788	-.200	.842
FM	1.17	±	1.875	1.08	±	1.336	.239	.812
L-L	-.0691	±	.23560	-.1708	±	.78249	.833	.408
Time(s)	335.74	±	137.697	477.61	±	267.758	-2.966	.004
Correct thinking time (ms)	196322.13	±	64230.725	222265.80	±	114539.541	-1.012	.315
Error thinking time(ms)	139324.65	±	110373.769	256162.35	±	213687.646	-3.056	.003
TMT-A								
Dot symbol (s)	23.8691	±	7.29140	38.4527	±	21.04506	-4.329	.000
Maze (s)	31.4122	±	12.84614	55.5337	±	27.08145	-5.126	.000
Difference search								
Correct numbers	9.13	±	1.180	8.22	±	1.735	2.266	.027
Time(s)	79.3387	±	24.64328	93.9280	±	37.33280	-1.705	.093
Judgging correct and error number								
Correct numbers	67.91	±	23.429	45.37	±	28.223	3.327	.001
Error numbers	5.78	±	3.965	5.71	±	7.208	.042	.966
total numbers	73.70	±	23.908	51.08	±	28.190	3.324	.001

Data was given as mean ± SD

GK, general knowledge; SI, similarity; VP, visual puzzles; BD, block design; IQ, intelligence quotient; PM prospective memory; TBPM, time based prospective memory; EBPM, event based prospective memory; IM, immediate memory; VB, visual breadth; VF, verbal fluency; AT, attention; RM retrospective memory; SS, scale scores; TSIS, total scale of index scores; PP, percentage of population; CPT, Continuous Performance Test; WCST, Wisconsin Card Classification Test; CR=Total Correct Responses; PCR=Percent Correct Responses; TE=Total Errors; PE=Percent Errors; PR=Perseverative Responses; PPR=Percent Perseverative Responses; PE=Perseverative Errors; PPE=Percent Perseverative Errors; NPE=Nonperseverative Errors; PNPE=Percent Nonperseverative Errors; CLR=Conceptual Level Responses;

PCLR=Percent Conceptual Level Responses; CC=Categories Completed; TCFC=Trials to Compete First Category; FM =Failure to Maintain Set; L-L=Learning to Learn; PE, perseverative errors; CC, categories completed; TMTA, Trail Making Test Part A.

Table 5. Comparison of cognitive function between ischemic and hemorrhagic adult patients with MMD

	Ischemic (n=37)			Hemorrhagic(n=12)			t value	P value
IQ								
GK	8.46	±	2.978	8.42	±	2.875	.044	.965
SI	9.54	±	2.755	10.42	±	2.466	-.980	.332
VP	10.73	±	2.256	10.25	±	2.832	.601	.551
BD	9.05	±	3.504	9.00	±	2.923	.048	.962
scores	97.1230	±	14.28413	97.7267	±	15.24531	-.125	.901
PM								
TBPM	9.68	±	3.951	7.17	±	2.329	2.684	
EBPM	12.59	±	3.370	10.75	±	2.221	1.769	.083
Total scores	22.27	±	6.509	17.92	±	3.895	2.805	.009
RBANS domains								
IM	82.81	±	12.447	71.08	±	21.386	1.803	.094
VD	74.92	±	9.590	77.25	±	11.506	-.697	.489
VF	84.78	±	13.375	78.58	±	16.659	1.313	.195
AT	93.43	±	16.508	94.75	±	13.116	-.251	.803
RM	83.92	±	14.184	73.67	±	16.951	2.074	.044
SS	419.86	±	49.017	395.33	±	62.536	1.407	.166
TSIS	79.08	±	11.805	73.17	±	14.671	1.420	.162
PP	.1357	±	.14414	.0961	±	.11230	.869	.389
Stroop								

Word	.38	±	.721	.00	±	.000	3.193	.003
Time(s)	16.3400	±	4.51900	18.0608	±	7.39627	-.971	.336
Color	.97	±	1.590	.83	±	1.586	.265	.792
Time(s)	22.4354	±	6.22634	25.9242	±	11.72453	-.987	.342
word interference	.59	±	1.166	.33	±	.492	.751	.457
Time(s)	20.8889	±	11.71724	20.2100	±	8.52942	.185	.854
Color interference	3.19	±	2.923	2.17	±	3.407	1.011	.317
Time(s)	48.1170	±	23.26557	46.9450	±	28.66185	.143	.887
CPT								
Correct numbers	56.89	±	25.612	59.50	±	14.425	-.440	.662
Error numbers	16.14	±	10.960	22.50	±	12.259	-1.699	.096
Omission numbers	51.81	±	26.670	40.75	±	24.595	1.271	.210
Response time	7680.81	±	892.517	7552.75	±	824.450	.440	.662
WCST								
TA	108.49	±	21.830	112.75	±	19.964	-.600	.552
CR	56.86	±	20.975	56.17	±	22.546	.098	.922
PCR	.5652	±	.25574	.5293	±	.24990	.425	.673
TE	51.62	±	36.114	56.58	±	35.533	-.415	.680
PE	.4348	±	.25575	.4707	±	.24992	-.425	.672
PR	34.30	±	32.444	37.75	±	31.980	-.321	.749
PPR	.2808	±	.24491	.3080	±	.23910	-.336	.738
PE	7.03	±	8.417	9.42	±	18.412	-.434	.672
PPE	.1101	±	.20642	.0788	±	.14275	.488	.628
NPE	38.65	±	32.709	47.17	±	32.434	-.785	.436
PNPE	.3247	±	.23969	.3920	±	.23232	-.851	.399
CLR	51.70	±	22.603	51.75	±	22.600	-.006	.995

PCLR	.5235	±	.27860	.4937	±	.26005	.327	.745
CC	4.08	±	2.191	4.17	±	1.946	-.121	.905
TCFC	21.86	±	26.686	17.42	±	11.066	.559	.579
FM	1.03	±	1.343	1.25	±	1.357	-.498	.620
L-L	-.1751	±	.85483	-.1575	±	.52920	-.067	.947
Time(s)	483.89	±	292.379	458.25	±	180.372	.286	.777
Correct thinking time (ms)	231608.89	±	123469.481	193457.92	±	78467.405	1.003	.321
Error thinking time(ms)	252526.14	±	226355.334	267374.00	±	177168.513	-.207	.837
TMT-A								
Dot symbol (s)	37.2203	±	20.36988	42.2525	±	23.53320	-.716	.477
Maze (s)	56.4414	±	28.74754	52.7350	±	22.00784	.408	.685
Difference search								
Correct numbers	8.16	±	1.772	8.42	±	1.676	-.438	.664
Time(s)	93.8124	±	37.62267	94.2842	±	38.06769	-.038	.970
Judging correct and error number								
Correct numbers	45.27	±	27.702	45.67	±	31.049	-.042	.967
Error numbers	6.24	±	8.146	4.08	±	2.392	.900	.373
total numbers	51.51	±	27.490	49.75	±	31.494	.186	.853

Data was given as mean ± SD.

Table 6. Comparison of cognitive function between ischemic subtypes for adult patients with MMD.

	TIA (n=11)	infarction (n=21)	headache (n=5)	F value	P value
IQ					
GK	8.00 ± 3.194	8.67 ± 2.904	8.60 ± 3.362	.179	.837
SI	8.82 ± 2.926	9.48 ± 2.750	11.40 ± 1.817	1.571	.222
VP	11.45 ± 2.806	10.43 ± 2.158	10.40 ± .894	.799	.458

BD	9.00	±	4.266	8.33	±	2.852	12.20	±	3.033	2.693	.082
scores	97.3609	±	18.13119	95.5610	±	12.98353	103.1600	±	10.63454	.560	.577
PM											
TBPM	10.27	±	4.839	8.67	±	3.136	12.60	±	3.975	2.342	.111
EBPM	13.09	±	3.048	12.00	±	3.521	14.00	±	3.464	.875	.426
Total scores	23.36	±	7.606	20.67	±	5.808	26.60	±	5.273	2.005	.150
RBANS domains											
IM	83.00	±	10.469	81.43	±	12.620	88.20	±	16.664	.586	.562
VD	77.36	±	12.801	73.48	±	8.232	75.60	±	7.162	.594	.558
VF	89.36	±	11.457	80.90	±	14.515	91.00	±	6.595	2.207	.126
AT	98.64	±	13.374	88.10	±	16.413	104.40	±	16.861	3.062	.060
RM	80.00	±	18.488	84.62	±	12.675	89.60	±	8.234	.839	.441
SS	428.36	±	52.024	408.52	±	46.930	448.80	±	43.877	1.657	.206
TSIS	81.27	±	12.729	76.33	±	11.137	85.80	±	10.941	1.623	.212
PP	.1718	±	.18384	.0982	±	.08079	.2140	±	.22634	1.882	.168
Stroop											
Word	.27	±	.647	.48	±	.814	.20	±	.447	.450	.641
Time(s)	14.7136	±	2.66886	17.7995	±	5.13410	13.7880	±	2.75537	2.877	.070
Color	1.09	±	1.814	1.05	±	1.627	.40	±	.894	.365	.697
Time(s)	21.6318	±	5.51272	23.9190	±	6.66682	17.9720	±	3.53039	2.092	.139
word interference	.64	±	.809	.67	±	1.426	.20	±	.447	.321	.728
Time(s)	19.2745	±	6.73829	23.1719	±	14.33820	14.8520	±	3.75847	1.178	.320
Color interference	2.82	±	2.714	3.67	±	3.276	2.00	±	1.225	.772	.470
Time(s)	40.4964	±	13.66912	55.4705	±	27.00374	33.9980	±	8.10484	2.818	.074
CPT											
Correct numbers	72.00	±	26.386	46.43	±	22.750	67.60	±	15.159	5.019	.012

Error numbers	16.45 ± 14.152	14.90 ± 8.848	20.60 ± 12.482	.538	.589
Omission numbers	39.55 ± 22.792	61.95 ± 26.149	36.20 ± 20.632	4.159	.024
Response time	7239.91 ± 906.613	8012.86 ± 850.651	7256.20 ± 396.967	3.904	.030
WCST					
TA	107.45 ± 25.843	109.62 ± 20.106	106.00 ± 24.094	.069	.933
CR	59.36 ± 19.221	55.33 ± 22.464	57.80 ± 21.959	.132	.877
PCR	.6001 ± .25952	.5425 ± .26245	.5837 ± .26341	.189	.828
TE	48.09 ± 36.115	54.29 ± 37.222	48.20 ± 38.258	.126	.882
PE	.3999 ± .25952	.4575 ± .26245	.4163 ± .26342	.189	.828
PR	30.45 ± 28.186	37.05 ± 35.635	31.20 ± 32.337	.167	.847
PPR	.2470 ± .21341	.3032 ± .26945	.2612 ± .23812	.199	.820
PE	5.18 ± 5.344	6.53 ± 8.296	13.00 ± 12.884	.712	.498
PPE	.0471 ± .04773	.1417 ± .26562	.1160 ± .09376	.750	.480
NPE	42.91 ± 35.235	37.24 ± 33.673	35.20 ± 27.941	.134	.875
PNPE	.3528 ± .25813	.3158 ± .24882	.3003 ± .19398	.110	.896
CLR	53.27 ± 20.684	50.29 ± 24.942	54.20 ± 19.817	.093	.911
PCLR	.5524 ± .29144	.5017 ± .28794	.5515 ± .25672	.142	.868
CC	3.91 ± 2.166	4.00 ± 2.345	4.80 ± 1.789	.305	.739
TCFC	31.18 ± 32.899	19.00 ± 25.677	13.40 ± 5.941	1.046	.362
FM	1.27 ± 1.794	1.05 ± 1.161	.40 ± .894	.720	.494
L-L	.0264 ± .79340	-.1162 ± .53646	-.8660 ± 1.68448	2.111	.137
Time(s)	498.09 ± 396.925	506.10 ± 257.278	359.40 ± 148.406	.512	.604
Correct thinking time (ms)	231505.55 ± 131165.966	242704.48 ± 130714.895	185234.80 ± 73652.259	.423	.658
Error thinking time(ms)	267041.18 ± 301761.861	263446.48 ± 201476.713	174727.60 ± 147460.230	.330	.721

TMT-A

Dot symbol (s)	37.0245	±	26.85668	38.7367	±	18.89114	31.2820	±	9.51605	.260	.773
Maze (s)	49.9973	±	19.85881	63.9224	±	33.06713	39.1980	±	14.31791	1.991	.152
Difference search											
Correct numbers	8.18	±	1.940	7.90	±	1.814	9.20	±	.837	1.085	.349
Time(s)	85.9418	±	30.01821	98.7805	±	41.77051	90.2620	±	38.03805	.432	.653
Judgging correct and error number											
Correct numbers	47.27	±	28.260	38.00	±	25.322	71.40	±	23.713	3.368	.046
Error numbers	6.18	±	6.145	6.43	±	9.600	5.60	±	6.427	.020	.980
total numbers	53.45	±	26.778	44.43	±	26.390	77.00	±	20.988	3.230	.052

Data was given as mean ± SD.

Table 7. Comparison of cognitive function between headache patients with MMD and healthy controls.

	Headache (n=5)			HC (n=23)			t value	P value
IQ								
GK	8.60	±	3.362	9.35	±	2.328	-.603	.552
SI	11.40	±	1.817	11.13	±	1.660	.324	.748
VP	10.40	±	.894	12.70	±	2.032	-2.446	.022
BD	12.20	±	3.033	10.65	±	2.534	1.199	.241
scores	103.1600	±	10.63454	106.2609	±	9.44316	-.652	.520
PM								
TBPM	12.60	±	3.975	12.30	±	2.704	.204	.840
EBPM	14.00	±	3.464	14.22	±	2.110	-.186	.854
Total scores	26.60	±	5.273	26.52	±	3.860	.039	.970
RBANS domains								
IM	88.20	±	16.664	87.43	±	11.317	.126	.901

VD	75.60	±	7.162	79.26	±	13.084	-.600	.554
VF	91.00	±	6.595	94.04	±	8.931	-.716	.480
AT	104.40	±	16.861	108.70	±	8.977	-.823	.418
RM	89.60	±	8.234	90.04	±	10.227	-.090	.929
SS	448.80	±	43.877	459.48	±	34.927	-.594	.558
TSIS	85.80	±	10.941	88.57	±	8.727	-.616	.543
PP	.2140	±	.22634	.2530	±	.16751	-.445	.660
Stroop								
Word	.20	±	.447	.13	±	.344	.389	.700
Time(s)	13.7880	±	2.75537	13.7748	±	1.78760	.014	.989
Color	.40	±	.894	.43	±	.788	-.088	.931
Time(s)	17.9720	±	3.53039	19.4809	±	4.18185	-.748	.461
word interference	.20	±	.447	.26	±	.689	-.188	.853
Time(s)	14.8520	±	3.75847	16.6096	±	4.21034	-.860	.398
Color interference	2.00	±	1.225	1.83	±	1.193	.294	.771
Time(s)	33.9980	±	8.10484	36.8770	±	8.68854	-.678	.504
CPT								
Correct numbers	67.60	±	15.159	76.57	±	24.654	-.775	.445
Error numbers	20.60	±	12.482	19.22	±	15.568	.185	.855
Omission numbers	36.20	±	20.632	32.70	±	20.805	.342	.735
Response time	7256.20	±	396.967	6995.00	±	754.882	.744	.464
WCST								
TA	106.00	±	24.094	103.04	±	22.894	.260	.797
CR	57.80	±	21.959	64.39	±	15.447	-.804	.429
PCR	.5837	±	.26341	.6565	±	.19255	-.720	.478
TE	48.20	±	38.258	38.65	±	28.056	.648	.523

PE	.4163	±	.26342	.3435	±	.19255	.720	.478
PR	31.20	±	32.337	23.26	±	25.857	.597	.556
PPR	.2612	±	.23812	.1988	±	.19568	.624	.538
PE	13.00	±	12.884	6.05	±	7.000	.190	.851
PPE	.1160	±	.09376	.0957	±	.18864	.233	.818
NPE	35.20	±	27.941	27.78	±	22.306	.646	.524
PNPE	.3003	±	.19398	.2478	±	.15897	.645	.524
CLR	54.20	±	19.817	58.30	±	17.468	-.466	.645
PCLR	.5515	±	.25672	.6056	±	.22717	-.472	.641
CC	4.80	±	1.789	4.74	±	1.912	.065	.949
TCFC	13.40	±	5.941	19.70	±	14.775	-.925	.363
FM	.40	±	.894	1.17	±	1.875	-.891	.381
L-L	-.8660	±	1.68448	-.0691	±	.23560	-1.056	.350
Time(s)	359.40	±	148.406	335.74	±	137.697	.344	.734
Correct thinking time (ms)	185234.80	±	73652.259	196322.13	±	64230.725	-.342	.735
Error thinking time(ms)	174727.60	±	147460.230	139324.65	±	110373.769	.614	.545
TMT-A								
Dot symbol (s)	31.2820	±	9.51605	23.8691	±	7.29140	1.957	.061
Maze (s)	39.1980	±	14.31791	31.4122	±	12.84614	1.206	.239
Difference search								
Correct numbers	9.20	±	.837	9.13	±	1.180	.124	.902
Time(s)	90.2620	±	38.03805	79.3387	±	24.64328	.816	.422
Judging correct and error number								
Correct numbers	71.40	±	23.713	67.91	±	23.429	.301	.766
Error numbers	5.60	±	6.427	5.78	±	3.965	-.083	.934
total numbers	77.00	±	20.988	73.70	±	23.908	.285	.778

Data was given as mean ± SD.

Table 8. Comparison of cognitive function between male and female adult patients with MMD.

	Male(n=24)			Female(n=25)			t value	P value
IQ								
GK	8.75	±	2.418	8.16	±	3.363	.707	.483
SI	9.21	±	2.085	10.28	±	3.116	-1.409	.165
VP	9.96	±	1.853	11.24	±	2.697	-1.931	.060
BD	8.54	±	3.203	9.52	±	3.466	-1.025	.311
scores	94.8763	±	10.73203	99.5696	±	17.06170	-1.157	.254
PM								
TBPM	7.79	±	3.078	10.28	±	4.005	-2.431	.019
EBPM	11.13	±	3.026	13.12	±	3.127	-2.268	.028
Total scores	18.92	±	4.916	23.40	±	6.652	-2.674	.010
RBANS domains								
IM	73.75	±	14.789	85.88	±	14.466	-2.902	.006
VD	74.04	±	7.926	76.88	±	11.677	-.991	.327
VF	79.63	±	15.444	86.76	±	12.471	-1.783	.081
AT	89.58	±	15.973	97.76	±	14.481	-1.879	.066
RM	77.71	±	15.716	84.96	±	14.478	-1.681	.099
SS	394.71	±	53.052	432.24	±	46.986	-2.624	.012
TSIS	73.04	±	12.509	82.04	±	11.385	-2.635	.011
PP	.0823	±	.08313	.1680	±	.16481	-2.314	.027
Stroop								
Word	.33	±	.761	.24	±	.523	.502	.618
Time(s)	18.1638	±	5.82931	15.4152	±	4.51706	1.849	.071

Color	1.46	±	1.933	.44	±	.917	2.340	.026
Time(s)	26.9267	±	8.68960	19.7984	±	5.24056	3.460	.001
word interference	.54	±	.833	.52	±	1.229	.072	.943
Time(s)	21.2058	±	7.10919	20.2588	±	13.80458	.300	.766
Color interference	3.63	±	3.373	2.28	±	2.590	1.569	.123
Time(s)	52.8229	±	24.26224	43.0368	±	23.99959	1.419	.162
CPT								
Correct numbers	56.50	±	20.741	58.52	±	25.838	-.301	.765
Error numbers	20.38	±	12.384	15.12	±	10.163	1.627	.110
Omission numbers	48.00	±	27.236	50.16	±	26.020	-.284	.778
Response time	7621.67	±	783.433	7676.12	±	960.678	-.217	.829
WCST								
TA	117.63	±	18.490	101.76	±	21.172	2.789	.008
CR	54.46	±	23.474	58.84	±	18.847	-.722	.474
PCR	.4887	±	.24380	.6214	±	.24755	-1.889	.065
TE	63.17	±	34.023	42.92	±	35.013	2.052	.046
PE	.5113	±	.24380	.3786	±	.24756	1.889	.065
PR	43.38	±	31.476	27.24	±	31.143	1.803	.078
PPR	.3474	±	.23707	.2299	±	.23569	1.739	.089
PE	8.65	±	14.714	6.67	±	7.744	.582	.563
PPE	.1072	±	.20517	.0978	±	.18231	.170	.866
NPE	50.00	±	31.255	31.84	±	31.780	2.016	.050
PNPE	.4041	±	.23039	.2808	±	.23241	1.863	.069
CLR	47.42	±	24.020	55.84	±	20.281	-1.328	.190
PCLR	.4324	±	.25690	.5966	±	.26600	-2.197	.033
CC	3.33	±	2.099	4.84	±	1.886	-2.645	.011

TCFC	26.33	±	30.473	15.44	±	13.466	1.607	.118
FM	1.33	±	1.633	.84	±	.943	1.288	.206
L-L	-.2438	±	1.08677	-.1008	±	.28686	-.624	.538
Time(s)	527.08	±	312.605	430.12	±	211.994	1.275	.208
Correct thinking time (ms)	211123.21	±	125323.203	232962.68	±	104612.486	-.663	.510
Error thinking time(ms)	318934.71	±	239493.741	195900.88	±	169216.811	2.084	.043
TMT-A								
Dot symbol (s)	40.2954	±	22.99045	36.6836	±	19.30276	.597	.554
Maze (s)	52.6692	±	26.06112	58.2836	±	28.28152	-.722	.474
Difference search								
Correct numbers	7.79	±	1.933	8.64	±	1.440	-1.737	.090
Time(s)	90.3654	±	32.86059	97.3480	±	41.56650	-.651	.519
Judgging correct and error number								
Correct numbers	40.75	±	28.751	49.80	±	27.551	-1.125	.266
Error numbers	5.46	±	4.314	5.96	±	9.271	-.241	.810
total numbers	46.21	±	30.116	55.76	±	25.954	-1.191	.240

Data was given as mean ± SD.

Table 9. Comparison of cognitive function between male and female for healthy controls.

	Male(n=9)			Female(n=14)			t value	P value
IQ								
GK	9.78	±	2.279	9.07	±	2.401	.702	.490
SI	11.44	±	1.333	10.93	±	1.859	.719	.480
VP	12.67	±	1.000	12.71	±	2.525	-.063	.950
BD	9.78	±	2.863	11.21	±	2.225	-1.352	.191
scores	105.4833	±	10.35100	106.7607	±	9.18078	-.310	.760

PM

TBPM	12.00	±	3.162	12.50	±	2.473	-.425	.675
EBPM	13.89	±	1.453	14.43	±	2.472	-.659	.517
Total scores	25.89	±	3.621	26.93	±	4.085	-.622	.541

RBANS domains

IM	91.78	±	11.065	84.64	±	10.952	1.519	.144
VD	76.11	±	12.604	81.29	±	13.442	-.923	.367
VF	92.00	±	5.477	95.36	±	10.573	-.875	.391
AT	110.44	±	8.443	107.57	±	9.436	.741	.467
RM	94.00	±	6.837	87.50	±	11.420	1.533	.140
SS	464.33	±	30.972	456.36	±	38.044	.526	.605
TSIS	89.56	±	8.233	87.93	±	9.277	.428	.673
PP	.2633	±	.18835	.2464	±	.15979	.231	.819

Stroop

Word	.11	±	.333	.14	±	.363	-.211	.835
Time(s)	13.8822	±	1.59162	13.7057	±	1.95850	.226	.823
Color	.33	±	.500	.50	±	.941	-.487	.632
Time(s)	18.4156	±	3.21347	20.1657	±	4.68502	-.979	.339
word interference	.00	±	.000	.43	±	.852	-1.883	.082
Time(s)	14.7767	±	3.30301	17.7879	±	4.41189	-1.751	.095
Color interference	1.89	±	1.167	1.79	±	1.251	.198	.845
Time(s)	38.9489	±	5.09175	35.5450	±	10.34004	.914	.371

CPT

Correct numbers	72.89	±	30.743	78.93	±	20.775	-.564	.578
Error numbers	11.78	±	12.498	24.00	±	15.845	-1.951	.064
Omission numbers	38.56	±	27.460	28.93	±	15.148	1.088	.289

Response time	7007.44	±	960.843	6987.00	±	629.322	.062	.951
WCST								
TA	100.00	±	20.827	105.00	±	24.689	-.502	.621
CR	68.22	±	10.060	61.93	±	18.023	.952	.352
PCR	.7055	±	.14931	.6250	±	.21515	.978	.339
TE	31.78	±	22.560	43.07	±	31.067	-.940	.358
PE	.2945	±	.14933	.3750	±	.21515	-.978	.339
PR	17.56	±	17.664	26.93	±	30.040	-.843	.409
PPR	.1560	±	.12965	.2262	±	.22886	-.833	.414
PE	5.11	±	3.257	6.69	±	8.807	-.512	.614
PPE	.0514	±	.03335	.1241	±	.23940	-.898	.380
NPE	26.67	±	21.366	28.50	±	23.657	-.188	.853
PNPE	.2430	±	.14718	.2509	±	.17150	-.113	.911
CLR	61.78	±	17.598	56.07	±	17.666	.757	.457
PCLR	.6519	±	.22286	.5758	±	.23310	.777	.446
CC	5.22	±	1.716	4.43	±	2.027	.970	.343
TCFC	17.67	±	8.846	21.00	±	17.794	-.519	.609
FM	1.22	±	1.093	1.14	±	2.282	.097	.924
L-L	-.0267	±	.13757	-.0964	±	.28327	.685	.501
Time(s)	364.67	±	175.137	317.14	±	110.722	.801	.432
Correct thinking time (ms)	226116.67	±	65380.847	177168.50	±	57806.148	1.884	.073
Error thinking time(ms)	138405.89	±	128413.507	139915.29	±	102311.516	-.031	.975
TMT-A								
Dot symbol (s)	25.9867	±	10.03686	22.5079	±	4.78309	.971	.353
Maze (s)	30.9700	±	10.06666	31.6964	±	14.72026	-.129	.898
Difference search								

Correct numbers	8.78	±	1.202	9.36	±	1.151	-1.159	.260
Time(s)	80.1533	±	24.32608	78.8150	±	25.74509	.124	.902
Judgging correct and error number								
Correct numbers	60.89	±	22.436	72.43	±	23.728	-1.162	.258
Error numbers	5.89	±	4.137	5.71	±	4.008	.101	.921
total numbers	66.78	±	22.191	78.14	±	24.695	-1.119	.276

Data was given as mean ± SD.