Brain substrates of perceived spatial separation between speech sources under simulated reverberant listening conditions in schizophrenia

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Stimuli and equipment

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fMRI data processing and analyses

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Results

Behavioural testing

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$(F_{1,272} = 216.179, p < 0.001)$, $(F_{1,272} =$

(   ) $16.266, p < 0.001)$ $(F_{3,272} = 74.318, p < 0.001)$

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$(F_{1,68} = 47.397, p < 0.001)$

$(F_{1,68} = 15.080, p = 0.004)$ fi-   fi

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$(F_{1,68} = 0.670, p = 0.416)$.

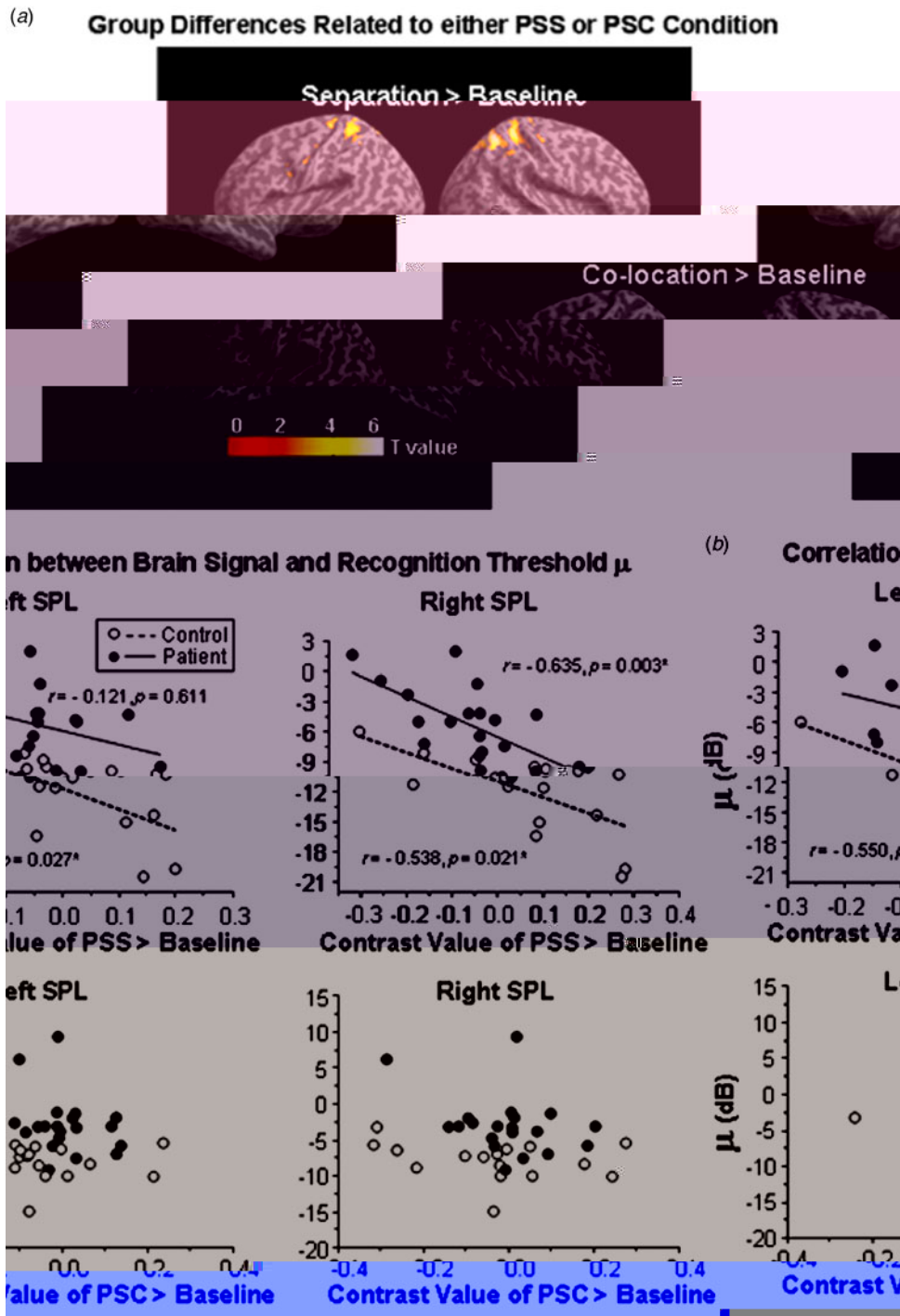Fig. 1. ( )   (
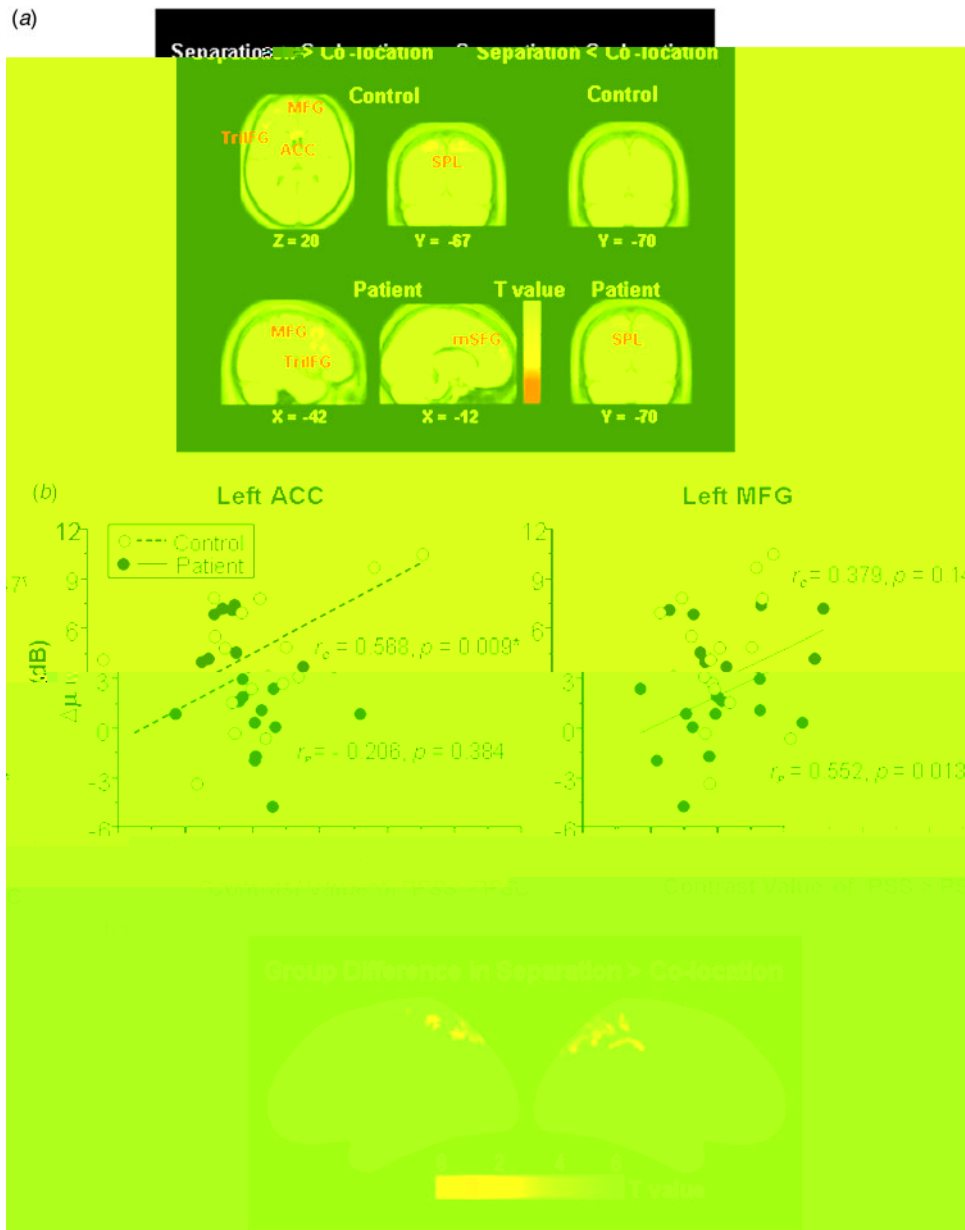   )   ( )   - -   -fi
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fMRI experiment
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(a) Group Differences Related to either PSS or PSC Condition

Separation > Baseline

Co-location > Baseline

0 2 4 6 T value

Correlation between Brain Signal and Recognition Threshold μ

(b)

Left SPL

Right SPL

Left

○ --- Control
● — Patient

r= -0.121, p= 0.611

r= -0.635, p= 0.003*

r= -0.550,

r= -0.538, p= 0.021*

Contrast Value of PSS > Baseline

Contrast Value of PSS > Baseline

Contrast Va

Left SPL

Right SPL

L

Value of PSC > Baseline

Contrast Value of PSC > Baseline

Contrast V

Fig. 2. ( )   fi

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(= −0.635,   = 0.003)   .
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Fig. 3. ( ) ... ( ) > ... - ( )′ ... (ACC) ... ( ). < 0.05 ... (,) ... 10 ... ; ... ; , ... ; , , ... ( ) ... ( ) ′ , > , ′ ... Δ ... ; ′ , > , ′ ... Δ ... . ( ) ... ′ , > , ′ ... . < 0.05 (... 10 ...) ... 8 ... .

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      ;   (461.1 .8(54-1.49. ,) (   )-54-   376)6   37   37 24-   376   38 -/   (4 1)   451688

Fig. 5. ( ) , (,) (,)
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PSS-related functional connectivities

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Supplementary material

Acknowledgements

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