

Chronic Change in Thin Aesthetic Preferences

Chronic Change in Aesthetic Preferences

Abstract
The present study examined changes in aesthetic preferences for thin bodies over a 10-year period. Participants were shown 100 thin female bodies (A) and 100 thin male bodies (B) and rated their attractiveness. The results showed that preferences for thin bodies increased over time, and that these changes were not due to changes in the stimuli themselves. These findings have implications for the fashion industry and for body image concerns.

General Scientific Summary

The present study examined changes in aesthetic preferences for thin bodies over a 10-year period. Participants were shown 100 thin female bodies (A) and 100 thin male bodies (B) and rated their attractiveness. The results showed that preferences for thin bodies increased over time, and that these changes were not due to changes in the stimuli themselves. These findings have implications for the fashion industry and for body image concerns.

Keywords: chronic change, aesthetic preferences, thin bodies, body image.

Supplemental materials: [http://x.org/10.1037/0000498](#).

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Method

Participants

The study was conducted at the University of... (2016-03-03)...

Participants were recruited from... (N = 24)...

Demographics: Mean age = 23.11, SD = 6.64, range 16-32...

Procedure: Participants were assigned to... (AD, D)...

Materials

The materials used in this study were... (N = 20)...

Stimuli: 1 (very unattractive) to 5 (very attractive)...

Materials

The materials used in this study were... (N = 20)...

Stimuli: 1 (very unattractive) to 5 (very attractive)...

Procedure: Participants were assigned to... (AD, D)...

Procedure

The procedure involved... (N = 24)...

Participants were assigned to... (AD, D)...

Characteristics of the Participants

| | A D (N = 24) | | D (N = 24) | | t | p |
|-------|--------------|-------|------------|-------|-------|------|
| | M | SD | M | SD | | |
| A () | 7.22 | 1.58 | 5.08 | 11.57 | 7.49 | .66 |
| AD | 98.54 | 18.58 | 69 | 136 | 6.50 | 8.65 |
| A | 8.37 | 1.53 | 5 | 10 | -.769 | .446 |
| B | 8.46 | 1.47 | 5 | 10 | .592 | .557 |
| AD - | 7.75 | 1.11 | 5 | 10 | | |
| C | 21.88 | 5.57 | 10 | 30 | | |
| B | 17.75 | 4.80 | 9 | 26 | | |
| D | 8.67 | 2.08 | 5 | 12 | | |
| D | 3.25 | 1.15 | 1 | 5 | | |

Note. A D = ... ; D = ...

Ch (...) f h ... 6 ...

Aff t ... B t = AD ...

(2014). AD - = A t D t t ...

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Eye Movement Data Analysis

Data preprocessing. t th h t
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(, 2012), t t th .
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 t f th t t t f th A D (M =
 0.02, SD = 0.03) D (M = 0.02, SD = 0.01) , t(46) =
 0.66, p = .515, C h ' d = 0.19, 95% C -0.38, 0.76 . h
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 , t .). h t f t th t x f
 th h h f th A D (M = 0.15, SD = 0.11)
 th th t f th D (M = 0.08, SD = 0.08), t(46) = 2.53,
 p = .015, C h ' d = 0.73, 95% C 0.14, 1.31 . x t
 t f x t f t (, 2012;
 , t ., 2018) th th f t t f :
 (1) t th h t t 30 / ; (2) f x t th t
 t t (<0.5 , <75)
 t f x t f t t h t f x t
 f t ; (3) t th h t t
 60
 th t f th t , t h th A D
 th f th f t f h t ft
 t t x f f th . h
 f t f h t t h h f th
 th A D (M = 8.49, SD = 1.09) D (M = 9.21, SD = 0.83)
 , th f t ff , t(46) = -2.59, p =
 .013, C h ' d = 0.75, 95% C 0.16, 1.33 . h
 t t t th t t t th t
 (. . , 4) th A D (M = 0.74,
 SD = 0.16) D (M = 0.81, SD = 0.15) ,
 t(46) = -1.63, p = .110, C h ' d = -0.47, 95% C -1.04,
 0.11 . A f t t (A) f th t ()
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Attention to objects. h th h -
 th th t A D t t th ' -

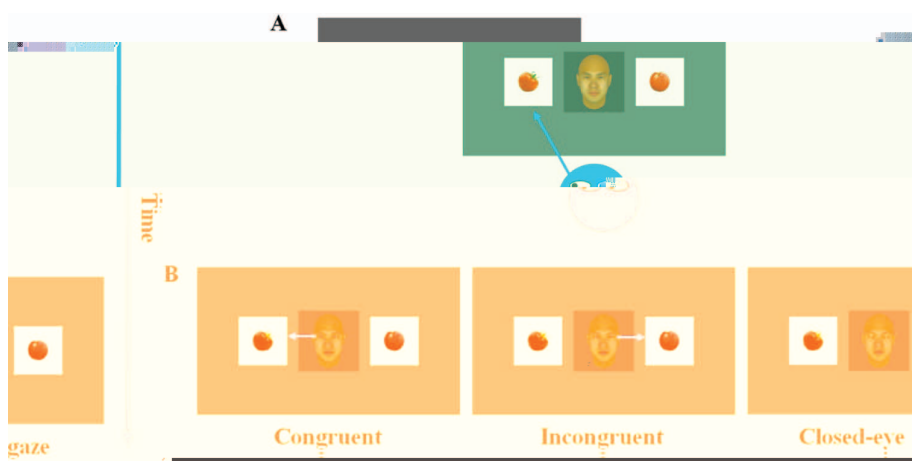


Figure 1. Ex t . Ch (t f) t t t tt t t f th t
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 t , f 3 f th f h , h h th f t th t t .
 t f (B). D t f h B . th t f th f .

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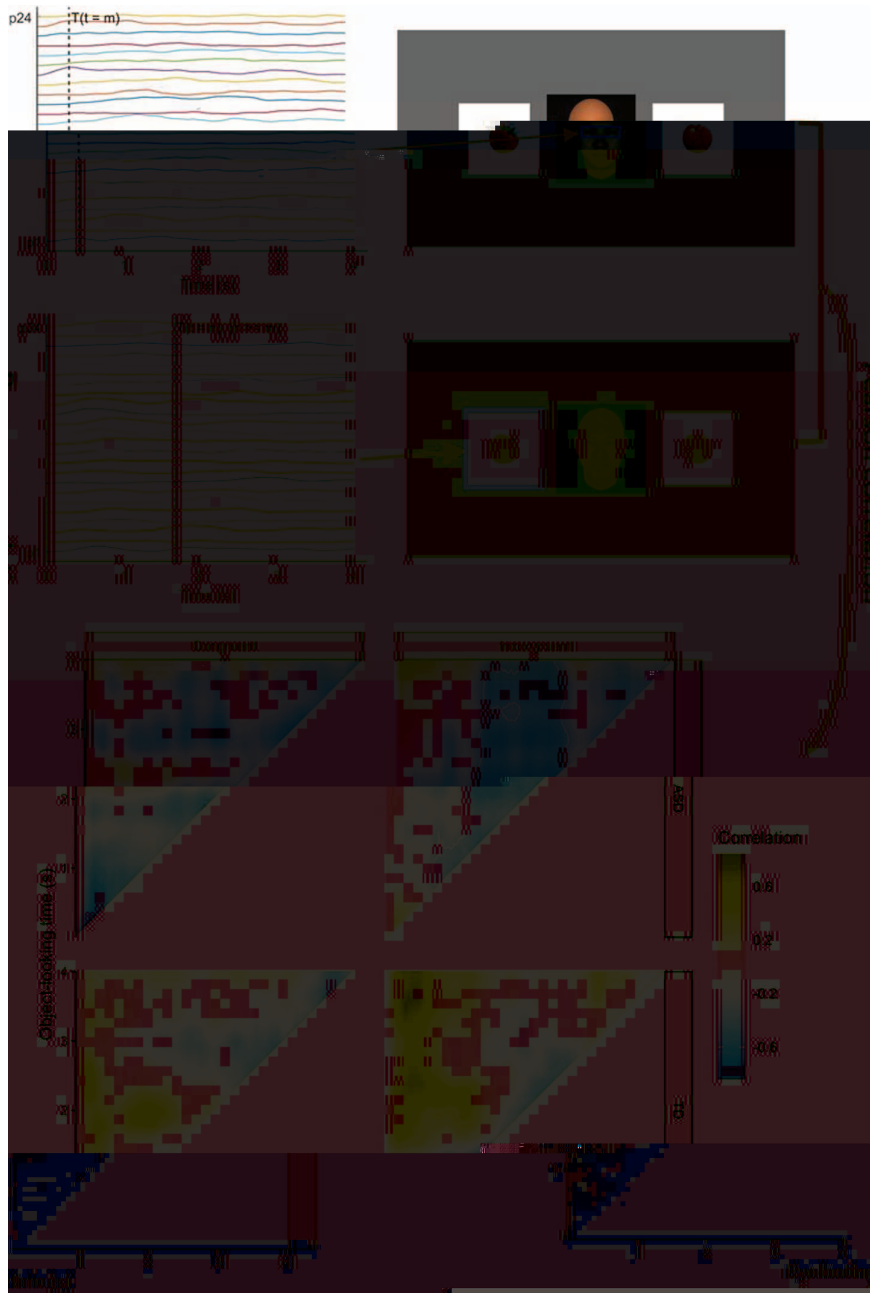


Figure 2. ... $n(0 \leq m \leq n \leq 4; t \dots)$. $h \dots t \dots 480(t \dots) \times 480(t \dots)$. $E \dots th \dots x \dots$. $n(0 \leq m \leq n \leq 4)$. $ht \dots t \dots th \dots ft \dots t \dots t \dots ft \dots$. $t \dots t \dots t \dots th \dots h \dots th \dots$, $th \dots th \dots th \dots - \dots t \dots h \dots f \dots t \dots$. $t \dots A \dots h \dots f \dots t \dots t \dots ht \dots (\dots t \dots$. $th \dots t \dots \dots tt \dots t)$. $h \dots t \dots f \dots h \dots t \dots x \dots t \dots$. $t \dots A \dots f \dots th \dots t \dots (\dots th \dots \dots t \dots t \dots) \dots tt \dots th \dots$. $f \dots A \dots D = \dots t \dots t \dots$; $D = t \dots \dots th \dots t \dots f \dots th \dots$. $f \dots$.

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 $2 (: A D . D) \times 3 (C t : t, -$
 $t, (A A) f h t t,$
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 $& t , 2007) t t f th f -$
 $t . x th th t th -$
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Attention to eyes. Att t t ht t t
 f t th ' f (B &
 t ff, 2005; C t t , 1998; & , 2007).
 h , th t t f D h , t t h th A D, t
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Correlation between eye-looking time and object-looking time. t , t - th t x
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 $t) \times 480 (t t) . t t x (2).$
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 t t

Results

Attention to Objects

A h 3A, D h h t t t
 t f ' t th t
 t , th t - th ff t f C -
 t th 0.83 1.46 1.78 3.15 ft th

t f h ft t , $F = 399.95, p = .028$ $F =$
 $795.59, p = .004,$ t t , th t t
 t C t th t f
 $1.87 2.77$ ft th t f h ft t , $F = 400.27,$
 $p = .038.$ D t th t th t t
 ff t xt t . A 2 (: A D
 . D) $\times 3 (C t : t, t, -)$
 A A t th t f th
 t - t (3B): h t t t
 C t f t, $F(2, 92) = 5.10, p = .008,$
 $\eta^2 = 0.10, 90\% C 0.02, 0.19 . h t t ff t$
 f t h th th th -
 t t t th t t t ,
 $F(2, 90) = 4.74, p = .011, \eta^2 = 0.10, 90\% C 0.01, 0.19 .$
 ff t f th th t , D h -
 t th th t t th th
 t - t , $t(23) = 3.66, p =$
 $.001, C h ' d = 0.75, 95\% C 0.29, 1.19 ; t(23) = 3.79, p =$
 $.001, C h ' d = 0.77, 95\% C 0.31, 1.22 , t ,$
 h f t ff f t th -
 t t , $t(23) = -0.46, p = .65,$
 $C h ' d = -0.09, 95\% C -0.49, 0.31 . Ch th A D,$
 h , h f t ff th th -
 t : t t , $t(23) = -0.02, p = .985,$
 $C h ' d = -0.004, 95\% C -0.16, 0.16 ; t$
 , $t(23) = 0.90, p = .377, C h ' d = 0.18, 95\%$
 $C -0.22, 0.59 ; t , t(23) =$
 $0.84, p = .409, C h ' d = 0.17, 95\% C -0.23, 0.57 .$
 th t th ff t f
 $C t th 1.81 4.00 , F =$
 $1908.66, p < .001.$ t t , th t t t
 C t 1.83 2.67 , $F =$
 $391.44, p = .036.$ A 2 (: A D . D) $\times 3 (C t :$
 $t, t, -) A A -$
 t th f t t , t t
 ff t f th t - t (3B):
 h t t t C t f t, $F(2,$
 $92) = 4.62, p = .012, \eta^2 = 0.09, 90\% C 0.01, 0.18 . h$
 t t ff t f t h th
 t th t t t th
 t , $F(2, 90) = 3.81, p = .026, \eta^2 = 0.08, 90\% C 0.01,$
 $0.17 . ff t f th th th$
 , D h th th th
 t th th th t
 t , $t(23) = 3.46, p = .002, C h ' d = 0.71, 95\% C$
 $0.25, 1.15 ; t(23) = 2.85, p = .009, C h ' d = 0.58, 95\% C$
 $0.14, 1.01 , t , h f t ff$
 f t th t - t ,
 $t(23) = -1.24, p = .229, C h ' d = -0.25, 95\% C -0.66,$
 $0.16 . Ch th A D, h , h f t ff -$
 th th t : t t t ,
 $t(23) = 0.07, p = .946, C h ' d = 0.01, 95\% C -0.39, 0.41 ;$
 t , $t(23) = 1.10, p = .28, C -$
 $h ' d = 0.23, 95\% C -0.18, 0.63 ; t$
 , $t(23) = 1.44, p = .163, C h ' d = 0.29, 95\%$
 $C -0.12, 0.70 , t th t t t th t f '$
 t .

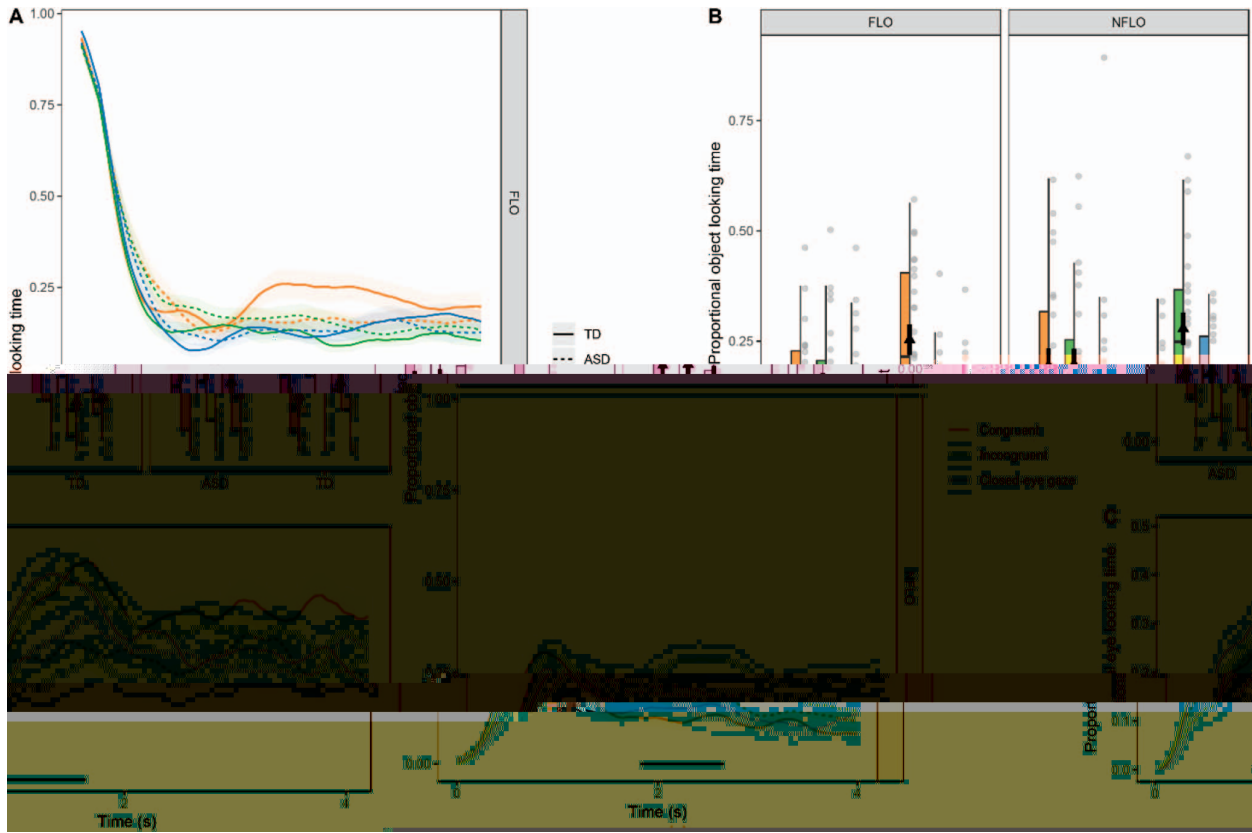


Figure 3. (A) Line graph showing looking time (Y-axis, 0.00 to 1.00) over time (X-axis, 0 to 4 seconds) for TD (solid lines) and ASD (dashed lines) groups. (B) Bar charts showing proportional object looking time for FLO and NFLO conditions. (C) Eye-tracking data showing congruent, incongruent, and good eye gaze metrics over time.

Attention to Eyes

h t - f th ff t f
 th t t 0.88 1.66, $F_{(1, 46)} = 607.89, p = .046$. D t th f tt
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 (: A D D) $\times 3$ (C t : t, t,
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 ff t f f t, $F_{(1, 46)} = 6.93, p = .011, \eta^2 = 0.13$, 90% C 0.02, 0.28 . h ff t f t
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 t t t th t, $F_{(1, 45)} = 4.26$,
 $p = .045, \eta^2 = 0.09$, 90% C 0.00, 0.23 . h f , h th
 A D t th th D h 0.88 1.66
 (ft th t f h ft t), h h th th
 t th t th C t ff .

Correlation Between Eye-Looking Time and Object-Looking Time

D t - t (2) th t f
 th D , th t h f t t
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 t : E - t th 0.07 t 1.29
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 4.00, $Z_{(1, 46)} = 54,092, p = .041$. C t t f t
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 t t t : E - t th f
 0.66 t 2.48 t t t th

f 0.75 t 4.00 , Z = -80.820, p = .046. C - t t f t ft t th t

Discussion

t - t t t t - A D h t th f th tt th t t (1) h h tt f , (2) h th h th A D t tt t t th t A, (3) h th tt t t f. t tt t t t t. t, f th t D h tt t t th t t th : h t h h - t th t th t th th h h t t th t - t th th th t - h t t x t 1.8 ft th t f t t t h ft t th t th t f - h ft t x t 1.2 , th f t th t D h ft f xt t th f f t t , h th A D t ff t t th tt t t t th t t , C t t th f th t t t h th A D (. . . , B f t . , 2012; - tt t . , 2015; h t . , 2010). th t , h tt t tt t t f f th f t h ft t , h h t f h th A D t th - h ft f th - t th t t f x t (. . . , h t . , 2007; & t . , 2004; th f & , 2008; t . , 2009). t th t - A, t t t t' f h t t th t t t A. -f h h t t , ft h t t , th h t t t th t t f t t th ff t . f , th t x, , A A D . t t th t (t . , 2017), f th t h th A D t th D h , t 0.88 1.66 , t f th t t f th D (ft 1.8). h f tt t t h t t t t tt t A D (Ch t . , 2012). D h - t h th A D ht th f t t th t f f (t th , h h t) f h , f. t t t - t t tt t th t D h , t t t f t th t t f t t h . t t, f h th A D, - t t t th t.

h t t th t D h h t th f t t th t f t t th tt t , t - t t - t t . Ch th A D, h , th t f th f (Ch t . , 2012; - tt t . , 2015) th t f t f th t th ' , th t t f . th t - f t t f h th A D, th th f t t th t f D h t th t th t f . th t t th t t . th t t t t t th ' tt t t t t th - t t , th t t x th t th th t t . f - t f th t th t t th t th A D h t t t t f th f . Ex h t th ' f h f t th t t t t h - t , A h t t f t t th t h t ff t f h t t f A, t t t t - t f A f . t t th ' h t h th t t t t h , t th t t th h , f th t t th t ' t (h - h t . , 2013). h h h h th h ft f h h f h t , h h ff h h f h ' t t x A t t t f h . h f f x th h t - ff t A D h t t t t f t t h . t, h t th t h f h th t t A, t h f , f h t t th t t A t ? t t h th t t f f t t h . , h th t t f th t h . x t 7 , t t h f ft t t t th f , th f t th t t t f t t th ' f h th A D. h t f th t f A t t t t t , th h th t th t f t t h h . h , - t t t f t t - t th t h th A D. , th t t x th t h t - t t t (. . . , th h t t f - t), f th t th x t f t th t

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References

B -C h . . (1991). t th f : t
 tt t th . A. ht (E .), *Natural theories of mind* (.
 233 251). x f , E : B B
 B ., A ., h, E., ht , C ., t , A., h h, ., &
 B ., . (2013). : tt t tt t
 f . t h h . *Journal of Experimental
 Psychology: General*, 142, 76 92. [htt://x. . /10.1037/0029286](https://doi.org/10.1037/0029286)
 B f ., E h, ., ., A., ., A., Ch ., .
 . . th BA t . (2012). : t t
 ff . t f t- f t : f tt t
 t. *Journal of Autism and Developmental Disorders*, 42,
 2208 2218. [htt://x. . /10.1007/10803-012-1450-](https://doi.org/10.1007/10803-012-1450-)
 B tt -B t ., (2016). A t t t t t -
 t t t : A t -
 t t . *Autism Research*, 9, 1021
 1035. [htt://x. . /10.1002/.1624](https://doi.org/10.1002/.1624)

B ., ., & t ff, A. . (2005). h t f f
 t t t . *Developmental Science*, 8, 535 543. [htt://x. . /10.1111/.1467-7687.2005.00445.x](https://doi.org/10.1111/.1467-7687.2005.00445.x)
 C t ., ., ., ., B tt th, ., & , C.
 (1998). t t t t t
 f 9 t 15 th f . *Monographs of the Society for Research in
 Child Development*, 63, -174. [htt://x. . /10.2307/1166214](https://doi.org/10.2307/1166214)
 C ., ., t t ., ., B ., ., A., th, .,
 ., & th ., . (2018). t tt t ff t t t t :
 A t t -t t . *Autism*, 22, 502 512.
 Ch ., . (2003). h t tt t t t ?
*Philosophical Transactions of the Royal Society of London Series:
 Biological Sciences*, 358, 315 324. [htt://x. . /10.1098/t.2002.1199](https://doi.org/10.1098/t.2002.1199)
 Ch ., ., A., & . (2003). A t t tt t
 th h t 2- - h th t . *Child
 Development*, 74, 1108 1122. [htt://x. . /10.1111/1467-8624.00595](https://doi.org/10.1111/1467-8624.00595)
 Ch ., C., h ., ., B ., E ., & h t . .
 (2012). h t t th f t . *Trends in Cognitive
 Sciences*, 16, 231 239. [htt://x. . /10.1016/t.2012.02.007](https://doi.org/10.1016/t.2012.02.007)
 C ., . (1977). *Visual co-orientation and maternal speech*.
 E : A
 - tt ., h ., E., & B t ., . (2015). B f t : f
 f th t th tt t 3- - th
 . *Journal of Autism and Developmental Disorders*, 45, 1897
 1904. [htt://x. . /10.1007/10803-014-2278-4](https://doi.org/10.1007/10803-014-2278-4)
 ., ., E f ., E., ., A ., & B h ., A. (2007). * 3: A
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 . *Behavior Research Methods*, 39, 175 191. [htt://x. . /10.3758/B03193146](https://doi.org/10.3758/B03193146)
 ., ., ., ., E ., ., t , E. E., .,
 A ., E ., C., & t , E. A. (2017). A t - f
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 Adolescent Psychiatry*, 56, 546 555. [htt://x. . /10.1016/.2017.05.005](https://doi.org/10.1016/.2017.05.005)
 h , A., B ., A ., & ., . (2007). f
 tt t : tt t , t , ff
Psychological Bulletin, 133, 694 724. [htt://x. . /10.1037/0033-2909.133.4.694](https://doi.org/10.1037/0033-2909.133.4.694)
 ., D., h, ., ., & ., . (2011). t
 f t- t t t ff : A t t t
Psychophysiology, 48, 1711 1725. [htt://x. . /10.1111/1469-8986.2011.01273.x](https://doi.org/10.1111/1469-8986.2011.01273.x)
 ., th ., ., & , C. (2014). t AD >
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 h . *Journal of Autism and Developmental Disorders*, 44, 2400
 2412. [htt://x. . /10.1007/10803-012-1719-1](https://doi.org/10.1007/10803-012-1719-1)
 h ., B ., th - t , ., h ff, ., C .,
 C. A., ., & ., . (2010). E t ff :
 A t t t f t t t th
 t t . *Experimental Brain Research*, 201, 155 165.
[htt://x. . /10.1007/00221-009-2019-7](https://doi.org/10.1007/00221-009-2019-7)
 ., A., & t ., . (2004). Att t t th '
 t h th t . *Journal of Child Psychology and
 Psychiatry*, 45, 435 444. [htt://x. . /10.1111/.1469-7610.2004.00235.x](https://doi.org/10.1111/.1469-7610.2004.00235.x)
 ., E., & t ., . (2007). t t t t t f
 EE - E - t . *Journal of Neuroscience Methods*, 164, 177 190.
[htt://x. . /10.1016/.th.2007.03.024](https://doi.org/10.1016/.th.2007.03.024)
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