

C . \_\_\_, D

an leage: lenenello, l/i, cale/, allendo



; <u> </u>	_		<b>-</b> .	1		<b>-</b> . <b>-</b>	,
	_ F. M	, <b>N</b> L.,	**	· <del>-</del>	`,	, L', G_	· / · · ,

- Institute of Psychology, Chinese Academy of Sciences, Beijing, China
- Dept. of Psychology, University of Chinese Academy of Sciences, Beijing, China
- Dept. of Neurology, Peking University Third Hospital, Beijing, China
- Center for Brain and Cognitive Sciences, School of Psychological and Cognitive Sciences, Peking University, Beijing, China
- PKU-IDG/McGovern Institute for Brain Research, Peking University, Beijing, China
- Dept. of Neurology, University of Lübeck, Lübeck, Germany

Institute of Neuroscience, Key Laboratory of Primate Neurobiology, CAS Center for Excellence in Brain Science and Intelligence Technology, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, Shanghai, China

### A . ICLE INF

# Keywords:

D2/3 , - - A , - F , -

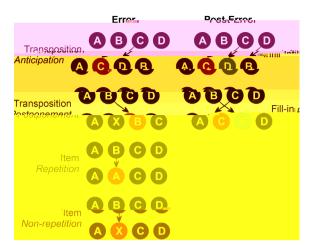
AB. AC.

Introduction:

— (D). H
— versus
— D.
— versus
— D.
— (N = 40)
— (N = 57)
— (fi.) — (fi.) versus

# 1. Introduction

D ff



fl , ff

#### 2. Methods

### 2.1. Patients and clinical assessment

132 \_ D ( K \_ )

B B C \_ D C \_ D . C \_ )

H \_ D \_ N . . . I . . \_ 1) \_ . . . . . . . . . . . . D \_ 1-3; 3) 50-80 \_ ; 4) ≥9 **\_** .E ,.. , 1)\_ (M \_ C A A , M CA < 21/30) \_ \_ (..., \_ ); 3) ..., ... (B 、 I . II, BDI-II > 7) D . ,\_ , ,\_ D\_ D2/3ff 14. ( D •) III ( ., 🛖 . ). N , M . D . . . . . G. 🗕 . . . M CA. F M CA  $\geq$  26/30) D-MCI (N = 27, 21  $\leq$  M CA  $\leq$  25). \_ , \_ , \_ \_ \_ . fl. , EM , B , D , N -M , •, · • + · + I - • ·

#### 2.2. Healthy control subjects

### 2.3. Working memory tests and error types

### 2.4. Statistical analysis

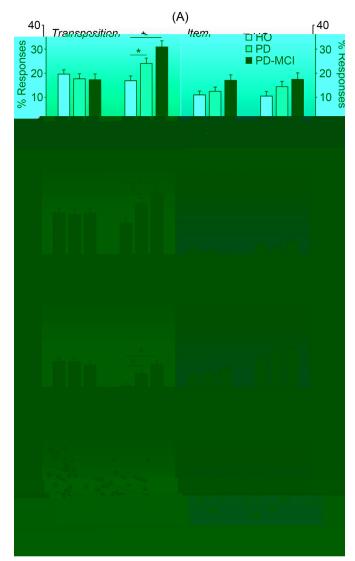
#### 3. Results

# 3.1. Test scores

The second secon

### 3.2. Error types

E /ML	D (N = 30)	D-MCI ( $N = 27$ )	$H_{-}$ (N = 40)	G (p)
M . : F	16:14	16:11	20:20	0.76
A (_ )	67.6 (7.0)	71.9 (8.0)	66.5 (5.8)	0.12
E _ (_ )	14.6 (2.7)	14.2 (3.8)	14.4 (2.0)	0.54
Motor symptoms				
D_ (_ )	1.9 (1.8)	2.3 (1.8)	_	0.98
H , _ : _ , ~ .	2.0 (0.6)	2.1 (0.5)	_	0.49
D . III: M	12.1 (4.6)	10.8 (3.0)	_	0.41
Cognition				
M CA	27.4 (1.2)	24.1 (1.0)	28.2 (1.4)	< 0.001*
A_ , , , , ,	5.4 (2.2)	3.8 (1.7)	7.4 (2.2)	< 0.001*
D +	7.5 (1.2)	7.0 (1.2)	8.1 (1.0)	0.001*
D	4.5 (1.1)	4.1 (1.0)	5.8 (1.8)	0.001*
A _ fl.	19.3 (5.1)	15.1 (3.2)	21.2 (5.8)	0.003
Other non-motor functions				
N -M	9.5 (4.6)	10.8 (4.7)	_	0.57
B , D . II	2.2 (2.2)	3.4 (2.0)	1.9 (1.9)	0.16
EM B D	4.7 (2.6)	5.4 (3.5)	1.9 (1.4)	0.001*
E	5.6 (4.5)	3.7 (3.7)	3.8 (2.6)	0.13
I I :	4.1 (3.9)	4.3 (6.5)	3.0 (2.6)	0.64
Levodopa equivalent daily dose (LEDD)				
~ <b>–</b> 1 (	272.1 (159.9)	312.2 (181.5)	_	0.62
L ( )	146.7 (146.2)	223.2 (152.9)	_	0.16
D2/3 ( )	50.4 (45.1)	44.9 (44.9)	_	0.11



# 3.3. Effect of D2/3 receptor agonists

F . 2D ... \_ ff . D2/3 ... \_ .

# 4. Discussion

Table 2

<b>M</b> : .	$\mathbf{B} - (\mathbf{BF}_{10})$							
		I	Α		F	I fi.		
	3.34	193.54	0.25	45.69	9.95 10 <sup>3</sup>	6.10 10 <sup>5</sup>		
G .	1.77	0.21	3.58	0.13	0.65	0.23		
+ G .	6.22	43.91	0.92	6.01	$8.11   10^3$	$1.78   10^5$		
+ G . + . G .	$1.97   10^3$	22.90	27.33	1.50	$1.37   10^5$	$2.44   10^4$		
A	0.29	0.39	0.41	0.22	0.25	0.25		
, + A	1.00	79.91	0.11	10.53	$2.68   10^3$	$1.65   10^5$		
G + A	0.38	0.06	0.90	0.03	0.13	0.05		
+ G . + A	1.34	13.73	0.24	1.57	$1.71   10^3$	$3.72   10^4$		
+G + A + G	399.36	7.62	6.88	0.41	$2.87   10^4$	$4.96   10^3$		

D. fi D. D . -A . I . , fi, fi, , D.

D1 . D2 . fl 23,24 . H , ffi, . , C . . , , , D2 13 . A D2/3D2/3 fi . D2 26 D. D, fi 29,30.

#### 5. Conclusion

\_ D. D\_ . D\_ D2/3(fi -

### 6. Authors' roles

N L\_ \_\_ \_

F. M

A\_ \_ \_ \_ fi\_ \_ . .

### **Funding sources**

# Financial disclosure

 $\sim$  1  $\leftarrow$  1  $\leftarrow$  1  $\leftarrow$  1.

# Acknowledgments

, M • .— · C.

### References

- 3 D. N
- - 51 (6) (1988) 757–766. \_ , . \_ , J. N . . . N . . .

- 7 K. H / 🚅 : , J.G. / , 💻 , H. 🗘 , . . K . . , .\_ . .
- 7 K. H. , J.G. , H. , J. K. , — — — , M 13 (3–4) (2005).

  8 J.I. , G.D. B , J. H , J. , J.

- G. C. \_\_ , ... M \_\_ , J. K \_\_ , ... K \_\_ , ... ,

- : L.A. J ff (E .),
- 24 M. D.E., B., 66 (2015) 115–142.
  25 J.A. C., H.J. J., M. D. D. ff ff
- 5 J.A. C . , H.J. \_ , .M. D . , N. J \_ , ..., E. . . . \_ ,
  Dff ff , . \_ \_ \_ . A . . . . . . . . . \_ . . B 115 ( 6) (1992) 1701–1725.
- 26 J. E ... , N. / \_ , A. N / \_ , .G. M \_ , M. H\_ , D \_ \_ . . . 29 (4) (2017) 728–738.