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A R T I C L E I N F O

Article history:

Keywords:

A B S T R A C T

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Introduction

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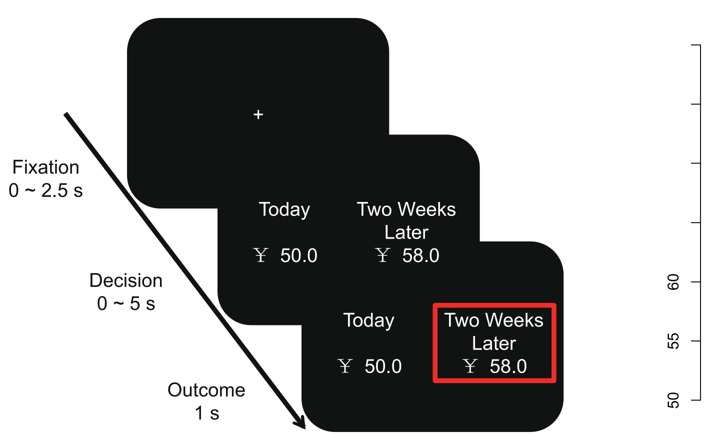
Intertemporal choice (ITC) task

Materials and methods

Participants



$SV = LL\ Amount/(1 + kD)$

k fi fl

k k fi fi

Procedure

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$+$ $-$ $-$ $+$

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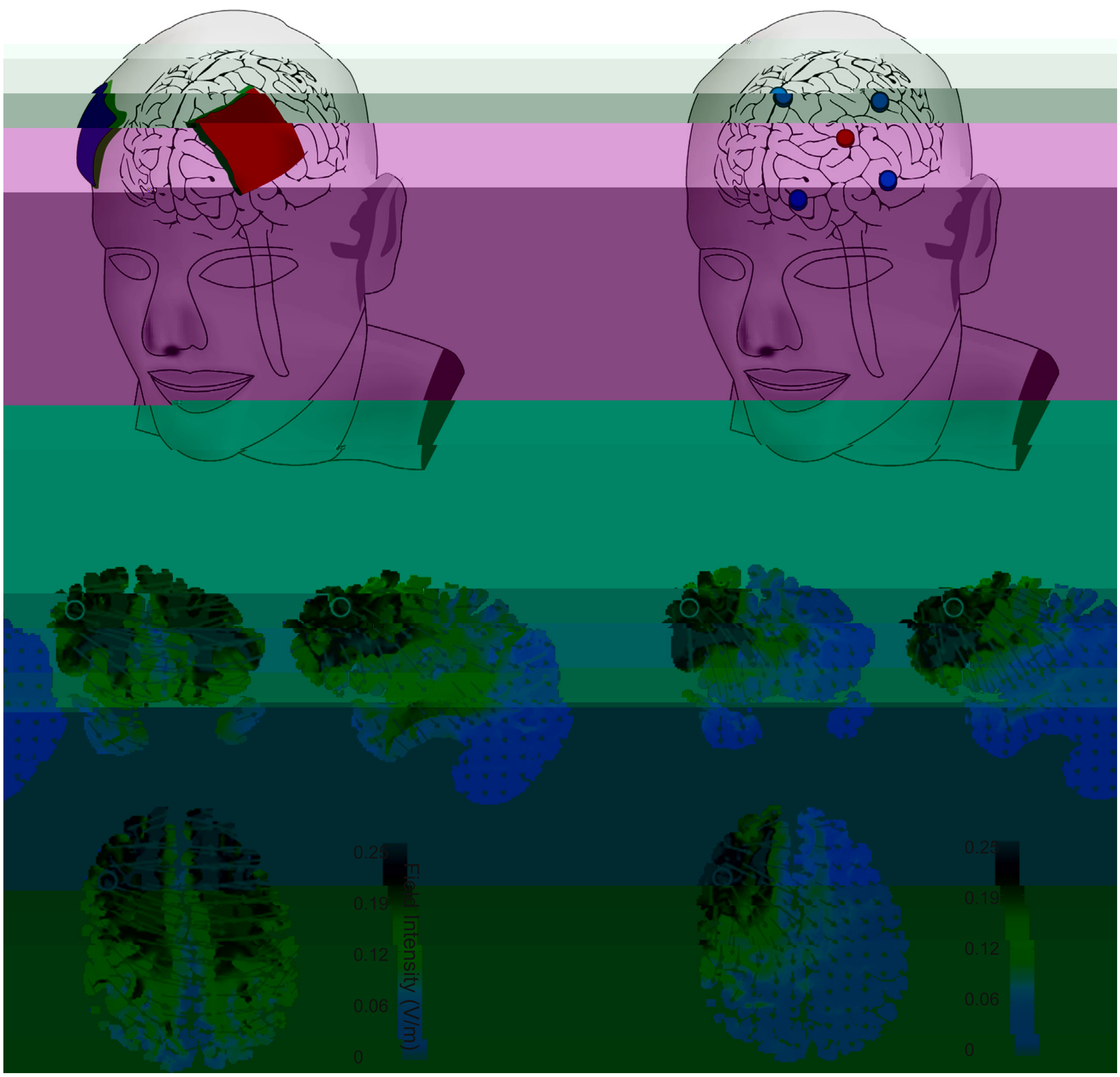

Conventional tDCS

HD-tDCS

Behavioral data analysis

$$logit\,P(chooseLL) = \beta_1\,LL\ amount + \beta_0$$

$$logit(0.5) = \beta_1 indifference\ point + \beta_0$$

β_1 β_0

$indifference\ point = -\beta_0/\beta_1$

β_1 β_0 “ ”

β_1 β_0,

β_1 β_0

“ ”

A

$$SV = \frac{A}{1 + kD}$$

D A

k

k

$$SV_{ASAP} = g(D_{ASAP})\frac{A}{1 + k_{ASAP}(D - D_{ASAP})}$$

D_{ASAP}

$g\ D_{ASAP}$

,

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$k \sim N \mu \; \sigma$

$$P(choose\ LL) = \left(1 + e^{-b(SV_{LL} - SV_{SS})}\right)^{-1}$$

SV_{SS} SV_{LL}

b

Results

Immediate context

Experiment 1.

+ − − +

k + − − +

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p = F = η^2 = p =

k

F = η^2 = p =

Experiment 2A and 2B.

+ +

k

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p < *post-hoc*

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= − p = +
Δ = = −
t = p =

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η^2 = p = *Post-hoc* t +
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= − p = + + Δ k = − =
− − t = − p =
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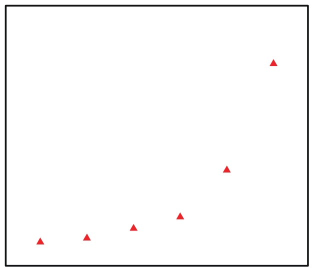

Delayed context

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Discussion

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Conclusion

Acknowledgment

Appendix A. Supporting information

References