Kallinen, Kari, et al. "Presence and emotion in computer game players during 1st person vs. 3rd person playing view: Evidence from self-report, eye-tracking, and facial muscle activity data." *Proceedings of the PRESENCE* 187 (2007): 190.

This paper determines whether the playing view (1PP or 3PP) affects the presence in a gaming environment. In a highly immersive state, people's attention is focused on the source of immersion and there is little attention outside the stimuli. They also studied whether eye-movements could be used as an indicator of attention/game involvement, which is considered as one important dimension of presence.

They conducted two experiments focusing on eye-tracking and facial muscle activity responses. They used a popular game at the time (Elder Scrolls 3: Morrowind). Participants were asked to play the game in both first and third-person perspectives in two sessions. The participants responded using a self-report MEC-SPQ presence questionnaire. The researchers recorded eye-movements and facial muscle activity.

They found that there was a higher sense of spatial presence and high cognitive involvement during playing in the 1st person view than during playing in the 3rd person view. In the study, they used ZM (an index for positive responses) and CS (an index for negative responses). 3PP was found to be more pleasant(high ZM) and less unpleasant(low CS) than 1PP. There was no significant difference between 1PP and 3PP in regard to eye-movements.

I think it would be nice to look into the MEC-SPQ presence questionnaire. This can be used when we're asking participants questions about our project. A similar approach can be taken by asking participants to take the survey after both 1PP and 3PP art performance experiences.

If we intend to take the alternate approach between 1PP and 3PP, we could use the ZM and CS indexes to see how pleasant the participant experience was and whether or not it's an effective approach when it comes to live art performances.

Questionnaire:
Vorderer, P., Wirth, W., Gouveia, F.R., Biocca, F., Saari, T., Jäncke, F., Böcking, S., Baumgartner, T., & Jäncke, P. (2004). MEC Spatial Presence Questionnaire (MEC-SPQ): Short Documentation and Instructions for Application. Report to the European Community, Project Presence: MEC (IST-2001-37661). Online. Available from http://www.ijk.hmt-hannover.de/presence

Works Cited

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