Projected Self Location and Perspective in Dreams

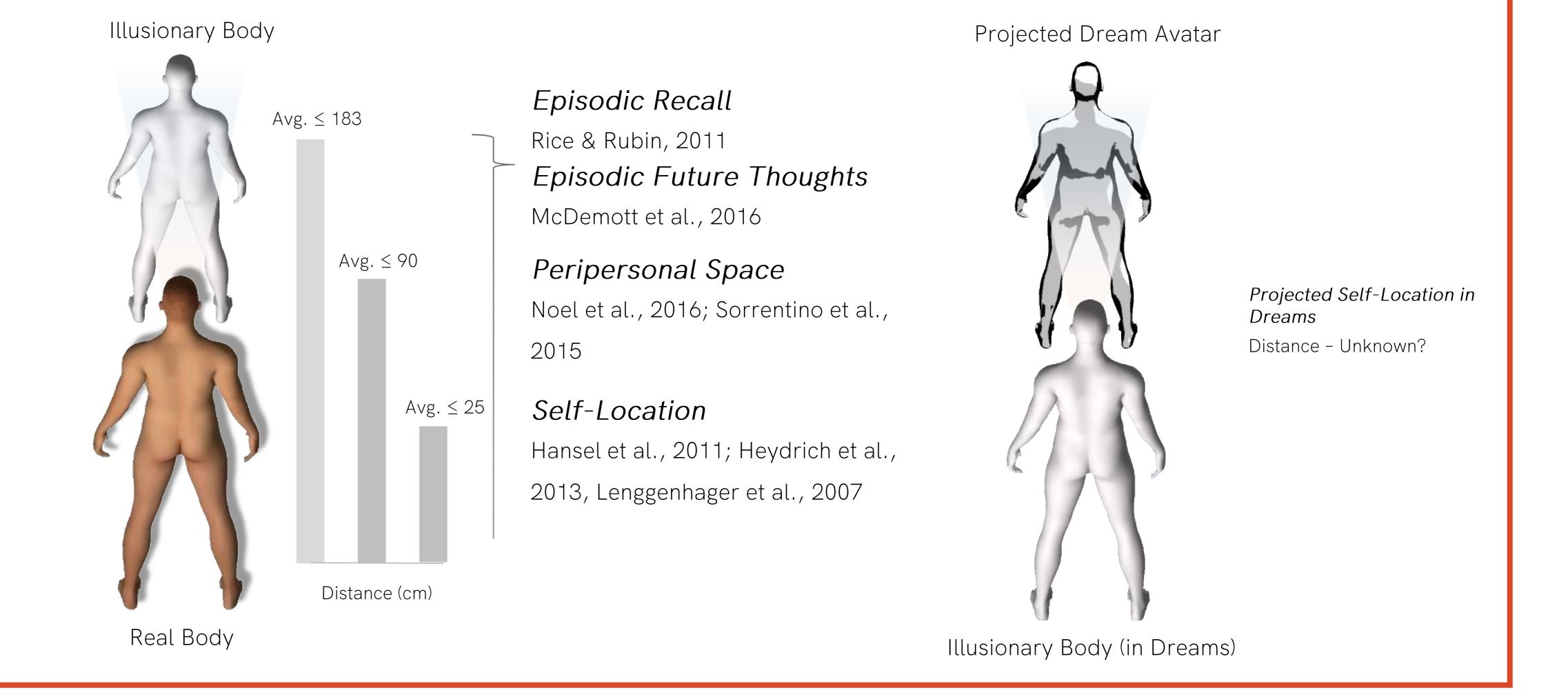
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Introduction

According to virtual reality dream theory (Hobson et al., 2014), if we can dream about various preposterous dream characters, our hierarchical generative self-modelling capacity should have already owned them. Regarding this, all of the dream characters that, our dream body encounters with, can be understood as a form of one's potential to embody other-selves and represent at a certain spatial distance from the dream body. Although several studies measured the psychological distance between the observer and other characters during Episodic Recall, Episodic Future Thought, Peripersonal space, as well as Self Location, the projected self-location in dreams is not measured previously before. Given the role of perspective on ownership, we investigated the relationship between projected self distance and perspective in dreams.

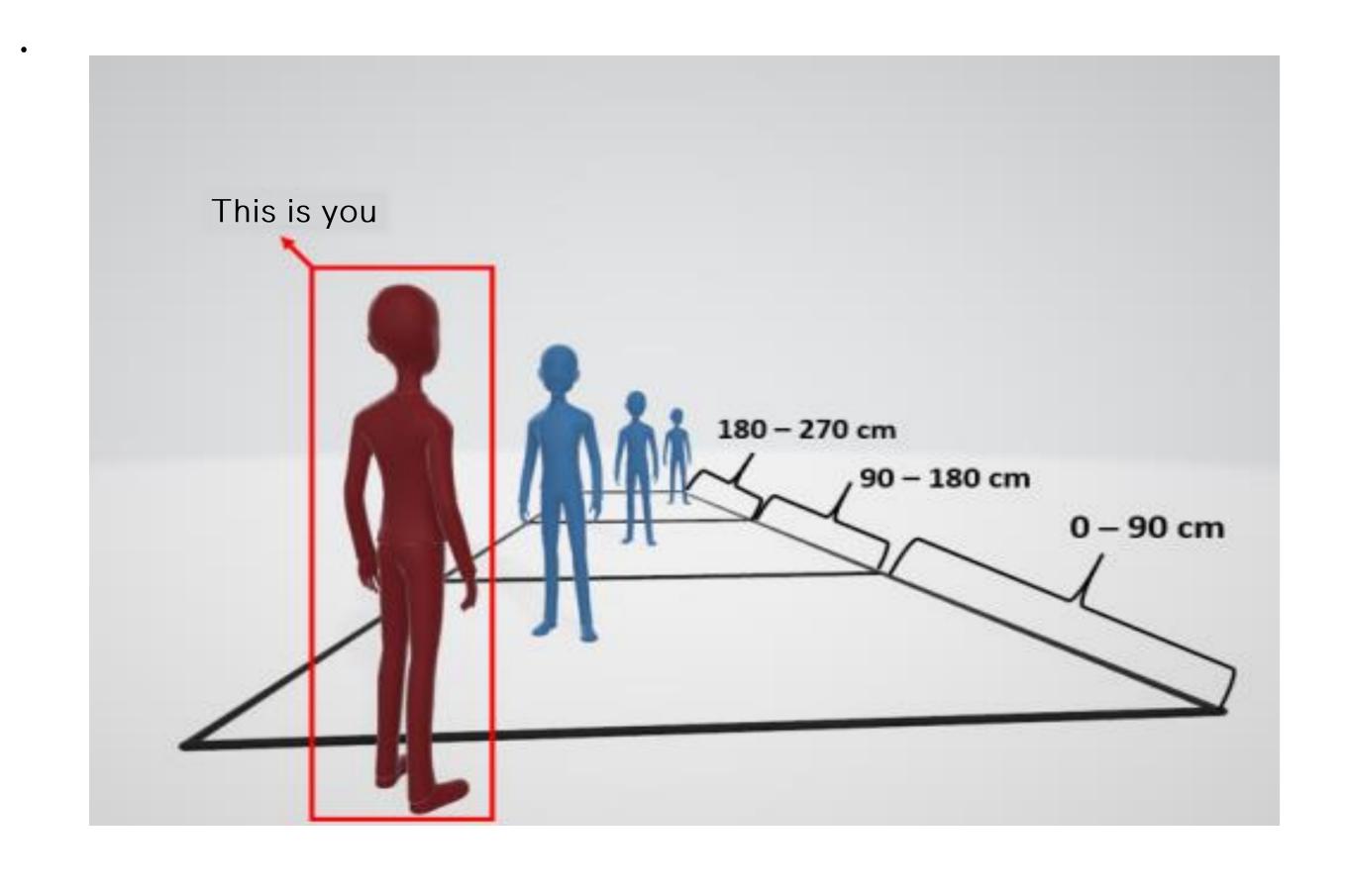


Participants & Methodology

- A total of 379 volunteers (107 males, 272 females) with a mean age of 26.16 (age range: 18-65) participated.
- Turkish online questionnaire was posted on Google Forms between May 24, 2021 and June 8, 2021.

Measurements

- Perspective in Dreams:
 - o When I remember my dreams, I see events from the perspective of my own eyes. (First-person perspective 1PP)
 - o When I remember my dreams, I watch myself and events from the outside. (Third-person perspective – 3PP)
- Others-Location in Dreams:



Results

A 2 (1PP, 3PP) x 3 ([0-90], [90-180], [180-270]) mixed design ANOVA was conducted to examine whether perspective (between subject variable), and distances (within subject variable) had any impact on the frequency remembered psychological distances in dreams. Results revealed that there was a significant within subject effect of distance F(1, 377) = 140.7, p < .001, $\eta^2 = .163$ which suggest that people more likely to see other dream characters between 0-90 cm distance interval. However, we found an insignificant main effect of perspective, F(1, 377) = 0.086, p > .05 and an insignificant interaction between perspective and psychological distance F(2, 377) = 0.408, p > .05.

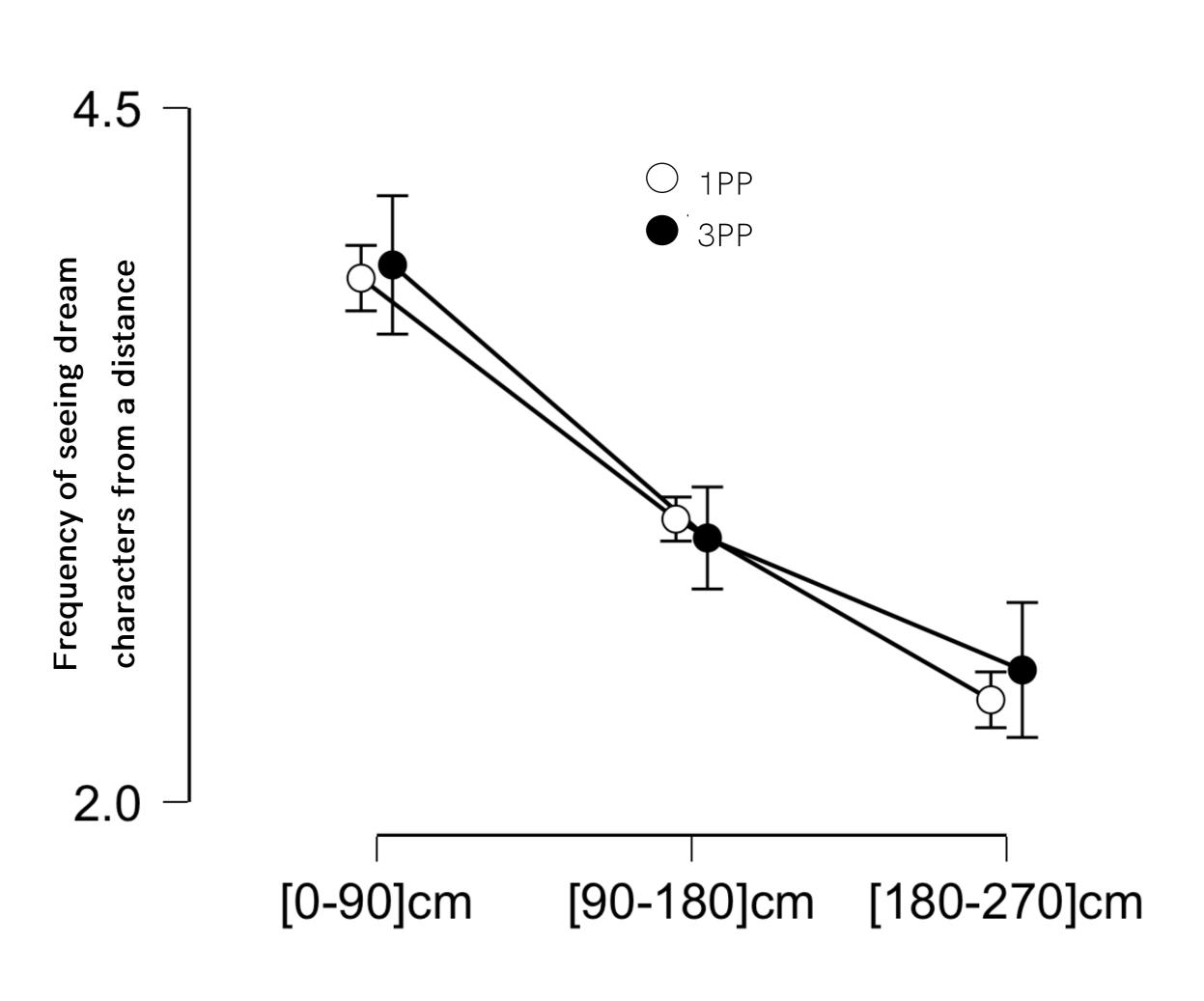


Figure 1. Average scores for the subjective distance report during dreaming. Error bars represent standard errors of the mean.

Conclusion

- Our study provided a new perspective to understand the phenomenology of projected dream location and bodily self-consciousness in dreams.
- Although further research is needed, we suggest that boundaries between self-other overlap within peripersonal space during dream states emphasizing the embodied nature of dream characters.

References

Hobson, J. A., Hong, C. C. H., & Friston, K. J. (2014). Virtual reality and consciousness inference in dreaming. *Frontiers in Psychology*, *5*, 1133. McDermott, K. B., Wooldridge, C. L., Rice, H. J., Berg, J. J., & Szpunar, K. K. (2016). Visual perspective in remembering and episodic future thought. *Quarterly Journal of Experimental Psychology*, *69*(2), 243–253.

Noel, J.-P., Pfeiffer, C., Blanke, O., & Serino, A. (2015). Peripersonal space as the space of the bodily self. Cognition, 144, 49–57.