he ki d of i fo a io a ailable i a afo eal d N + 1 (
i he e e ca e: N + 2) he he e e fixa e o d N
(Ra , 1975). I he o- e ie co di io , he e ie co i
of a a do le e i g; i he ide ical e ie co di io , he
age d i al a i ible. D i g he accade fo d N
o ad d N + 1 he e ie i o i io N + 1 (I he
e e ca e: N + 2) i e laced i h he age d. Sho e

fixa io loca io , a be de e ii e o afo eal e oce - i g ha al habe ic di . The efo e, e ex ec ed ead of Chi e e o e eal e ide ce fo e oce i g of N + 2.

Method

Subjects

Se e -fo 1 de fo he Beiji g No al U i e i h o al co ec ed o al io , ho e a i e eake of Chi e e, ici a ed i he e e- acki g ex e i e .

Material

Word N + 2. Fo -eigh age cha ac e e elec ed fo he ie - e a i la io a N + 2 o io . Fo each age cha ac e , fo e of e ie cha ac e e ed a ide - ical, o hog a hicall ela ed, e a icall ela ed, a d ela ed e ie . All e ie cha ac e ae i le a d o -co o d o a o a oid blexicall adical ac i a io d i g eadi g. The e e o diffe ce be ee he fo e ie e i h e ec o l al co lexi [i.e., be of oke ; ea oke : 5.0, 4.8, 5.5 a d 4.9, fo ide ical, o hog a hicall ela ed, e a icall ela ed, a d ela ed cha ac e , e ec i el ; $F(3, 188) = 1.1$, $> .1$] a d fe e c (Beiji g La g age I i e P bli he, 1986) [ea fe e cie : 1150, 1154, 1164, a d 1163, fo ide i- cal, o hog a hicall ela ed, e a icall ela ed, a d ela ed cha ac e , e ec i el ; $F(3, 188) < 1$]. I de e de ai g of o hog a hic (= 18 bjec) a d e a ic (= 16) ela ed e be ee he age a d each e of he e ie cha ac e e e collec ed. Each e of e ie cha ac e ela ed o age o l o he de ed di e io : e a ic ela ed e ie e e ed 4.1

d ra io of he accade (*M* = 25 ; *SD* = 7) ha d o ed he bo da .

The fo So g 40 a ed ih o e cha ac e al o 0.9 deg ee of i al a gle. The ex e i e a co olled b a P4 co e , i g a 2.8 GH de he Wi do XP e o - e . S bjec ead ih he head o i io ed o a chi e 80 c fo he o io . All ecodi g a d calib a io e e bi oc la .

Procedure

S bjec e calib a ed ih a ie- oi g id fo bo h e e. The e i ced o ead he e e ce fo co ehe io , he fixa e a do i he lo e igh co e of he o id, a d fi all e ab o o ig al co le io of he ial. A ho i Fig e 1, befo e eade ' e e d o he i ible bo da fo d d N o d d N + 1, he ge a o e of he fo e ie a he o i io of d d N + 2. D ig hi ical accade, he e ie d d i e laced b he age d d. O 26 ial he e e ce a follo ed b a ea e – o e io . S bjec co - ec l a e ed 91% of all e io (*SD* = 7%). Fixa io o he fixa io ol i iia ed e e a io of he ex e e ce d a if co ec io . A ex a calib a io occ ed if he acke did o de ec bo h e e ihi a edefi ed i do d o d he i ial fixa oi . All bjec ead 131 e e ce (i.e., 96 ex e i e - al e e ce a d 35 fille). Af e he ex e i e , bjec e a ked o e d a hi g al d ig he e e ce eadi g, o e e d ed 'fla he ' o he d ee fo o l a fe ial (*M* = 4, *SD* = 3), b he co ld o e d ha he a .

Data Analysis

Da a a al i a ba ed o 74 bjec . The da a e ed ced o a fixa io fo a i g a algo ih fo he bi oc la de ec io of accade (E gbe & Kliegl, 2003). Se e ce co ai i g a bli k o lo of ea e e e dele ed (i.e., 5%). A al e e ba ed o igh - e fixa io . Fi - a d i gle-fixa io d a io a ell a GD ih FFD ho e ha 60 o lo ge ha 600 e e excl ded (2% of all fixa io). Fi -fixa io d a io i he d a io of he i ial fixa io o a d d e ec ie of be of fixa io o he d; i gle-fixa io d a io i he d a io of fixa io o a d ha i fixa ed exac l o l o ce; a d GD i he of all fi - a fixa io o a d befo e aki g a accade o a o he d.

I fe e ial a i ic a e ba ed o *a* co a ih a do le ed e ie a efe e ce fo he o ela ed a d he ide i e ie . E a e a e fo a li ea ixed odel (LMM) fo d a io a d a ge e ali ed li ea ixed odel (GLMM) fo ki ig ih d o ed a do effec fo bjec a d ie i g he og a of he *4* ackage (Ba e , Maechle , & Dai, 2008) i he R e o e fo a i ical co i g a d g a hic (R-Co e De elo e Tea , 2008). We ed log- a fo ed co i o fe e c al e a edic d i he odel . A al e fo a fo ed a d log- a fo ed d a io ielded he a e a e of ig ifica ce; a i ic a e e d ed fo log- a fo ed d a io .

Results

Word N + 2 Region-Preview Benefits

T o ai goal of he e e d e o e (a) he he eade of Chi e e a e able o ob ai ef l i fo a io fo a afo - ea d d N + 2 o i io a d (b) he he a afo ea load d a i - call od la e he e ce al a . A o al of 5903 ial co ib ed o he follo i g al e . Rela i e o ela ed e ie , he e e ig ifica e ie be efi of 7 (*b* = .029, *SE* = .010, = 2.9) fo FFD a d 12 (*b* = .040, *SE* = .013, = 3.0) fo GD o d d N + 2. The ki i g obabili of d d N + 2 de ide ical e ie a al o highe ha ela ed e ie (*b* = 0.22, *SE* = 0.11, = 2.0, < .05). We al o e ed ha e of i fo a io i e ocessed a he d d N + 2 o i io . Ho e e, ei he d a io o ki i g obabili ie fo he o hog a hicall a d e a icall i ila co di io e ig ifica l diffe e fo ela ed co ol (all - al e < 1).

Al ho gh he ai effec of e e c a o ig ifica (bo h - al e < 1.2), e did ob ai a i e ac io be ee e e c of d d N + 1 a d he ide i co a fo FFD a al i (*b* = .013, *SE* = .006, = 2.3). Diffe e ce i a afo ea load of d d N + 1 lead o diffe e a e of e ocess i g of d d N + 2 i ag ee- e ih d a ical od la io of he e ce al a (ee Table 1a a d Fig e 2). S ecificall , i a o -hoc a al i , he Ide i co a , a ig ifica o l he N + 1 d d e e of high fe e c (12 ; *b* = .042, *SE* = .013, = 3.2) b o he he e e of lo fe e c (3 ; *b* = .016, *SE* = .015, = 1.1). The a e e ic

Table 1
M a (S a a D a) F -F a D a (FFD), Ga D a (GD) a S P bab (SP) W N + 2, W N + 1, a W N B D b P C (W N + 2) a F c W N + 1

	T e of Fi e			
Fe e c	Ide i	O hog a h	Se a ic	Co ol
(a) Wo d N + 2				
FFD-HF	269 (49)	284 (51)	278 (45)	282 (43)
FFD-LF	280 (46)	285 (53)	288 (49)	283 (50)
GD-HF	306 (63)	329 (66)	321 (70)	326 (60)
GD-LF	328 (77)	335 (82)	333 (75)	337 (75)
S -HF	.13 (.14)	.11 (.12)	.11 (.13)	.10 (.12)
S -LF	.13 (.13)	.14 (.12)	.14 (.14)	.12 (.14)
(b) Wo d N + 1				
FFD-HF	246 (48)	261 (59)	252 (55)	260 (83)
FFD-LF	290 (62)	297 (61)	296 (66)	301 (63)
GD-HF	249 (53)	263 (60)	253 (55)	264 (86)
GD-LF	293 (63)	303 (62)	300 (66)	307 (63)
S -HF	.58 (.18)	.63 (.17)	.61 (.17)	.60 (.16)
S -LF	.50 (.18)	.50 (.17)	.43 (.18)	.46 (.19)
(c) Wo d N				
FFD-HF	263 (46)	257 (42)	258 (39)	261 (46)
FFD-LF	264 (45)	261 (42)	263 (43)	268 (44)
GD-HF	289 (71)	287 (60)	291 (58)	288 (60)
GD-LF	303 (71)	295 (64)	305 (69)	306 (75)
S -HF	.18 (.18)	.14 (.14)	.15 (.14)	.14 (.14)
S -LF	.14 (.13)	.13 (.13)	.15 (.15)	.13 (.12)

N . HF = high-fe e c d; LH = lo -fe e c d. Mea a d a dd de ia io a e co ed ac o bjec ea .

a tt i ob ed ed fo GD fo PB de high-f e e c (18 ;

ve l hold if e exa i e o l fixa io o he cha ac e ha a cha ged. De i e he ed ced be of ob e a io (3461 of 5903 ial), exac l he a e e l e ob ai ed, i cl di g PB effec fo d N + 2 (b = .035, SE = .013, = 2.7 a d b = .046, SE = .019, = 2.4, fo FFD a d GD , e ec i el) a d he i e ac io of PB a d d N + 1 fi e e c (b = .019, SE = .008, = 2.5 a d b = .019, SE = .011, = 1.8, fo FFD a d GD , e ec i el).

Word N + 1 Region

Frequency effect. The ea ofile of FFD, GD, a d ki - i g obabili of d N + 1 i ho i Table 1b. D e o he high ki i g a e (54%) he d a io a al e a e ba ed o o l 3105 ob e a io . The ai effec of fi e e c eached ig ifica ce fo effec o FFD (39 ; b = .037, SE = .007, = 5.3), GD (41 ; b = .037, SE = .008, = 4.5), a d ki i g obabili (b = 0.17, SE = 0.04, = 4.2, < .01). The effec i he di a i edia e fi e e c effec .

Relatedness effect. We al o ob e ed a ig ifica ki i g a e diffe e ce be ee he hog a hicall i ila co di io a d he ela ed co di io (b = 0.15, SESE

We al o e ed hich i fo a io i ob ai ed f o o d N + 2. P e io die h Chi e e de o a ed ex ac io of o ho-g a hical, ho ological, a d e e a ic i fo a io f o o d N + 1. Si ce e ho ological e oce i g i Chi e ead i g i ela i el eak a d i effec i ob e ed ai l i GD (Li e al., 2002; T ai e al., 2004; Ya e al., 2009), e e ed PB o l fo o hog a hicall a d e a icall ela ed co di io . Ho e e, ei he e a ic o o hog a hic e ie facili a ed b e e oce i g of o d N + 2. Al ho gh ead of Chi e e a e able o ob ai i fo a io f o o d a a , e a ic a d o ho-g a hic fea e b he el e g e o o g e o gh o igge eliable e ide ce fo a afo eal oce i g i hi d .

The e ach o PB of o d N + 2 a i ia ed beca e he a e co ide ed li e of c e co a io al odel of e-o e e co i 98T [(ei he)6

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