

AVATARS FOR CO-LOCATED COLLABORATIONS IN HMD-BASED VIRTUAL ENVIRONMENTS

Jens Herder and Nico Brettschneider, Hochschule Düsseldorf, Germany | Jeroen de Mooij, Weird Reality, Berlin, Germany | Bektur Ryskeldiev, University of Tsukuba, Japan | Poster ID 029



Multi-user virtual reality is transforming towards a social activity that is no longer only used by remote users, but also in large-scale location-based experiences.

Usage of realtime-tracked avatars in co-located business-

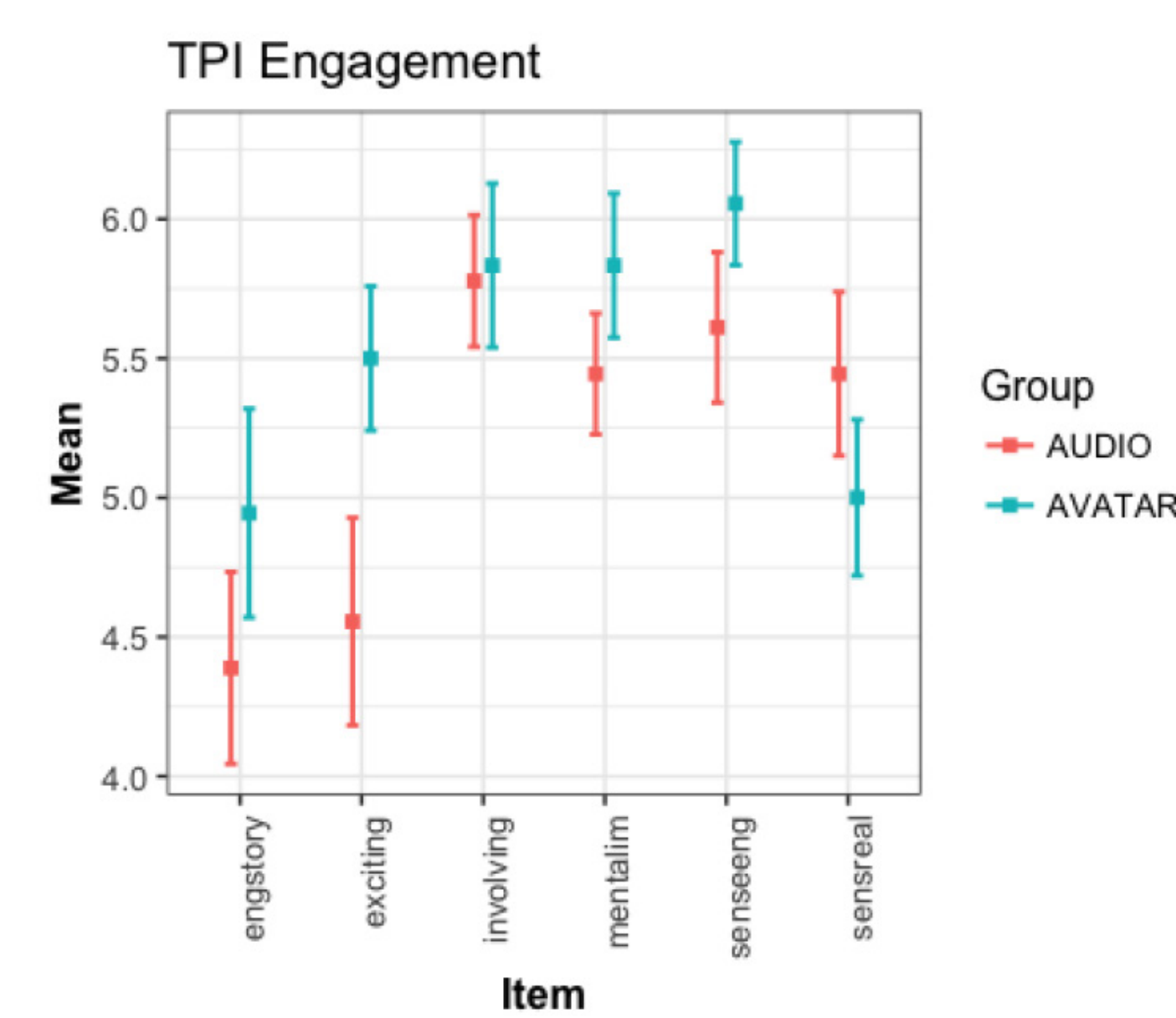
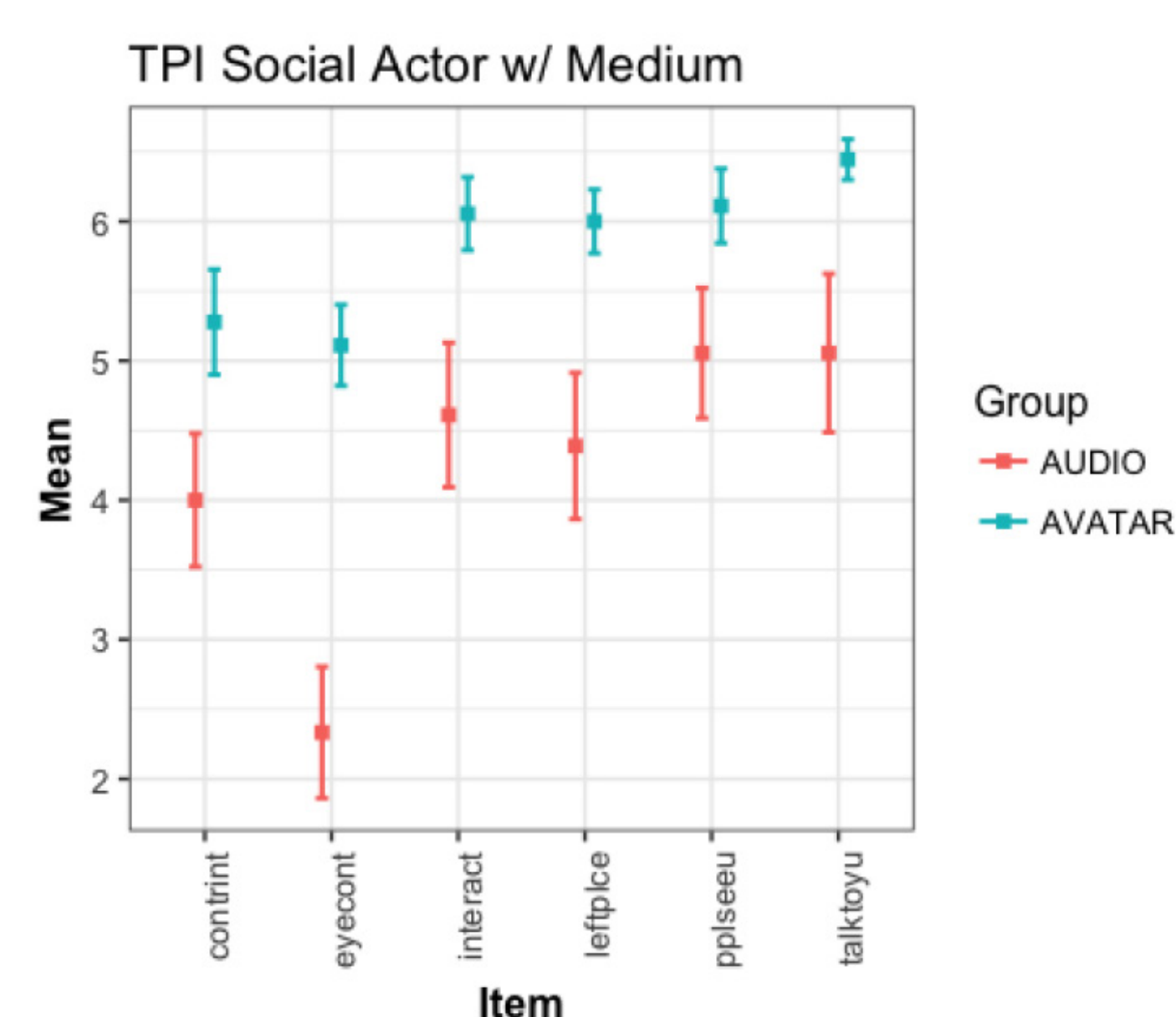
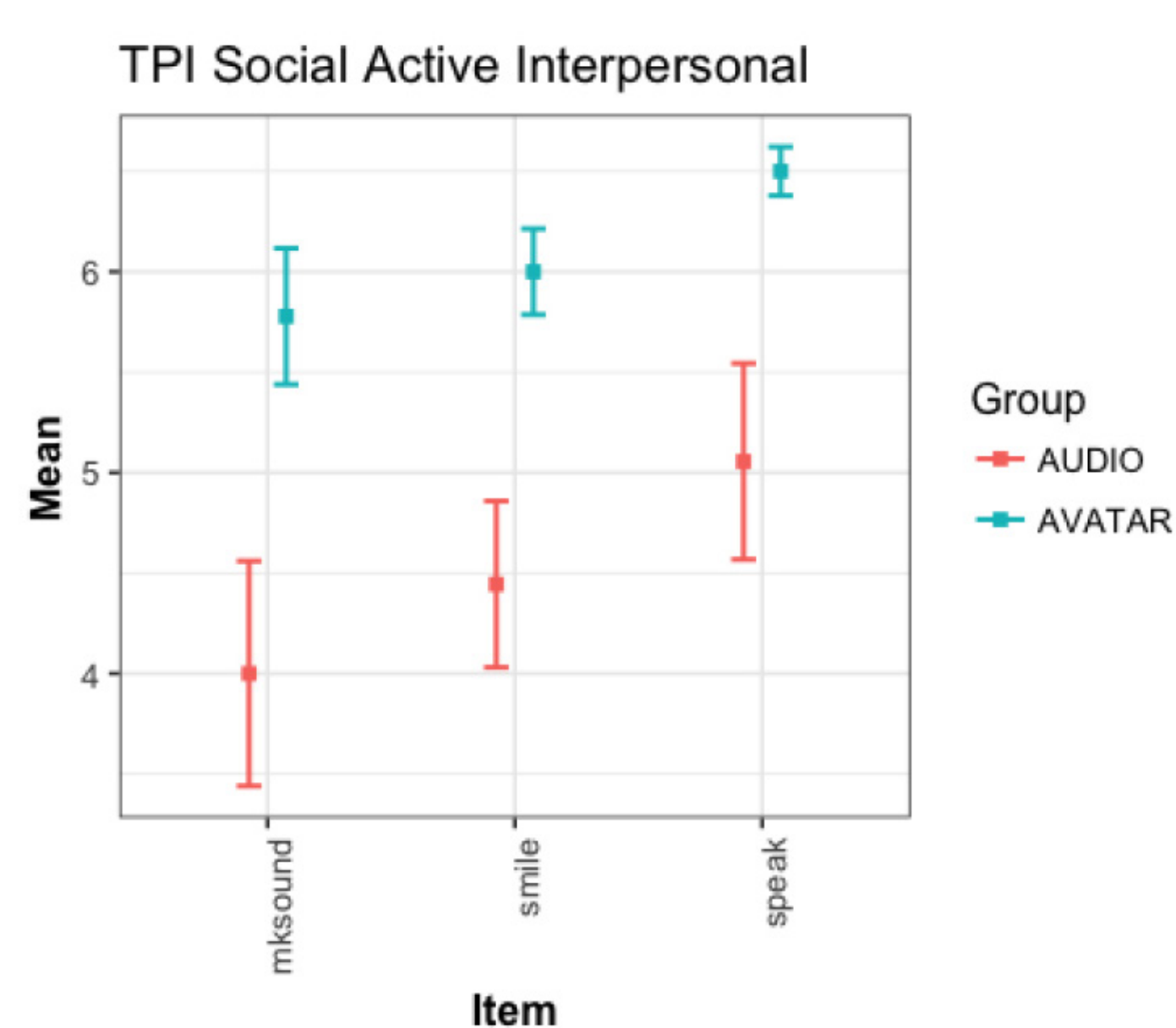
oriented applications with a "guide-user-scenario" is examined for user-related factors of Spatial Presence, Social Presence, User Experience and Task Load. A user study was conducted in order to compare both techniques of a realtime-tracked avatar and a non-

visualised guide. Results reveal that the avatar-guide enhanced and stimulated communicative processes while facilitating interaction possibilities and creating a higher sense of mental immersion for users and engagement.

CONCLUSION

Active interpersonal interactions showed up to be stimulated by an Avatar-represented guide in a location-based space compared to audio-only.

This positive effect on participants appeared not only in the will of reacting to the guide by making a sound or smiling as a response, but also as a trigger for self-induced verbal conversation. Simple avatars can be considered as valuable social elements in co-located collaborative interactive virtual environments.



Hochschule Düsseldorf
University of Applied Sciences

HSD

Fachbereich Medien
Faculty of Media



Video and more:
<http://vsvr.medien.hs-duesseldorf.de/publications/ieeetr2019>

CONTACT:

Jens Herder
Hochschule Düsseldorf
University of Applied Sciences
Münsterstraße 156
40476 Düsseldorf
Germany
jens.herder@hs-duesseldorf.de

AVATARS FOR CO-LOCATED COLLABORATIONS IN HMD-BASED VIRTUAL ENVIRONMENTS

Jens Herder and Nico Brettschneider, Hochschule Düsseldorf, Germany | Jeroen de Mooij, Weird Reality, Berlin, Germany | Bektur Ryskeldiev, University of Tsukuba, Japan | Poster ID 029



Multi-user virtual reality is transforming towards a social activity that is no longer only used by remote users, but also in large-scale location-based experiences.

Usage of realtime-tracked avatars in co-located business-oriented

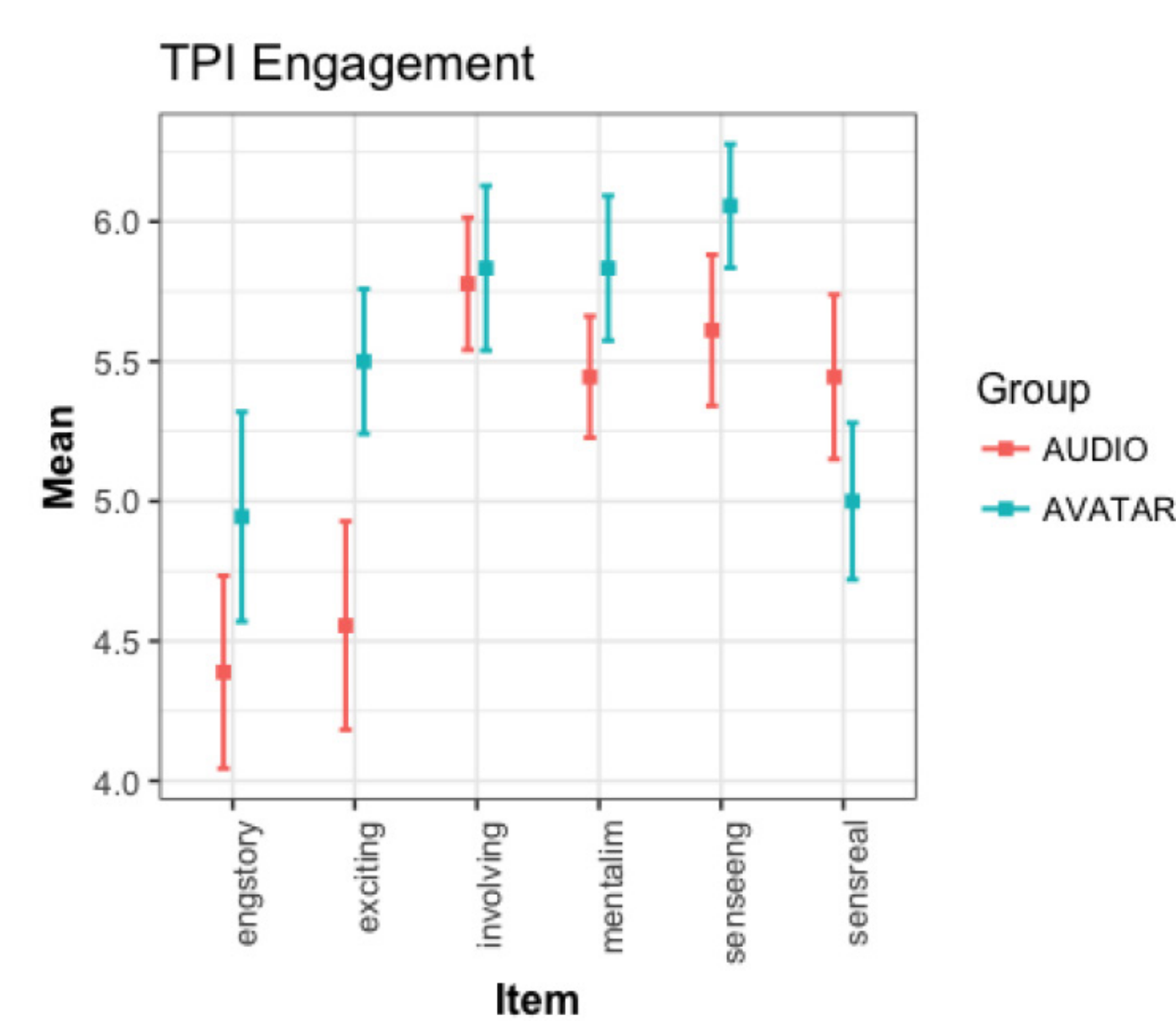
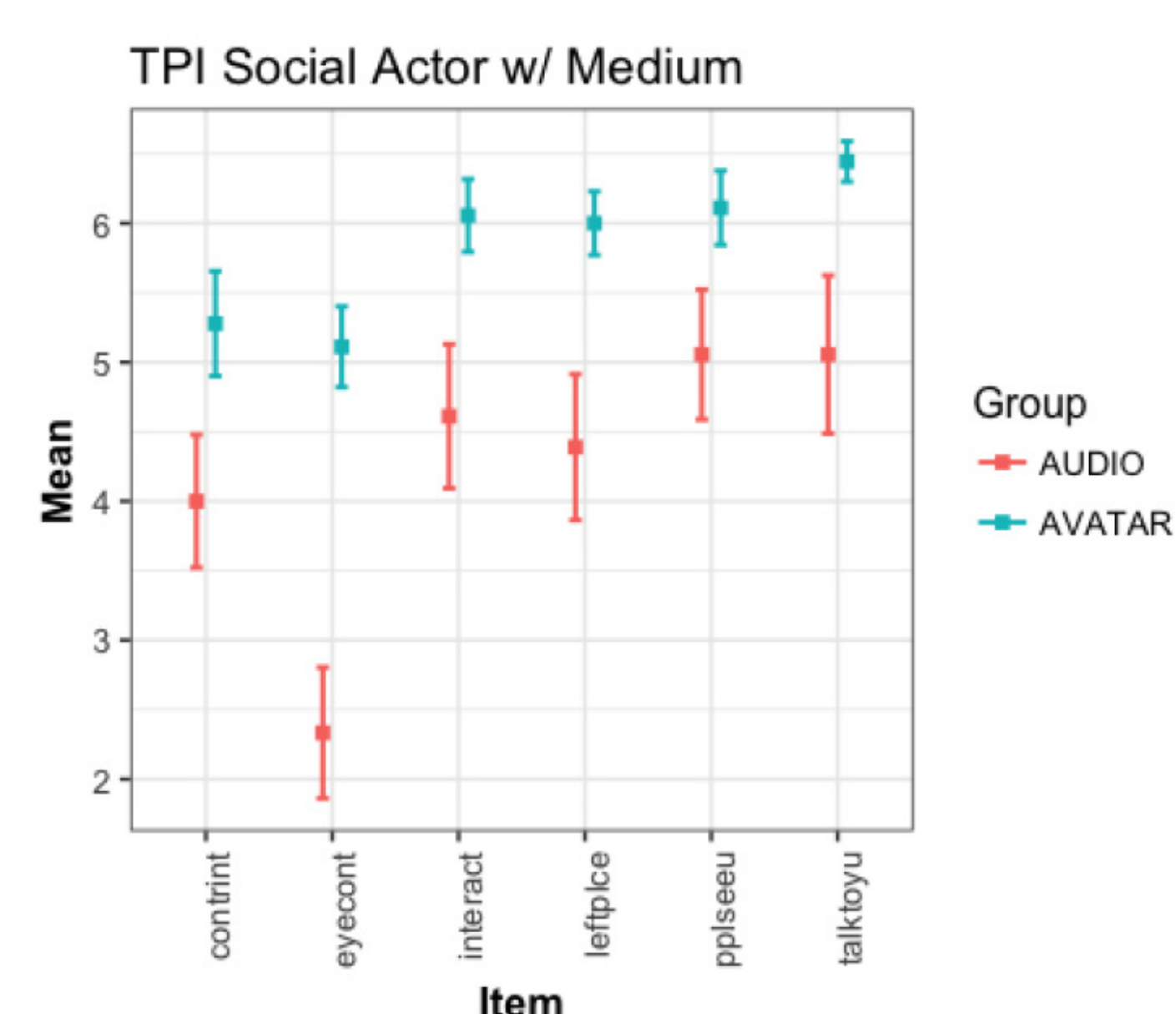
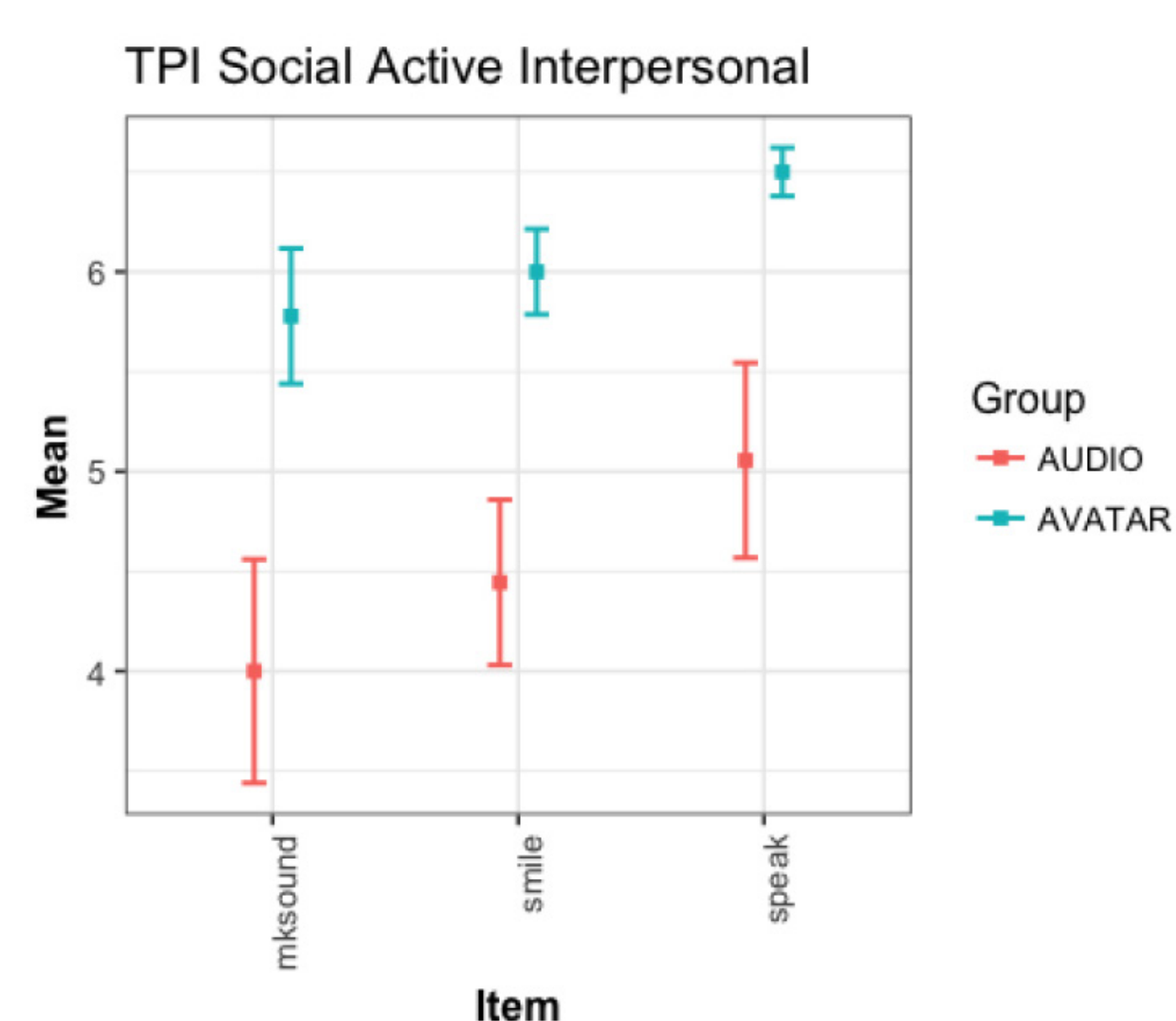
applications with a "guide-user-scenario" is examined for user-related factors of Spatial Presence, Social Presence, User Experience and Task Load. A user study was conducted in order to compare both techniques of a realtime-tracked avatar and

a non-visualised guide. Results reveal that the avatar-guide enhanced and stimulated communicative processes while facilitating interaction possibilities and creating a higher sense of mental immersion for users and engagement.

CONCLUSION

Active interpersonal interactions showed up to be stimulated by an Avatar-represented guide in a location-based space compared to audio-only.

This positive effect on participants appeared not only in the will of reacting to the guide by making a sound or smiling as a response, but also as a trigger for self-induced verbal conversation. Simple avatars can be considered as valuable social elements in co-located collaborative interactive virtual environments.



Hochschule Düsseldorf
University of Applied Sciences

HSD

Fachbereich Medien
Faculty of Media



Video and more:
<http://vsvr.medien.hs-duesseldorf.de/publications/ieeevr2019>

CONTACT:

Jens Herder
Hochschule Düsseldorf
University of Applied Sciences
Münsterstraße 156
40476 Düsseldorf
Germany
jens.herder@hs-duesseldorf.de