

# **'The mirror of the soul?' Inferring sadness in the eyes**

**Jonas Moosavi<sup>1</sup>, Annika Resch<sup>1</sup>, Alexander N. Sokolov<sup>1</sup>, Andreas J. Fallgatter<sup>1,2</sup>, Marina A. Pavlova<sup>1</sup>**

<sup>1</sup> Social Neuroscience Unit, Department of Psychiatry and Psychotherapy, Tübingen Center for Mental Health (TüCMH), Medical School and University Hospital, Eberhard Karls University of Tübingen, Tübingen, Germany

<sup>2</sup> German Center for Mental Health (DZPG), Partner Site Tübingen, Germany

## Supplementary Material

**Table S1. Recognition accuracy: group comparison**

	Group 1			Group 2			Mann-Whitney <i>U</i> / <i>t</i> - test	<i>P</i> uncorr.	<i>P</i> corr.
	Mean	Mdn	95% CI	Mean	Mdn	95% CI			
<b>anger</b>	0.71 ± 0.15			0.78 ± 0.10	0.83	[0.75; 0.82]	<i>U</i> = 257	0.047**	0.094*
<b>happiness</b>	0.84 ± 0.14	0.89	[0.79; 0.89]	0.88 ± 0.13	0.89	[0.83; 0.93]	<i>U</i> = 282	0.165	0.198
<b>neutral</b>	0.96 ± 0.08	1.00	[0.93; 0.99]	0.97 ± 0.08	1.00	[0.94; 1.00]	<i>U</i> = 340	0.555	0.555
<b>sadness</b>	0.69 ± 0.19			0.83 ± 0.16	0.89	[0.77; 0.89]	<i>U</i> = 201	0.003**	0.018**
<b>fear</b>	0.94 ± 0.07	0.94	[0.91; 0.96]	0.97 ± 0.05	1.00	[0.95; 0.99]	<i>U</i> = 269	0.075*	0.112
<b>disgust</b>	0.56 ± 0.17			0.65 ± 0.16			<i>t</i> (53) = 2.09	0.041**	0.094*

**Table S2. Recognition accuracy for male and female posers**

	female faces			male faces			Wilcoxon signed-rank test, <i>z</i>	<i>P</i> corr.
	Mean	Mdn	95% CI	Mean	Mdn	95% CI		
<b>anger</b>	0.79 ± 0.16	0.78	[0.75; 0.83]	0.71 ± 0.17	0.78	[0.67; 0.76]	2.48	0.028**
<b>happiness</b>	0.83 ± 0.18	0.89	[0.78; 0.88]	0.89 ± 0.16	0.89	[0.84; 0.93]	1.95	0.077*
<b>neutral</b>	0.95 ± 0.10	1.00	[0.93; 0.98]	0.98 ± 0.07	1.00	[0.96; 1.00]	1.54	0.149
<b>sadness</b>	0.83 ± 0.18	0.89	[0.78; 0.88]	0.70 ± 0.26	0.78	[0.62; 0.77]	3.45	0.003**
<b>fear</b>	0.95 ± 0.08	1.00	[0.93; 0.98]	0.95 ± 0.09	1.00	[0.93; 0.98]	0.23	0.818
<b>disgust</b>	0.50 ± 0.22			0.71 ± 0.23	0.78	[0.64; 0.77]	4.40	< 0.001**

Note: For non-normally distributed data, additionally to means and SDs, Mdns and 95% CIs are reported.

Double asterisks indicate significant differences ( $p < 0.05$ ), single asterisks indicate a tendency ( $0.05 < p < 0.1$ ).