

# **PERFORMING ACTIONS INFLUENCES WHAT YOU SEE OR THINK**

MARCIN **KOCULAK**



C-LAB



# FOLLOW ALONG

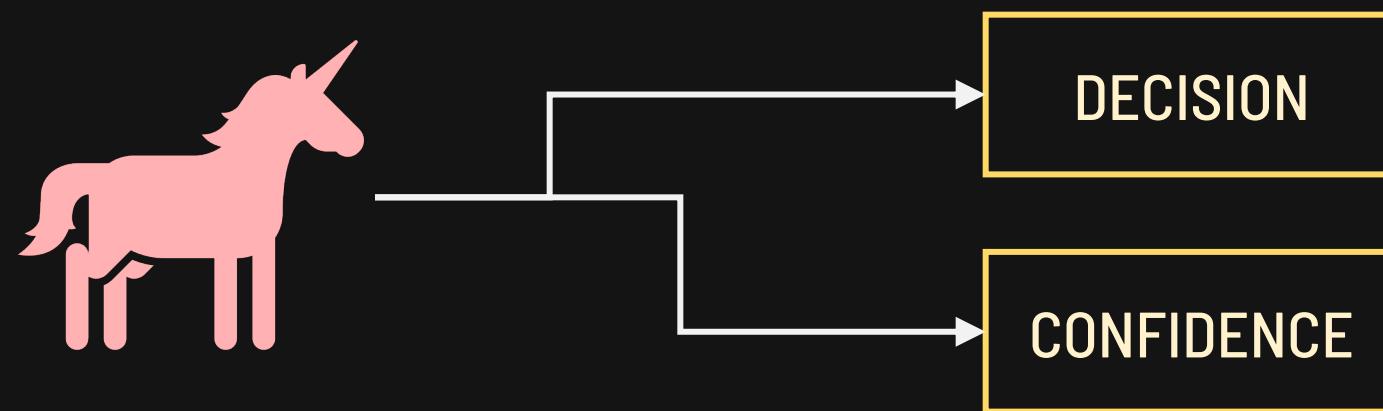
<https://tinyurl.com/2019AoN>



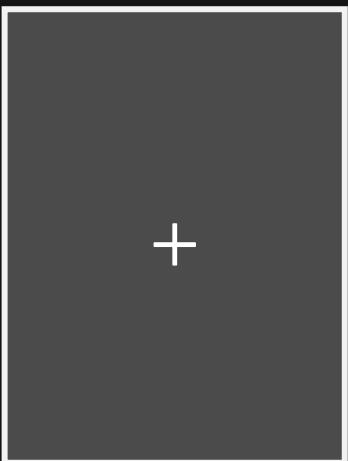
# ACTION - PERCEPTION LOOP



# NAÏVE MODEL OF METACOGNITION



# ORDER EFFECT IN METACOGNITION



1000 ms



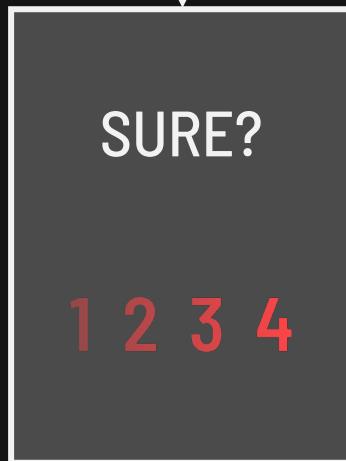
16 - 192 ms



200 ms



?



SURE?

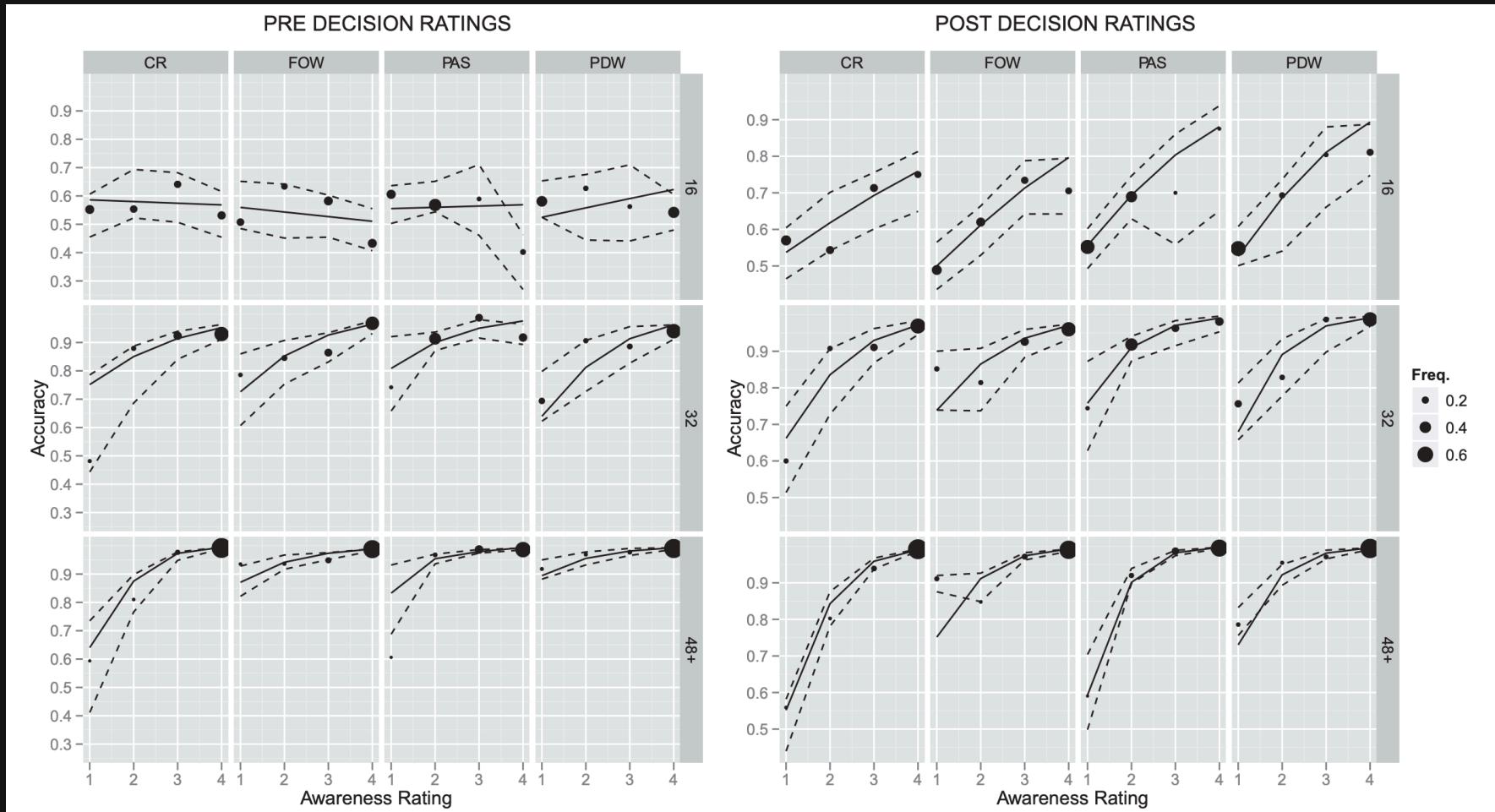
1 2 3 4

**Wierchoń, M., Paulewicz, B., Asanowicz, D., Timmermans, B., & Cleeremans, A. (2014). Different subjective awareness measures demonstrate the influence of visual identification on perceptual awareness ratings.** Consciousness and cognition, 27, 109-120.

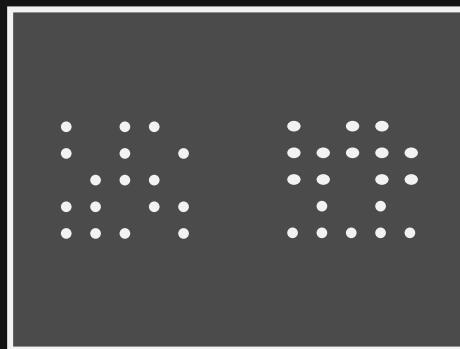
# ORDER EFFECT IN METACOGNITION



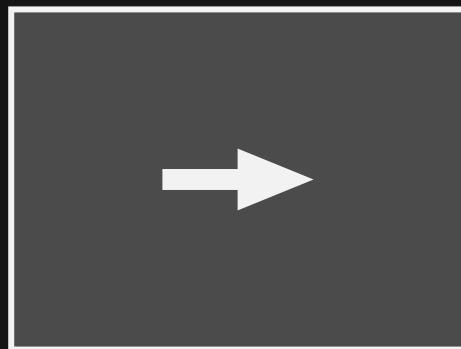
Wierzchoń, M., Paulewicz, B., Asanowicz, D., Timmermans, B., & Cleeremans, A. (2014). Different subjective awareness measures demonstrate the influence of visual identification on perceptual awareness ratings. *Consciousness and cognition*, 27, 109-120.



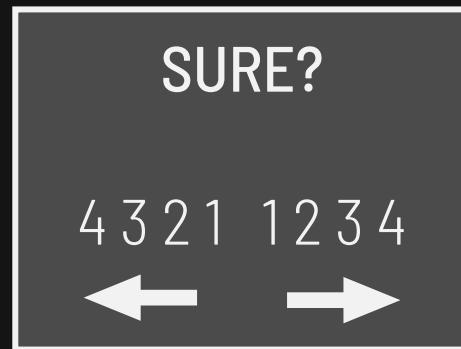
# DOUBLE-MOTOR RESPONSE



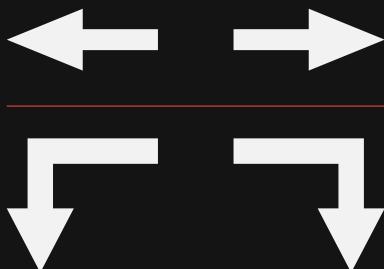
160 ms



max. 2000 ms



max. 3500 ms

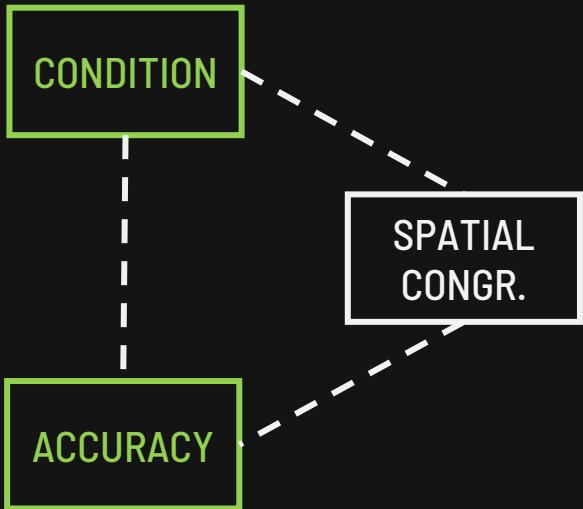


Siedlecka, M., Koculak, M.,  
Krzyżowska, A., Paulewicz, B. (xxxx).  
In preparation.

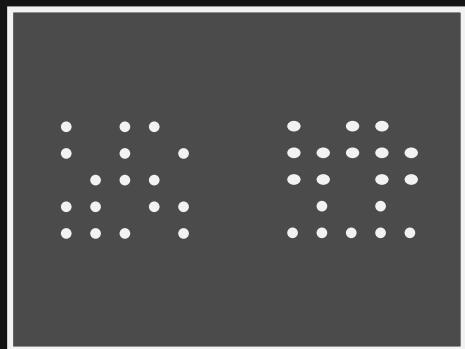
# DOUBLE-MOTOR RESPONSE



Siedlecka, M., Koculak, M.,  
Krzyżowska, A., Paulewicz, B. (xxxx).  
In preparation.



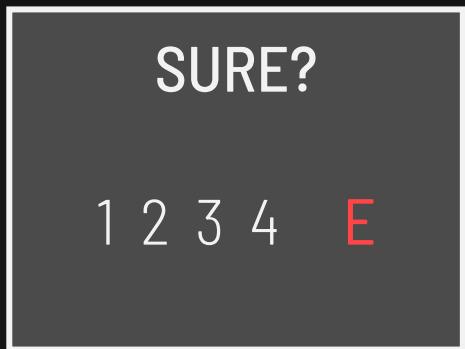
# No-MOTOR RESPONSE



160 ms



max. 1600 ms

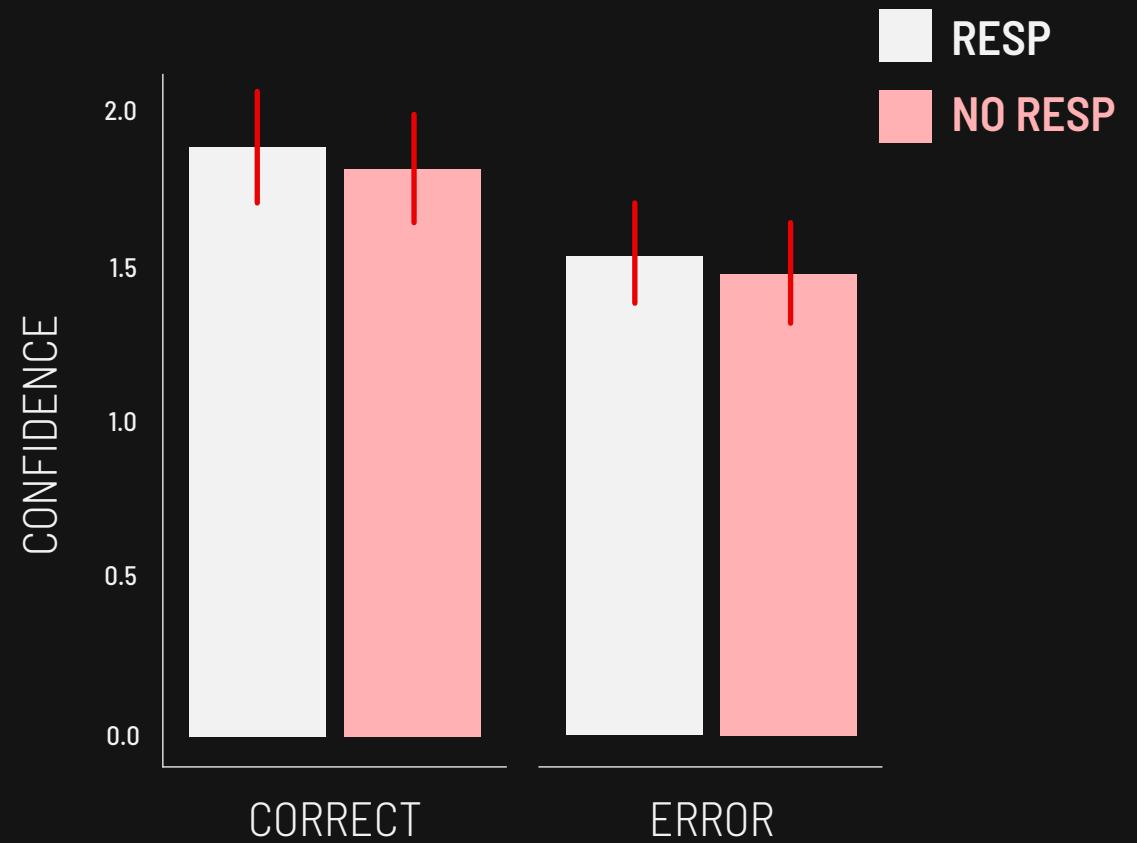
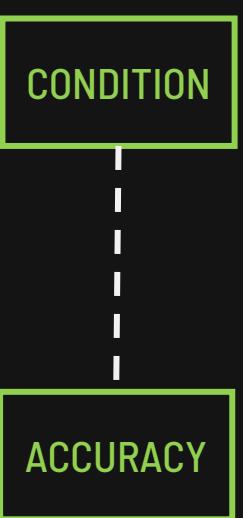


max. 3500 ms

# No-MOTOR RESPONSE



Siedlecka, M., Koculak, M., Paulewicz,  
B. (xxxx). In preparation.

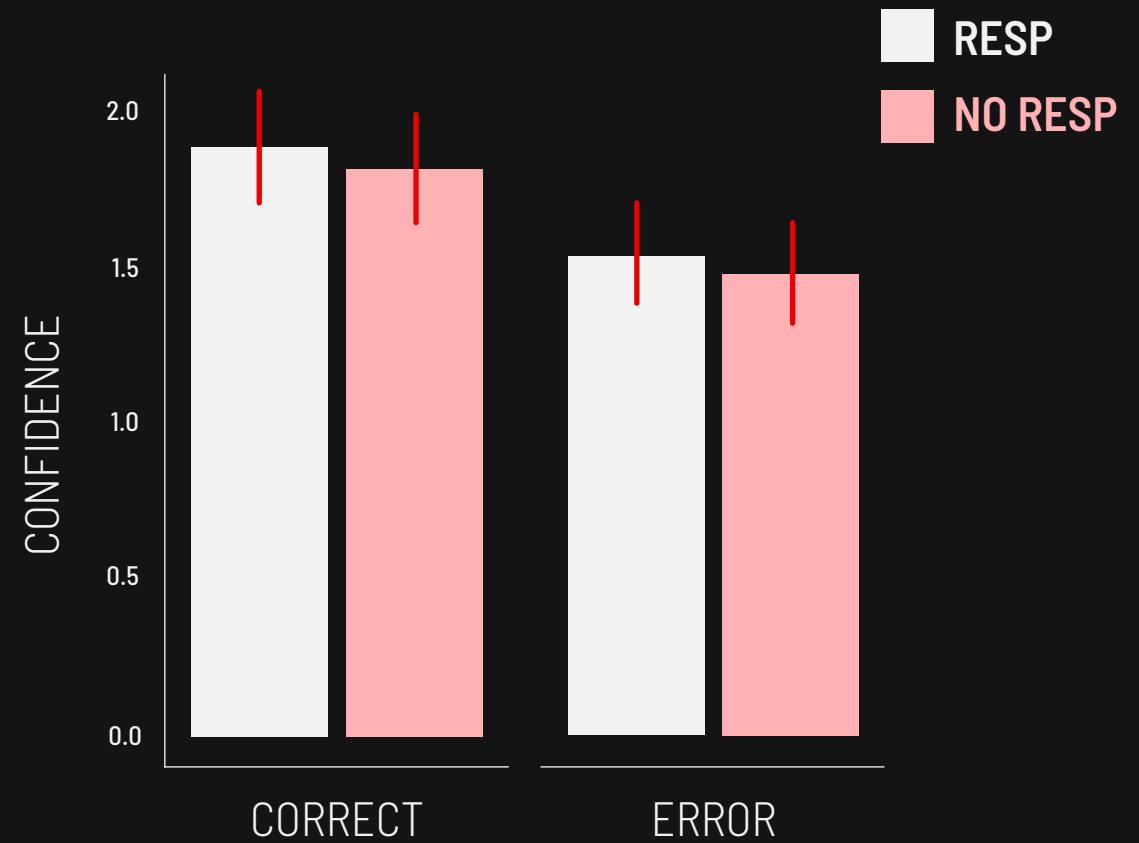


# NO-MOTOR RESPONSE



Siedlecka, M., Koculak, M., Paulewicz,  
B. (xxxx). In preparation.

CONDITION	ACCURACY
RESPONSE	ERROR RECOGNITION 85%
NO RESPONSE	55%



# EXTRA MOTOR ACTIVATION

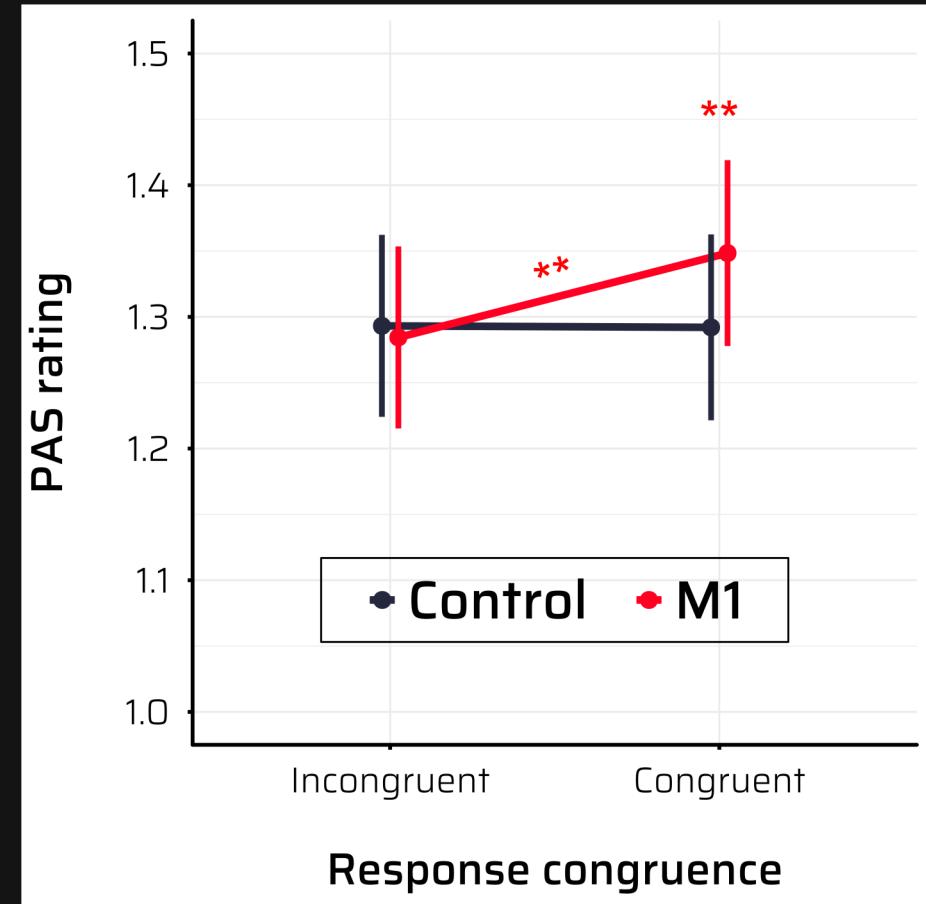
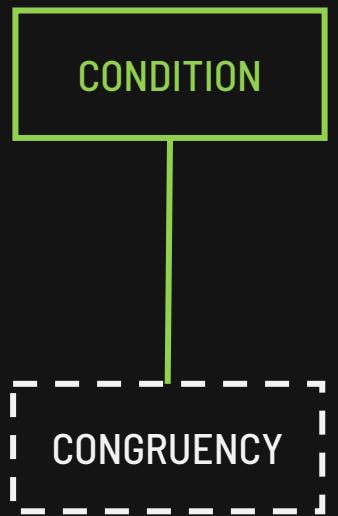


**Hobot, J.**, Koculak, M., Paulewicz, B., Sandberg, K., & Wierzchoń, M. (2019). TMS-induced motor activation increases visual awareness. *BioRxiv*, 848457.  
<https://doi.org/10.1101/848457>

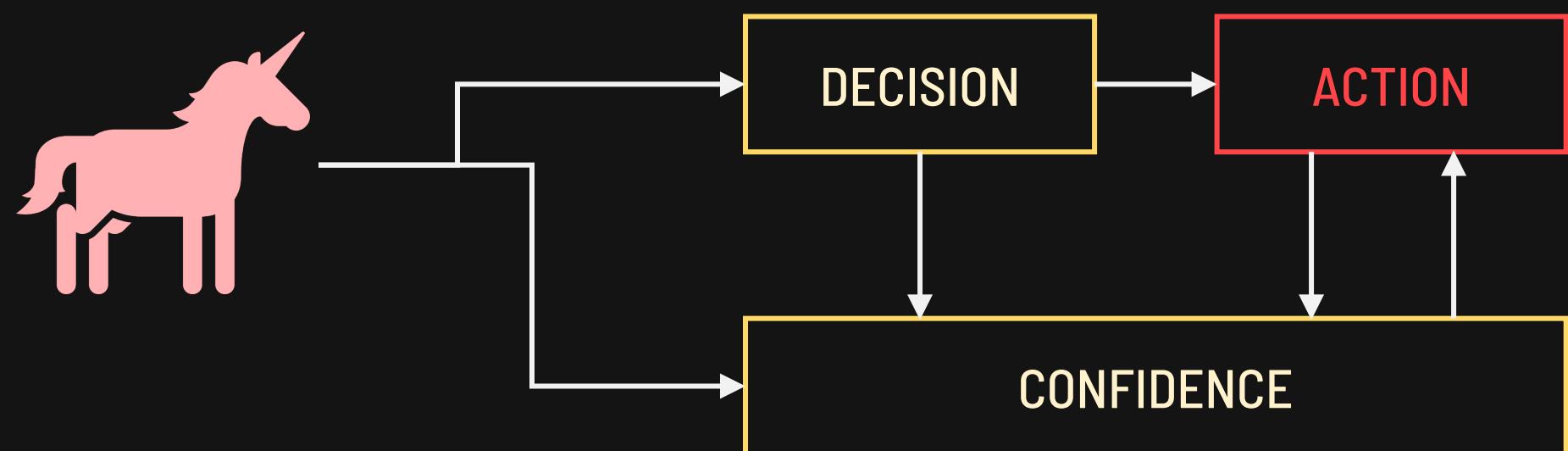
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Hobot, J., Koculak, M., Paulewicz, B., Sandberg, K., & Wierzchoń, M. (2019). TMS-induced motor activation increases visual awareness. *BioRxiv*, 848457.  
<https://doi.org/10.1101/848457>



# METACOGNITIVE MOSAIC



# THE TEAM



MICHał WIERZCHOŃ



MARTA SIEDLECKA



JUSTYNA HOBOT



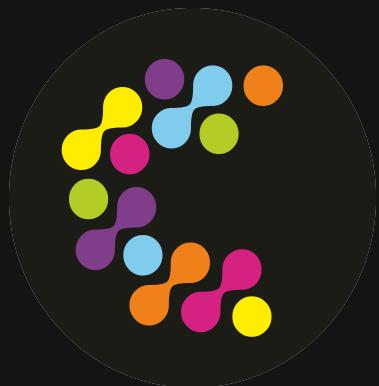
KRISTIAN SANDBERG



BORYS PAULEWICZ



ALICJA KRZYŻOWSKA



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<https://www.facebook.com/consciousnesslab>

# COME WORK WITH US

If any of these tick your boxes

CONSCIOUSNESS



EEG



PYTHON



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