

# No correlations between the strength of visual illusions

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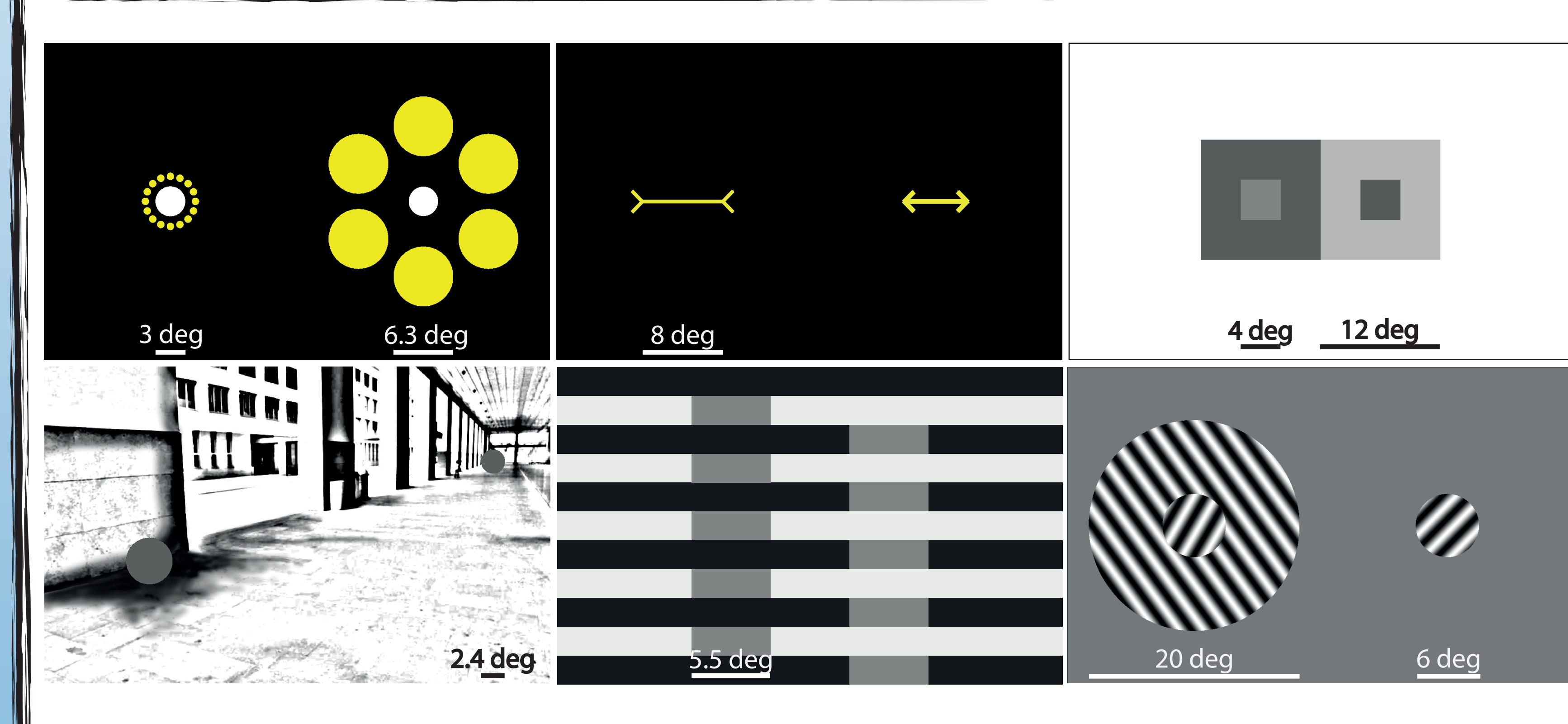
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## Introduction

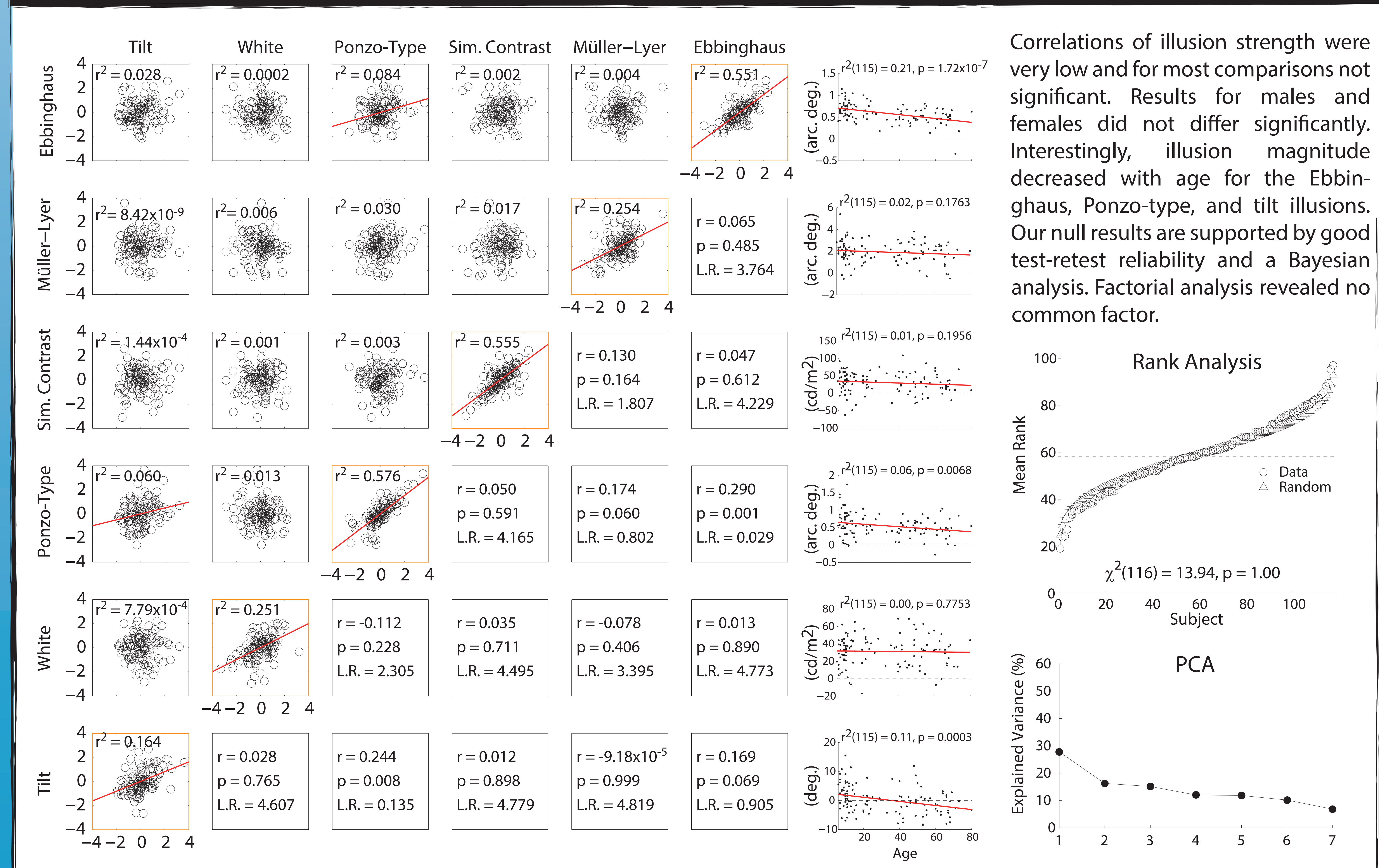
In cognition, audition and somatosensation, performance correlates strongly between different tasks suggesting the existence of common factors (Frenzel et al., 2012). Surprisingly, this does not hold true for vision. For example, Vernier acuity and Gabor detection correlate very weakly (Cappe, Clarke, Mohr & Herzog, 2014). Here, we show similar results for visual illusions.

Observers included 144 people (69 females) visiting the SwissTech Convention Center for its inauguration. Age ranged from 8 to 81 years. Observers adjusted with a computer mouse the size, the luminance or the orientation of a target in six visual illusions.

## Stimuli



## Results



## Discussion

In line with previous studies (Coren, 1973; Coren et al. 1976; Coren & Porac, 1987), our results suggest that, contrary to cognition, audition and somatosensation, there is no common factor for vision. Magnitudes of the Ebbinghaus and Ponzo-type were found to correlate with V1 surface area (Schwartzkopf, Song & Rees, 2011, 2013). However, our data support this claim only weakly because the spatial illusions correlated only weakly with each other.

### REFERENCES:

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