AMERICAN PSYCHOLOGICAL ASSOCIATION

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[illegible]

… (2005) …

… 1993). …

… (2000; … 2013), … (1996) … (1998) …

… (2009).

… (… 2000) …

… (2008; … 2016; … 2010), … 2016).

… (… 2008; … 2016; … 2010). …

Experiment 1

… 1 … (2005), … 2. 4. … 1 … 6 …

… 1986; … 1977; … 1980; … 1970). …

Method

Participants. … (11 … 19 …; … = 21.2 …, *SD* = 2.2 …) … (… ≤20 … 0.5 … 6 …) …

Sample size. … 900 … 2010). … 80% … $p = .05$, … $d = 1.22$ … 10 …

Apparatus. … 3.0 … 1997) … 15- … HD-499 … (… GmbH & Co. KG, …).

Stimuli and procedure. … 15- … 100 … 1 … 6 … 86 … 5- … 300 … 785 … (2010). …

… (Δ, …) … 50%, … 1.414 … 79% … 60 …

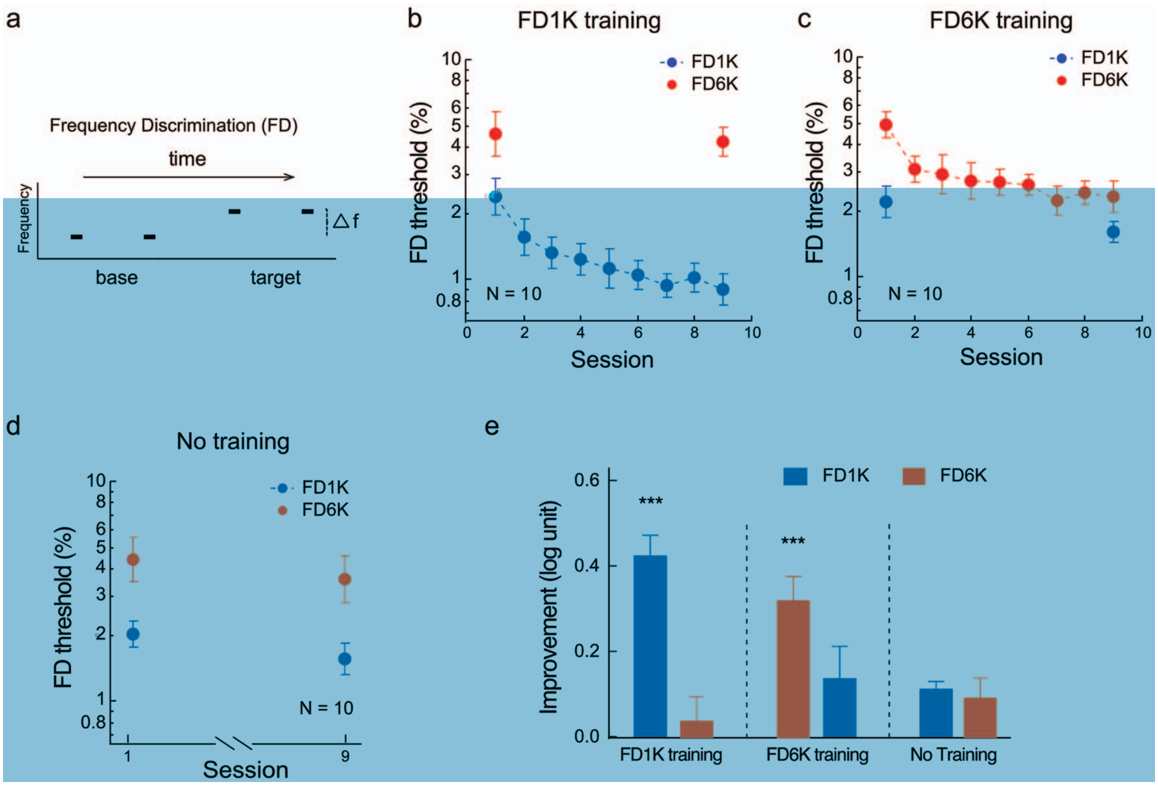

Figure 1. ... 1 ... H ... 6 H ... 1 H ... 6 H ... FD1 ..., FD6 ... Err ... ± 1 *SE*. FD: ... *** $p < .001$.

... 10 ...

Experimental design. ... 1 ... 6 H ... FD1 ... FD6 ... 2 ... 9 ... 14 ... 12 ... (1 ... 6 H). ... 12 ... 1 H ... FD1 ... 6 H ... FD6 ... 1 ... 12 ...

Data processing and statistical analysis. ... 2015). ... $p < .001$ ... 1 H ... $p < .001$ ... 6 H ... $p = .67$ ... 1 H ... $p = .10$ ... 6 H ...

... (LME) ... 1 ... 3 ... & B ..., 2000). ... (1 ... 6 H), ... FD1 ..., FD6 ... 1; FD6 ... ID1 ..., ID1 ... 2, ... FD1 ... 6 ... 6 ... 3) ... 2004).

Results

[illegible] 1 H [illegible] FD1 [illegible] 0.42 ± 0.05 ([illegible] ± 1 [illegible]) [illegible] 1 H [illegible] 0.04 ± 0.06 [illegible] 6 H (F [illegible] 1 [illegible]). [illegible] 6 H [illegible] FD6 [illegible] 0.32 ± 0.06 [illegible] 6 H 0.14 ± 0.08 [illegible] 1 H (F [illegible] 1 [illegible]). [illegible] 0.11 ± 0.02 [illegible] 1 H [illegible] 0.09 ± 0.05 6 H (F [illegible] 1 [illegible]).

[illegible] LME [illegible] E [illegible] 1 3 [illegible], $F(1, 190) = 120.99$, $p < .001$; [illegible], $F(1, 190) = 141.90$, $p < .001$; [illegible], $F(6, 190) = 0.58$, $p = .75$. [illegible], $F(6, 190) = 6.87$, $p < .001$; [illegible], $F(6, 190) = 3.19$, $p = .005$; [illegible], $F(6, 190) = 3.89$, $p = .001$.

I E [illegible] 1, [illegible] 1 H ($t = 6.06$, $p < .001$, 95% [illegible] (CI) [0.29, 0.57], C [illegible] $d = 1.92$), [illegible] 6 H ($t = 0.54$, $p = .59$, 95% CI [−0.10, 0.18], C [illegible] $d = 0.17$; F [illegible] 1 [illegible]) [illegible] FD1 [illegible]. I [illegible] FD6 [illegible] 6 H ($t = 4.60$, $p < .001$, 95% CI [0.18, 0.46], C [illegible] $d = 1.45$), [illegible] 1 H ($t = 1.95$, $p = .053$, 95% CI [−0.002, 0.27], C [illegible] $d = 0.62$; F [illegible] 1 [illegible]). [illegible] (1 H: $t = 1.59$, $p = .11$, 95% CI [−0.03, 0.25], C [illegible] $d = 0.50$; 6 H: $t = 1.32$, $p = .19$, 95% CI [−0.04, 0.23], C [illegible] $d = 0.42$; F [illegible] 1 [illegible]) [illegible].

Discussion

[illegible] 1 [illegible] 6 H [illegible] (E [illegible] & F [illegible], 2005).

Experiment 2

E [illegible] 2 [illegible] 6 H [illegible] 1 H [illegible]. I [illegible] 6 H, [illegible] 1 H [illegible] 1 H [illegible].

Method

Participants. [illegible] 12 [illegible] = 22.8 [illegible], $SD = 2.7$ [illegible].

Stimuli and procedure. [illegible] 6- H [illegible] E [illegible] 1. [illegible] 1 H, [illegible] (Δ) [illegible] 50 [illegible] 10 [illegible] 1 [illegible] E [illegible] 60 [illegible].

Experimental design. [illegible] E [illegible] 1. I [illegible] (FD6 [illegible] ID1 [illegible]), [illegible] 12 [illegible] 6 H [illegible] 12 [illegible] 1 H [illegible] 1.5 [illegible]. I [illegible] (ID1 [illegible]), [illegible] 12 [illegible] 1 H [illegible] 1 [illegible]. F [illegible] 9 [illegible] 14 [illegible] 2 [illegible].

Results

D [illegible] 0.46 ± 0.05 [illegible] 6 H, [illegible] 0.31 ± 0.06 [illegible] 1 H (F [illegible] 2 [illegible]). I [illegible] 1 H [illegible] 0.08 ± 0.05 [illegible] (F [illegible] 2 [illegible]).

[illegible] LME [illegible] (E [illegible] 1) [illegible] 6 H ($t = 6.28$, $p < .001$, 95% CI [0.32, 0.61], C [illegible] $d = 2.09$) [illegible] 1 H ($t = 4.21$, $p < .001$, 95% CI [0.16, 0.46], C [illegible] $d = 1.40$; F [illegible] 2 [illegible] 2), [illegible] 6 [illegible] 1 H. [illegible] 1 H [illegible] 1 H ([illegible] 27 [illegible] 9 [illegible] 13; $t = 0.40$, $p = .71$, 95% CI [−0.13, 0.18], C [illegible] $d = 0.16$, [illegible] t [illegible], F [illegible] 2; A [illegible] F [illegible] 2), [illegible].

I [illegible] 1 H [illegible] ($t = 1.12$, $p = .27$, 95% CI [−0.05, 0.22], C [illegible] $d = 0.35$; F [illegible] 2 [illegible] 2). [illegible] 1 H [illegible].

Discussion

E [illegible] 6 [illegible] 1 H. [illegible] 1 H [illegible].

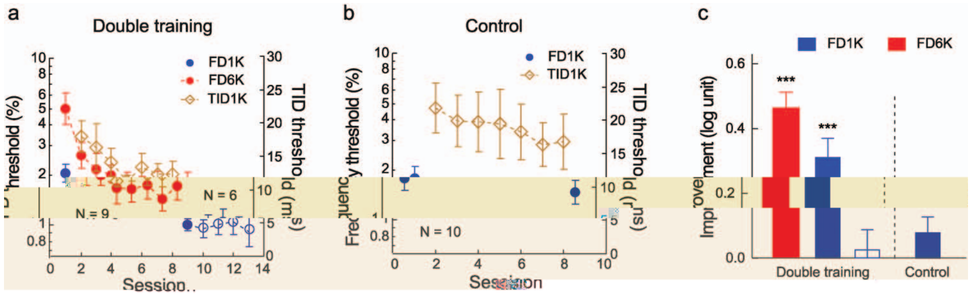

Figure 2. … 6 … 1 H … . ( ) … 6 H … 1 H … 1 H … (2 … 2 8). … 1 H . A … 1 H (2 … 10 13). ( ) … 1 H . ( ) … 1 … 6 H … (FD6 … ID1) … (ID1) … . Error … ± 1 *SE*. FD = … ; ID = … . *** $p < .001$. …

Experiment 3

E … 3 … E … 2, … 1 … 6 H … M … I … 1 H, … 6 H … A … 6- H …

Method

Participants. … 13 … ; … = 24.1 … , *SD* = 3.1 …)

Stimuli and procedure. … 1- H … E … 1. … E … (24 × 24 …) … A … 300-ms … 300-ms … (200 … 100-ms …), 900-ms … 200-ms … B … (… 2,000-ms …), … 6 H … (… 785-ms …).

Experimental design. … E … 1. I … (FD1 … 6 …), … 12 … 1 H … 12 … (60 …) … 6 H … 1.5 … I … (6 …), … 12 … 6 H … 1 … F … 9 14 … 2 … .

Results

D … 0.42 ± 0.05 … 1 H, … 0.31 ± 0.05 … 6 H (F … 3 …). I … 6 H … 0.11 ± 0.04 … (F … 3 … 3).

… LME … (E … 1) … 1 H ($t = 6.02$, $p < .001$, 95% CI [0.28, 0.56], C … ' $d = 1.90$) … 6 H ($t = 4.44$, $p < .001$, 95% CI [0.17, 0.45], C … ' $d = 1.40$; F … 3 … 3). 2 … 6 H … 6 H (… 2 … 9 … 13; $t = 0.22$, $p = .83$, 95% CI [−0.27, 0.33], C … $d = 0.08$, … t … ; F … 3 … 3), … 6 H … 1 H …

… 6 H … ($t = 1.63$, $p = .10$, 95% CI [−0.02, 0.25], C … ' $d = 0.52$; F … 3 … 3). H … 6 H … 6 H.

Discussion

C … E … 2, … 1 … 6 H …

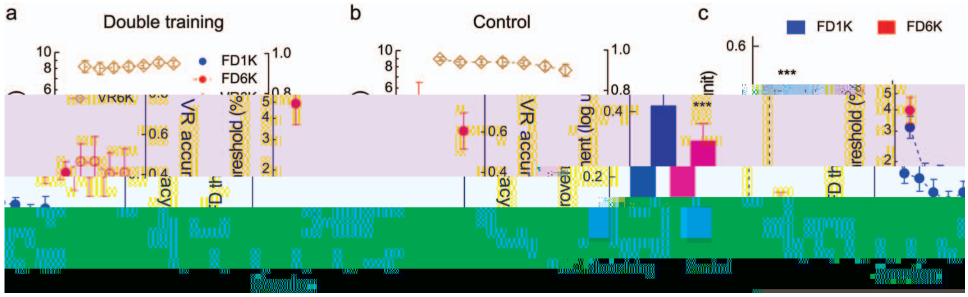

Figure 3. [illegible] (FD1K [illegible]) [illegible] ± 1 *SE*. FD = [illegible] *** $p < .001$. [illegible]

[illegible]

Experiment 4

[illegible] (2003). [illegible]

Method

Participants. [illegible] 14 [illegible] = 23.6 [illegible], *SD* = 3.0 [illegible]

Tasks. [illegible] 2 [illegible]

Experimental design. [illegible] 18 [illegible] (1, 4, [illegible] 6 [illegible]) [illegible] 1.5 [illegible] 12 [illegible] 17 [illegible] 2 [illegible]

Data analysis. [illegible] LME [illegible] (1, 4, [illegible] 6 [illegible]) [illegible] 2000). [illegible] LME [illegible] 2004).

Results

[illegible] 6 [illegible] 0.11 ± 0.06 [illegible] 1 [illegible], 0.12 ± 0.06 [illegible] 4 [illegible], 0.39 ± 0.06 [illegible] 6 [illegible] 1 [illegible] 0.20 ± 0.07 [illegible] 1 [illegible], 0.05 ± 0.03 [illegible] 4 [illegible], −0.01 ± 0.03 [illegible] 6 [illegible] (F[illegible] 4 [illegible] 4[illegible]).

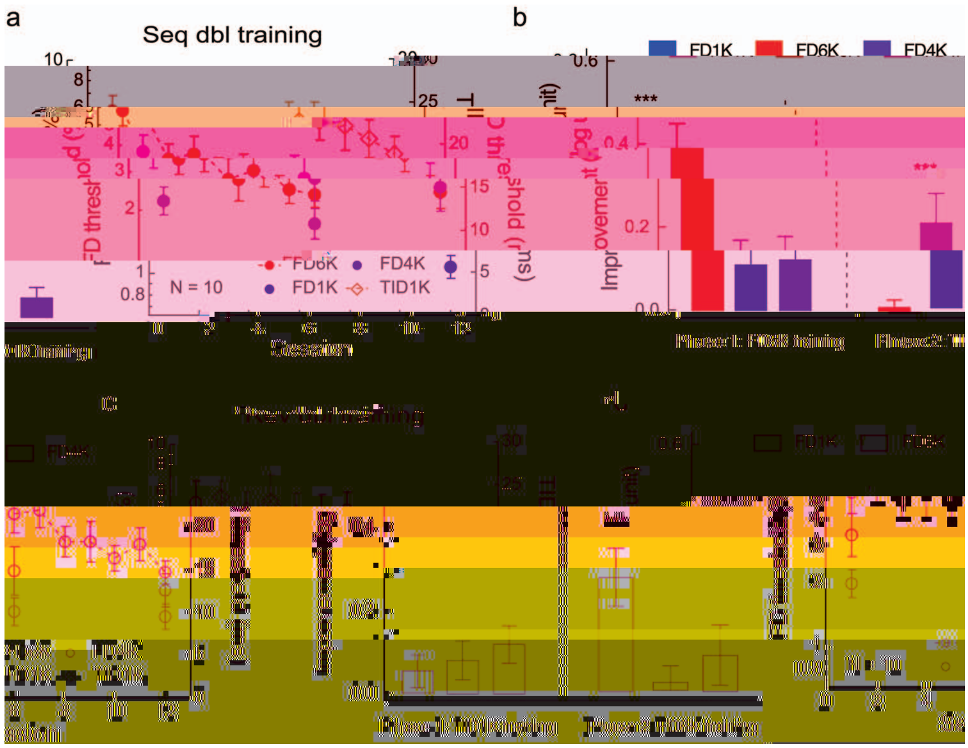

Figure 4. 2 . ( ) 2 : 6 H 1 H . F 6, 4, 1 H . ( ) 6, 4, 1 H . ( ) : 1 H 6 H . F 6, 4, 1 H . ( ) 6, 4, 1 H . Err ± 1 *SE*. FD = ; ID = .
*** $p < .001$. 2

F r 1 H 0.08 ± 0.05 1 H , 0.12 ± 0.05 4 H , 0.05 ± 0.04 6 H . F 6 H 0.02 ± 0.04 1 H , 0.09 ± 0.07 4 H , 0.28 ± 0.07 6 H (F 4 4).

LME , $F(2, 144) = 43.06$, $p < .001$; , $F(2, 144) = 32.44$, $p < .001$; , $F(1, 18) = 0.68$, $p = .42$. , $F(2, 144) = 3.60$, $p = .008$; , $F(4, 144) = 6.96$, $p < .001$.

F r 6 H 6 H ($t = 6.94$, $p < .001$, 95% CI [0.26, 0.52], C $d = 2.19$), 1 H ($t = 1.94$, $p = .16$, 95% CI [−0.02, 0.24], C $d = 0.61$) r 4 H ($t = 2.15$, $p = .10$, 95% CI [−0.01, 0.25], C $d = 0.68$). 1 H 1 H ($t = 3.61$, $p = .001$, 95% CI [0.07, 0.34], C $d = 1.14$), 4 H ($t = 0.82$, $p = 1.00$, 95% CI [−0.09, 0.18], C $d = 0.23$) r 6 H ($t = 0.21$, $p = 1.00$, 95% CI [−0.12, 0.15], C $d = 0.07$; F 4 4).

F r 1 H 1 H ($t = 1.46$, $p = .44$, 95% CI [−0.05, 0.22], C $d = 0.46$), 4 H ($t = 2.14$, $p = .10$, 95% CI [−0.01, 0.25], C $d = 0.68$), r 6 H ($t = 0.94$, $p = 1.00$, 95% CI [−0.08, 0.19], C $d = 0.30$). 6 H 6 H ($t = 4.91$, $p < .001$, 95% CI [0.14, 0.41], C $d = 1.55$), 1 H ($t = 0.36$, $p = 1.00$, 95% CI [−0.11, 0.15], C $d = 0.11$) r 4 H ($t = 1.57$, $p = .36$, 95% CI [−0.04, 0.22], C $d = 0.50$; F 4 4).

Discussion

2 r - r ,

General Discussion

[illegible] 2006; [illegible], 1993). [illegible] (2011). [illegible]

Context

[illegible] (e.g., 45 [illegible]) [illegible] 100% [illegible]

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