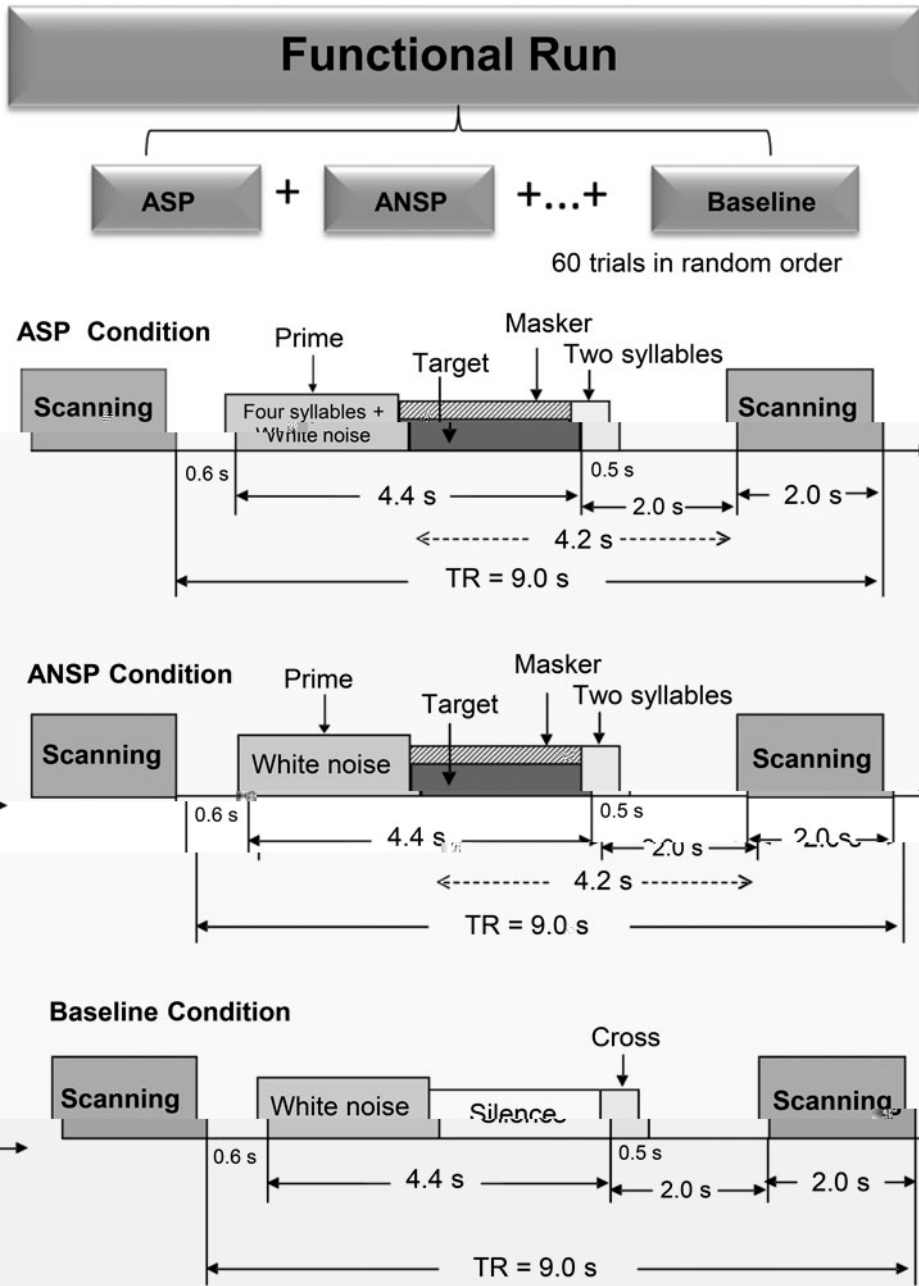


(*et al.* 2007). 1.9
 3.0
 (). fi / - (*et al.*
 2012a, 2013b),
 (*et al.* 2004; *et al.* 2007; & , 2009; (*et al.* 2012a).
et al. 2012b),
 (*et al.* 2007; *et al.* 2010),
 (*et al.* 2013a, b).
 (),
 ()
 (- - ▲ fi fi / -
 (*et al.* 2007), ; fl & , 2003; & , 2005).
 (fi fi -
) (. . - (*et al.* 2012a, 2013b;
) *et al.* 2016).
 / - (*et al.* 2004; *et al.* 2009; &
 (2004) , 2012; & , 2013; *et al.*
 2016). ▲ , *et al.* (2016)
 , fi () ▲
 (-)
 (*et al.* 2005;
et al. 2014)
 - - ()
 (*et al.* 2012; *et al.* 2012). ▲ -)-
 (*et al.* 2016).
 (),
 - -
 - -
 (*et al.* 2012a, 2013b).
 (: ,) -
 fi -
 1.0 -
 , 1.7 -

(*et al.* 1996), - ()



60 20

()

()

4200

fl

(v.)

fl

t

fi

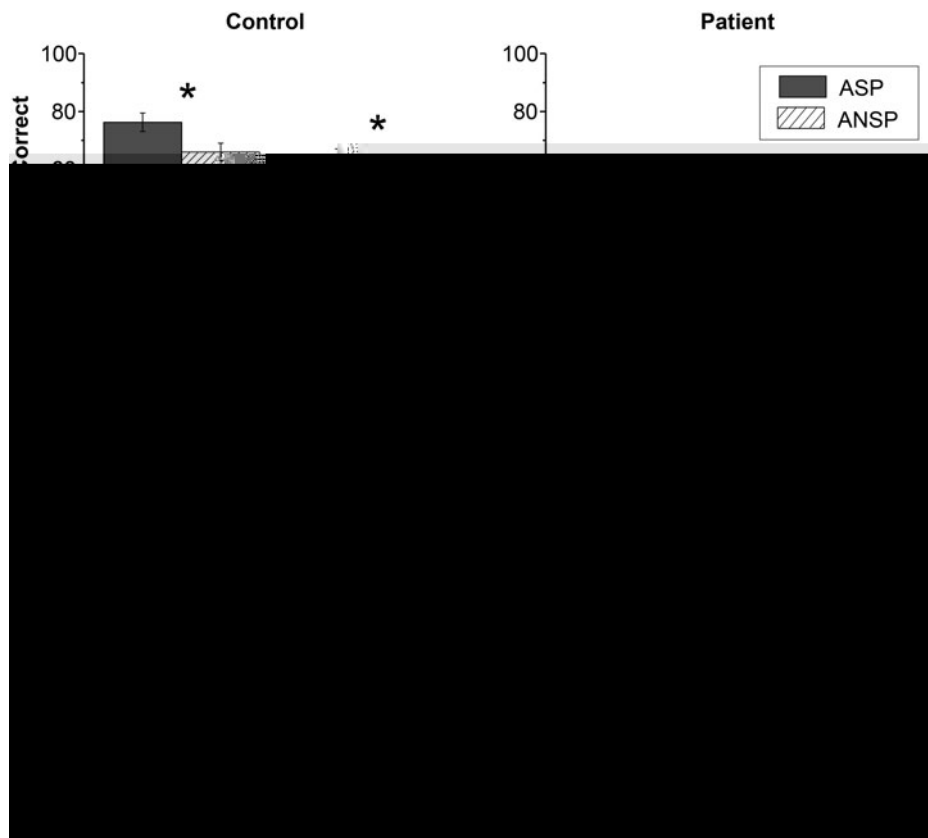
p

0.05 ()

Functional connectivity analyses (partial correlation)

([et al. 2002](#); [et al. 2008, 2014](#)).

> [fi](#) [\(p < 0.05, ; ://](#)
([. . /](#)).
> [fi](#)
fi
([et al. 2005](#); [et al. 2008, 2014](#))



... : - - - - - : () -4 -8 . :
 () -4 -8 . , -
 . * $p < 0.05$.

-8 (, $p < 0.001$),
 (.2) , $p < 0.001$, $p < 0.05$ p
), $p < 0.001$ $p < 0.05$
 -4 ($F_{1,72} = 6.880, p = 0.011$) -8
 ($F_{1,72} = 7.192, p = 0.009$).
 t

B a s a a b s B
 2 (: ,) 2 (: ,
) (v.) (.4a, ($p < 0.05$, 3).
 fi (), -) fi ($p < 0.05$, 3).
 (), (), (.4a,
 (.3) F fi $p < 0.05$ 2; >
). (v.)

$(Z = 3.6, p < 0.001)$,
 $(Z = 3.3, p < 0.001)$,
 $(Z = 3.0, p < 0.003)$,
 $(Z = 2.7, p < 0.008)$,
 $(Z = 2.4, p < 0.016)$,
 $(Z = 2.1, p < 0.034)$,
 $(Z = 1.8, p < 0.073)$,
 $(Z = 1.5, p < 0.132)$,
 $(Z = 1.2, p < 0.229)$,
 $(Z = 0.9, p < 0.367)$,
 $(Z = 0.6, p < 0.542)$,
 $(Z = 0.3, p < 0.756)$,
 $(Z = 0.0, p < 1.000)$.

Schizophrenia-related changes in functional connectivity for speech listening

$(Z = 2.1, p < 0.034)$,
 $(Z = 1.8, p < 0.073)$,
 $(Z = 1.5, p < 0.132)$,
 $(Z = 1.2, p < 0.229)$,
 $(Z = 0.9, p < 0.367)$,
 $(Z = 0.6, p < 0.542)$,
 $(Z = 0.3, p < 0.756)$,
 $(Z = 0.0, p < 1.000)$.

$(Z = 3.6, p < 0.001)$,
 $(Z = 3.3, p < 0.001)$,
 $(Z = 3.0, p < 0.003)$,
 $(Z = 2.7, p < 0.008)$,
 $(Z = 2.4, p < 0.016)$,
 $(Z = 2.1, p < 0.034)$,
 $(Z = 1.8, p < 0.073)$,
 $(Z = 1.5, p < 0.132)$,
 $(Z = 1.2, p < 0.229)$,
 $(Z = 0.9, p < 0.367)$,
 $(Z = 0.6, p < 0.542)$,
 $(Z = 0.3, p < 0.756)$,
 $(Z = 0.0, p < 1.000)$.

Correlation between strength of functional connectivity and speech-recognition performance

$(r = 0.512, p = 0.048)$,
 $(r = 0.552, p = 0.008)$,
 $(r = 0.488, p = 0.021)$.

Basal ganglia ASP

(Wang et al. 2004; Wang et al. 2007; & Wang et al. 2009; Wang et al. 2010; Wang et al. 2012b, 2013a) (Wang et al. 2012b),
 $(Z = 2.1, p < 0.034)$,
 $(Z = 1.8, p < 0.073)$,
 $(Z = 1.5, p < 0.132)$,
 $(Z = 1.2, p < 0.229)$,
 $(Z = 0.9, p < 0.367)$,
 $(Z = 0.6, p < 0.542)$,
 $(Z = 0.3, p < 0.756)$,
 $(Z = 0.0, p < 1.000)$.

et al. 2006; (& , 2004; & , 2009,

ASP- a a B STG/ MTG

(et al. 2015),

(et al. 2008), (et al. 2001).

& , 1981),

()

fi

(et al. 2007).

F a s a a s B B a- s s B a a s a a aS

(1)

(et al. 2007),

(et al. 2012a, 2013b; et al. 2016).

(et al. 2001; et al. 2008; et al. 2008; et al. 2010)

(et al. 2005),

fi

:

()

(2)

fi

(et al. 1996; et al. 1997; et al. 2000; et al. 2009; et al. 2012).

et al. (2012)

fi

(et al. 2014),

(. . . fi)

fi

fi

(et al. 2003)

(et al. 2007).

(, 2014)

(&

(, 2009; , 2012; et al. 2014). (4)

(et al. 2010)
(et al. 2009),
(et al. 2014)
(, 2012). (5)

(et al. 2008; , 2012; et al.
2013; et al. 2014).

(et al. 2009;
et al. 2010; , 2010; &
, 2011; & fl , 2012;
& , 2014; et al. 2015; et al. 2015)
(
et al. 2002; et al. 2012; et al. 2014; et al.
2014; & , 2014).

(1)

(2)

(3)

735()0780 1/12.8-235/3()) () .8

(2004). :
. *Cognition* ,
47–65.
(2007).
Brain Research , 136–144.
(2005).
. *Dialogues in Clinical Neuroscience* , 125–135.
(2001).
. *Journal of the*
Acoustical Society of America , 2527–2538.
(2010).
NeuroImage , 844–858.
(1953). *

(2009).
Human Brain Mapping, 4138–4151.
 (2008).
NeuroImage, 2002–2009.
 (2015).
Frontiers in Human Neuroscience, 36.
 (2008).
 : () 400. *Nature Reviews Neuroscience*, 920–933.
 (2013).
 fl
PLOS ONE, 62258.
 (2014).
 : *Psychiatry Research*, 261–267.
 (2008).
NeuroImage, 1352–1363.
 (2004).
 ? *Journal of Experimental Psychology. Human Perception and Performance*, 1077–1091.
 (2012).
Schizophrenia Bulletin, 285–294.
 (2008).
Brain, 945–961.
 (2014).
Cerebral Cortex, 1422–1435.
 (2001).
Human Brain Mapping, 131–143.
 (2010).
 :
Journal of Neuroscience, 9095–9102.
 (2015).
 :

▲ . *Frontiers in Neuroscience*, 158.

Journal of the American Academy of Audiology, 559–572. (2010).

(2009).

Cortex, 1111–1116. (2013).

Hearing Research, 58–66. (2009).

Journal of the Acoustical Society of America, 1737–1743. (2004).

Journal of the Acoustical Society of America, 813–821. (2003).

Speech Communication, 23–34. (2004).

Chinese Mental Health Journal, 45–47. (2009).

Cerebral Cortex, 1493–1503. (2012).

Journal of Neuroscience, 8443–8453. (2014).

Journal of Experimental Psychology: Human Perception and Performance, 186–199. (2012).

BMC Neuroscience, 119. (2007).

Cerebral Cortex, 171–181. (2005).

Current Opinion in Neurobiology, 219–224. (2005).

NeuroImage, 417–428. (1981).

Archives of Neurology, 486–490. (2011).

Frontiers in Systems Neuroscience, 1. (2013).

Frontiers in Psychology, 271. (2014).

Brain, 3396–3408. (2013).

Journal of Neuroscience, 19212–19222. (2015).

NeuroImage, 208–214. (2012).

NeuroImage, 1490–1502. (2003).

Journal of Clinical Psychiatry, 663–667. (2013a).

Journal of the Acoustical Society of America, 281–285. (2012a).

Schizophrenia Research, 33–41. (2013b).

Schizophrenia Research, 594–595. (2012b).

Hearing Research, 136–143. (2005).

Hearing Research, 1–10. (2014).

Neuroscience Bulletin, 490–496. (2007).

Speech Communication, 892–904. (2014).

Brain Connectivity, 53–69. (2016).

Psychological Medicine, 477–491. (2014).