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roduction
 Energetic versus informational masking
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1.3. Energetic and informational masking in Mandarin Chinese

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2. Materials and methods

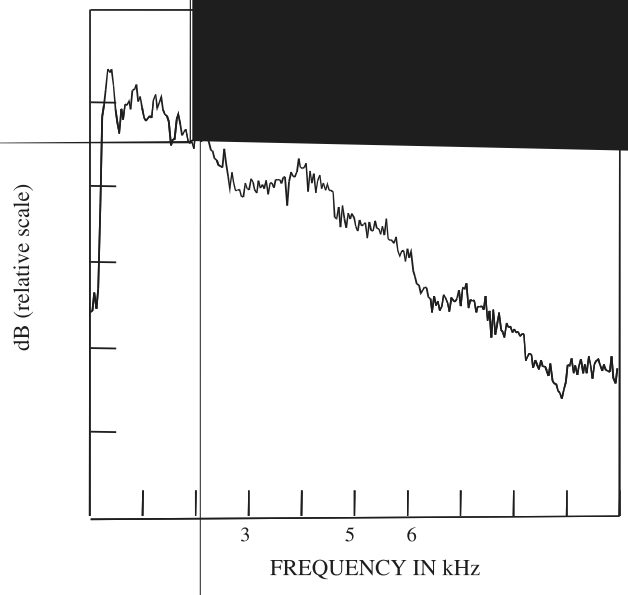
2.1. Participants

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2.2. Apparatus and materials

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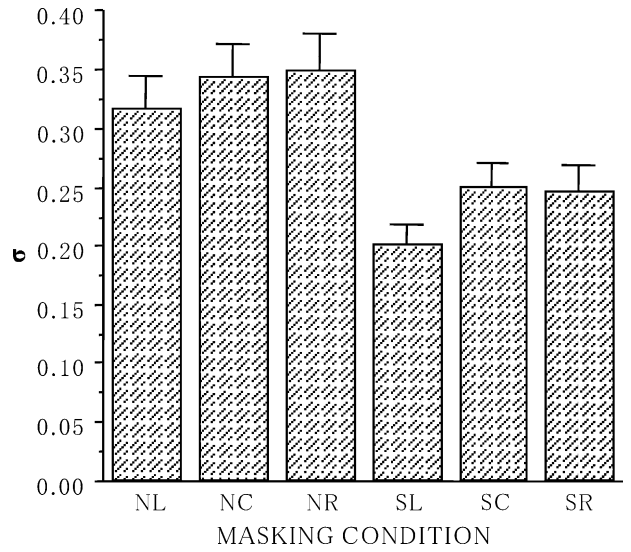
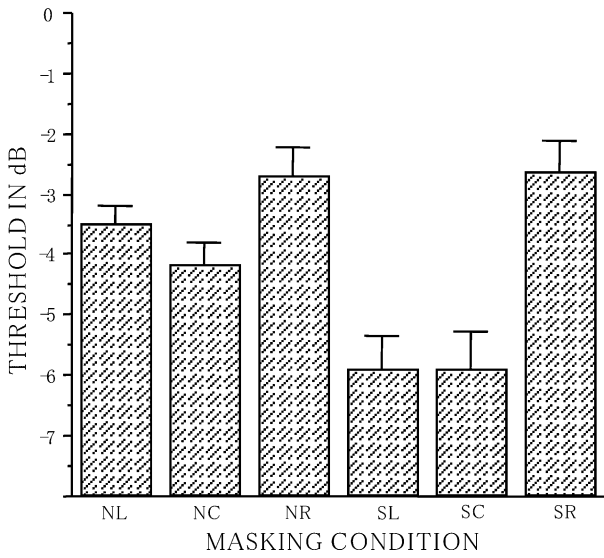
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3. Results

$$y = 1 / (1 + e^{-\sigma(x-\mu)})$$



F . 4. M (NL); (2) (NR); (4) (SL); (5) (SC); (6) (SR). T

F . 5. M (NL); (2) (NR); (4) (SL); (5) (SC); (6) (SR). T

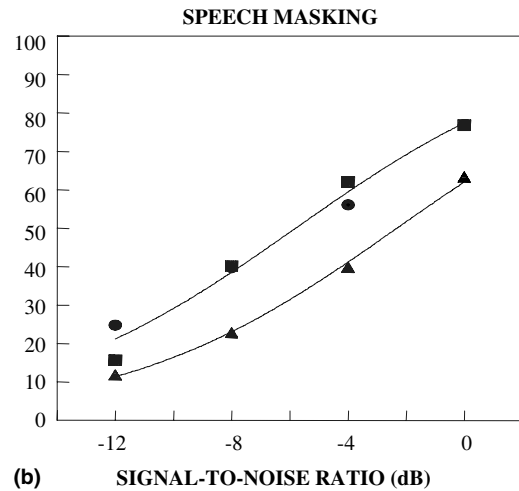
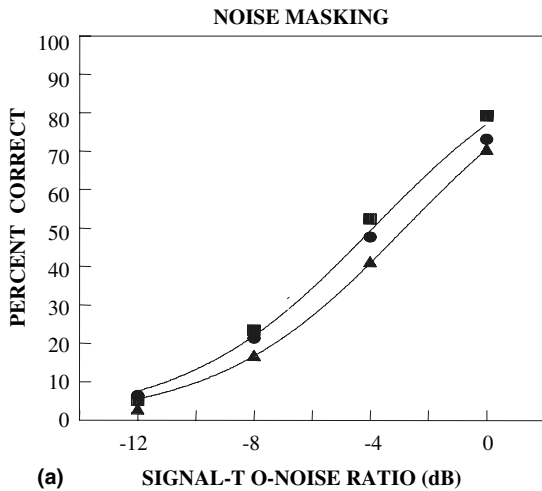
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4. Discussion

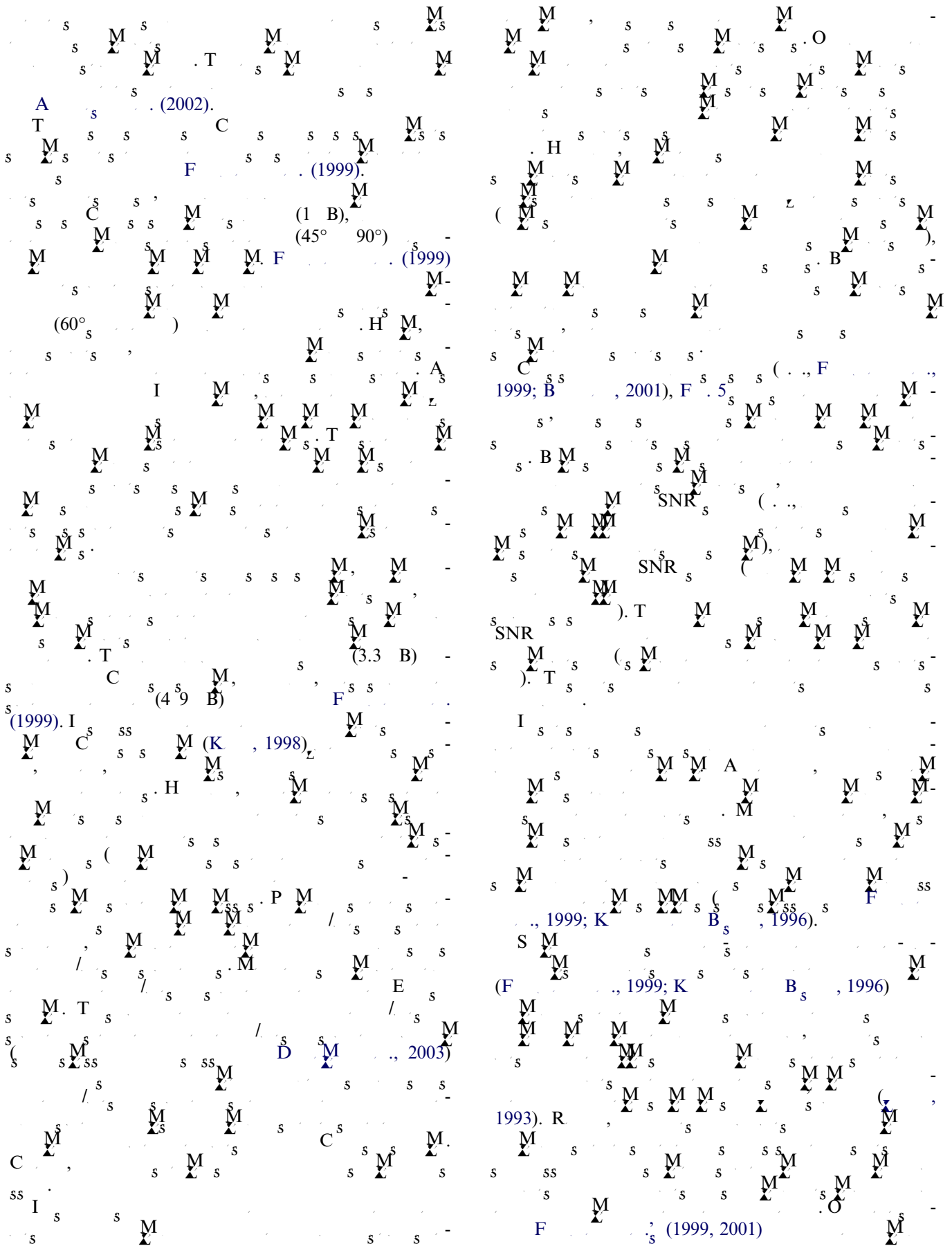
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K , J., 1998. C . M . E .
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K , J., B , J.M., 1996. A M .
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K , G., M , C.R., D , P.S., .S., C , H.S.,
 1994. R M .
 AM . S MA . 95, 3475 3480.

K , G., M , C.R., R , T.L., D , P.S., 1998. R s .
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 422 431.

L , L., , Q., 2002. A M .
 M M . H . R s . 168, 113 124.

L , R. , C , H.S., .A., G , S.J.,
 1999. T M M . J. AM . S MA . 106, 1633
 1654.

, S., 1991. M : A S . D M . M
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 M , H., N . E.B., R s . M.R., 1949. T M M
 M . A . J. P M . 62, 315 336.

, P.M., 1980. M M M .
 M . J. AM . S MA . 67, 952
 964.

, P.M., 1993. B M . M
 M . I : S , G.A., H M , I. (E s .),
 AM . MF M A M H . A P . M . A
 B M , B s , MA.