

Background

- Many previous studies have explored how synchronized movement to music supports social bonding and cooperation (Mogan et al., 2017).
- However, other musical experiences may lead to similar effects, such as sharing a positive preference to music together (Boer et al., 2011).
- There may be more natural synchronized movement in those who share a positive preference to music (Swarbrick et al., 2019).

Study Aims

How do music preferences influence social bonding in groups who listen to music together?

To test this, we recruited undergraduate students in groups of 4 to come into the LIVELab and listen to playlists of a genre (Pop or K-Pop), of which participants were either all Fans or Non-Fans.

We measured mood and social bonding pre-post listening, and group cooperation through a public goods game post-listening. We also measured their movements with motion capture (not included on current poster).

Predictions:

- Fans will show higher social bonding and cooperate more than the Non-Fans.
- Maybe the Non-Fans will bond over not liking the music.
- Fans will move more and in time with the music.



Methods

Design: A 2x2 crossed design with independent variable of preference (Fans vs Non-Fans) of two different genres (Pop or K-Pop).

- Participants: Groups of four were either all Fans or Non-Fans of either Pop or K-Pop (Pop Fans N=6, Pop Non-Fans N=5 K-Pop Fans N=1, K-Pop Non-Fans N=4, N total = 64).
- Participants were seated in a circle (Fig. 1) and listened to a Pop or K-Pop playlist on silent disco headphones (Table 1).
- Motion capture of head movements, video, and audio were all recorded during music listening.

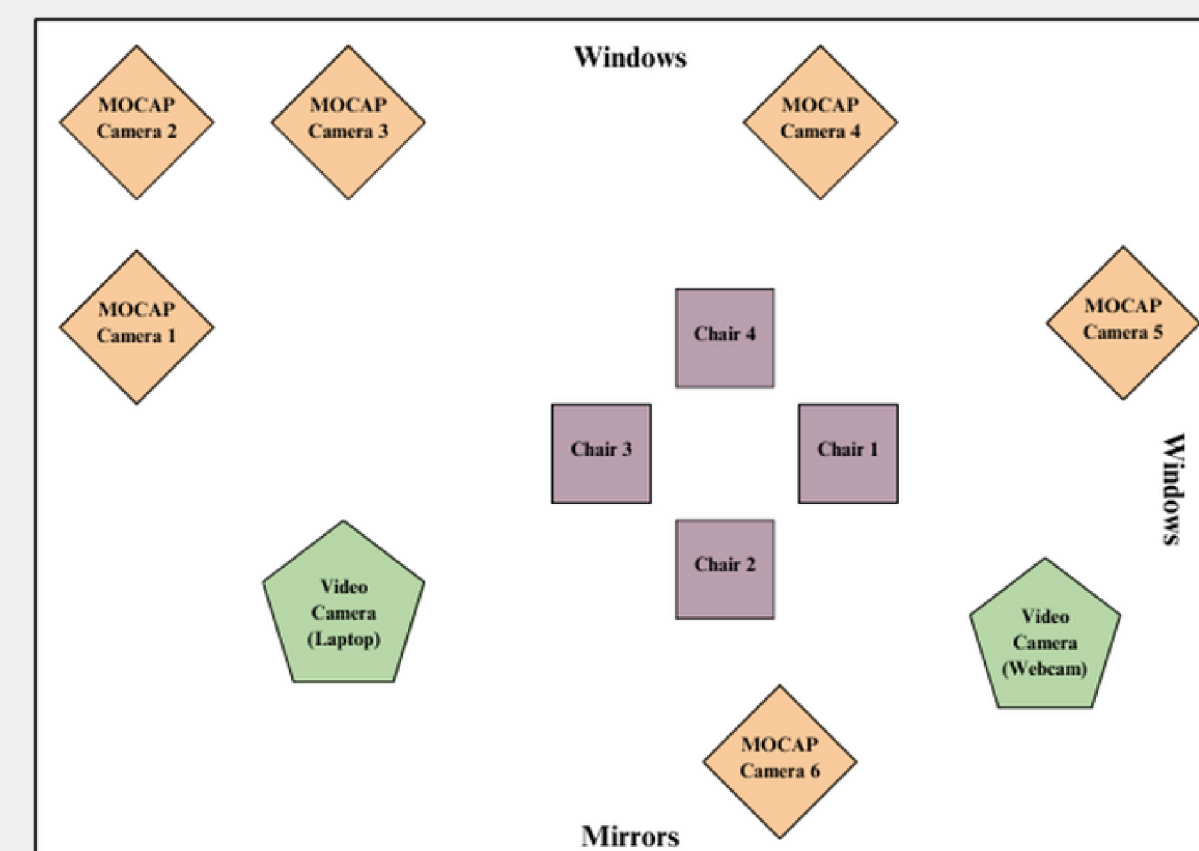


Figure 1.

Pop playlist:

1. "22" by Taylor Swift
2. "Woman" by Doja Cat
3. "Party in the U.S.A." by Miley Cyrus
4. "Give Me Everything" by Pitbull (featuring Ne-Yo, Afrojack & Nayer)
5. "Hips Don't Lie" by Shakira (featuring Wyclef Jean)

K-Pop Playlist:

1. "DNA" by BTS
2. "Egotistic" by Mamamoo
3. "Gee." By Girls' Generation
4. "Me Gustas Tu" by GFRIEND
5. "CROWN" by TOMORROW X TOGETHER

Table 1

Measures

- Participants completed the following measures:
 - Brief Mood Introspection Scale (BMIS) [pre- and post-listening]
 - Likability of other group members [pre- and post-listening]
 - The Inclusion of Other in Self (IOS) scale (Fig. 2) [pre- and post-listening]
 - Cooperation through a public goods game (Fig. 3) [post-listening]

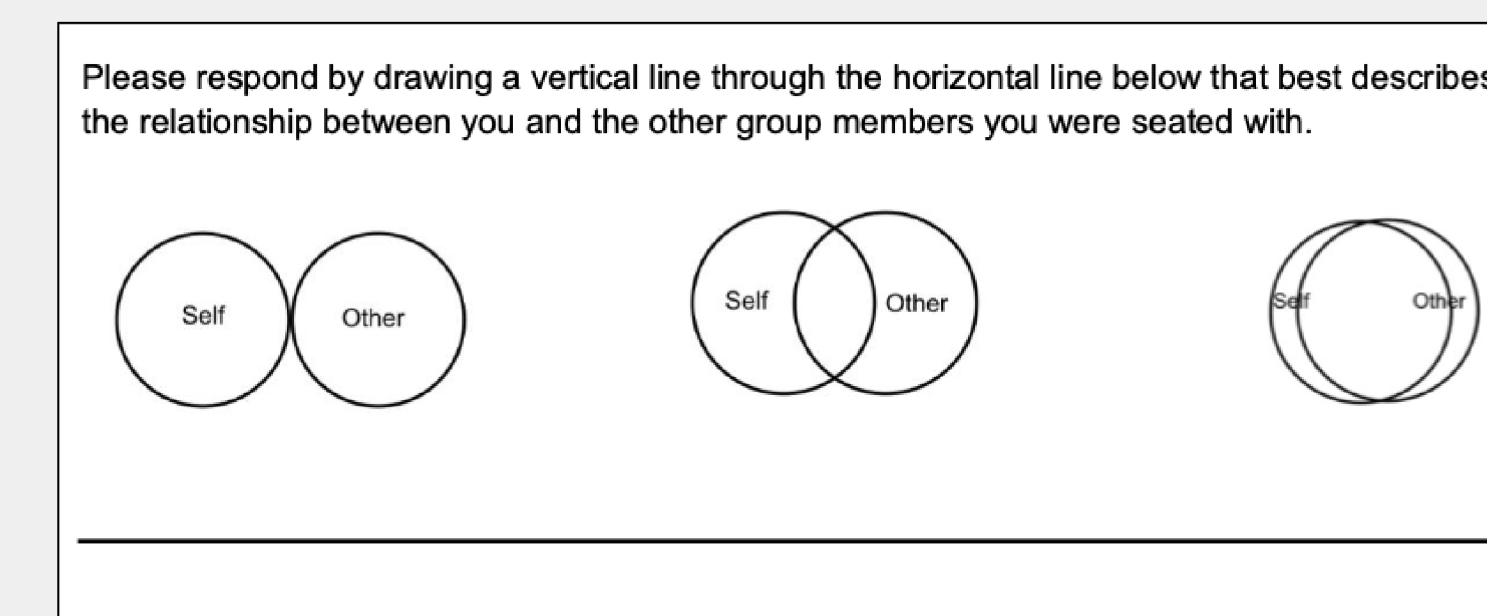


Figure 2.

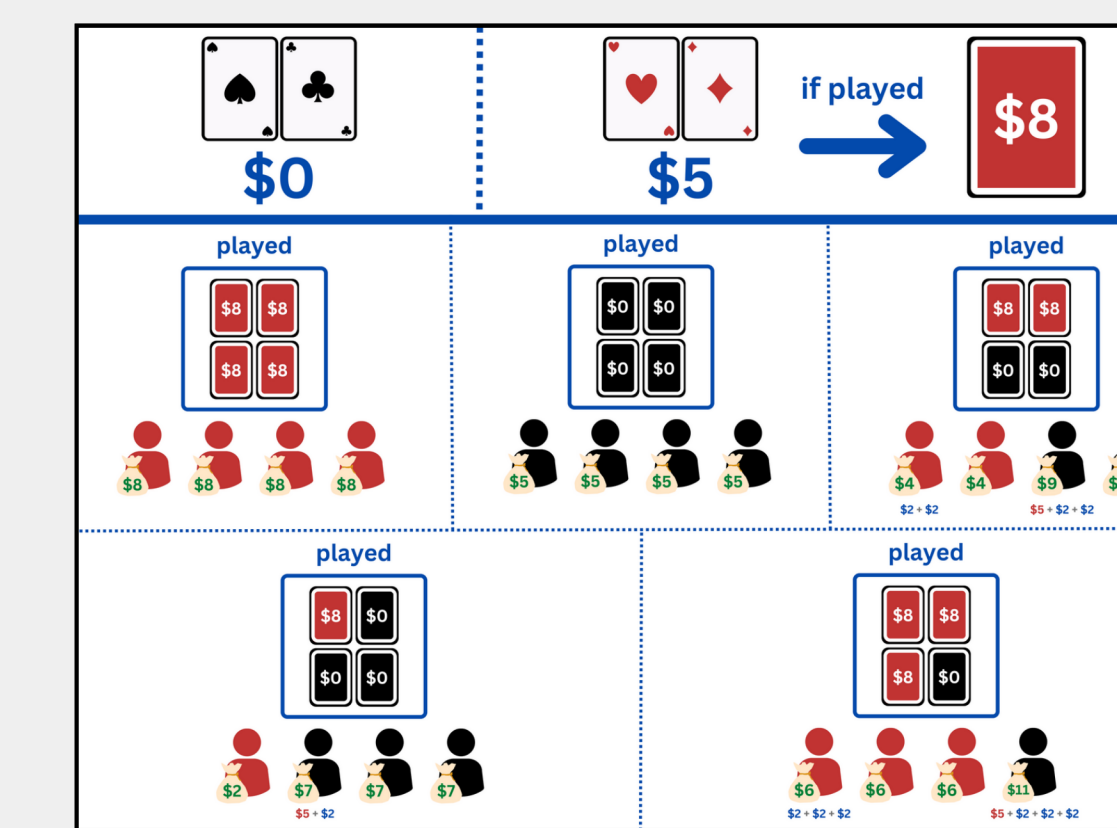


Figure 3.

Results

- Data collection is ongoing
- Preliminary results suggest that Fans enjoyed the playlists more than the Non-Fans (Fig. 4A and B).
- Both Fan and Non-Fan groups liked each other more from pre-post listening (Fig. 5A) and rate each other higher on the Inclusion of Other in Self scale (Fig. 5B).
- Fans help each other more than Non-Fans in the public goods game (Fig. 6).

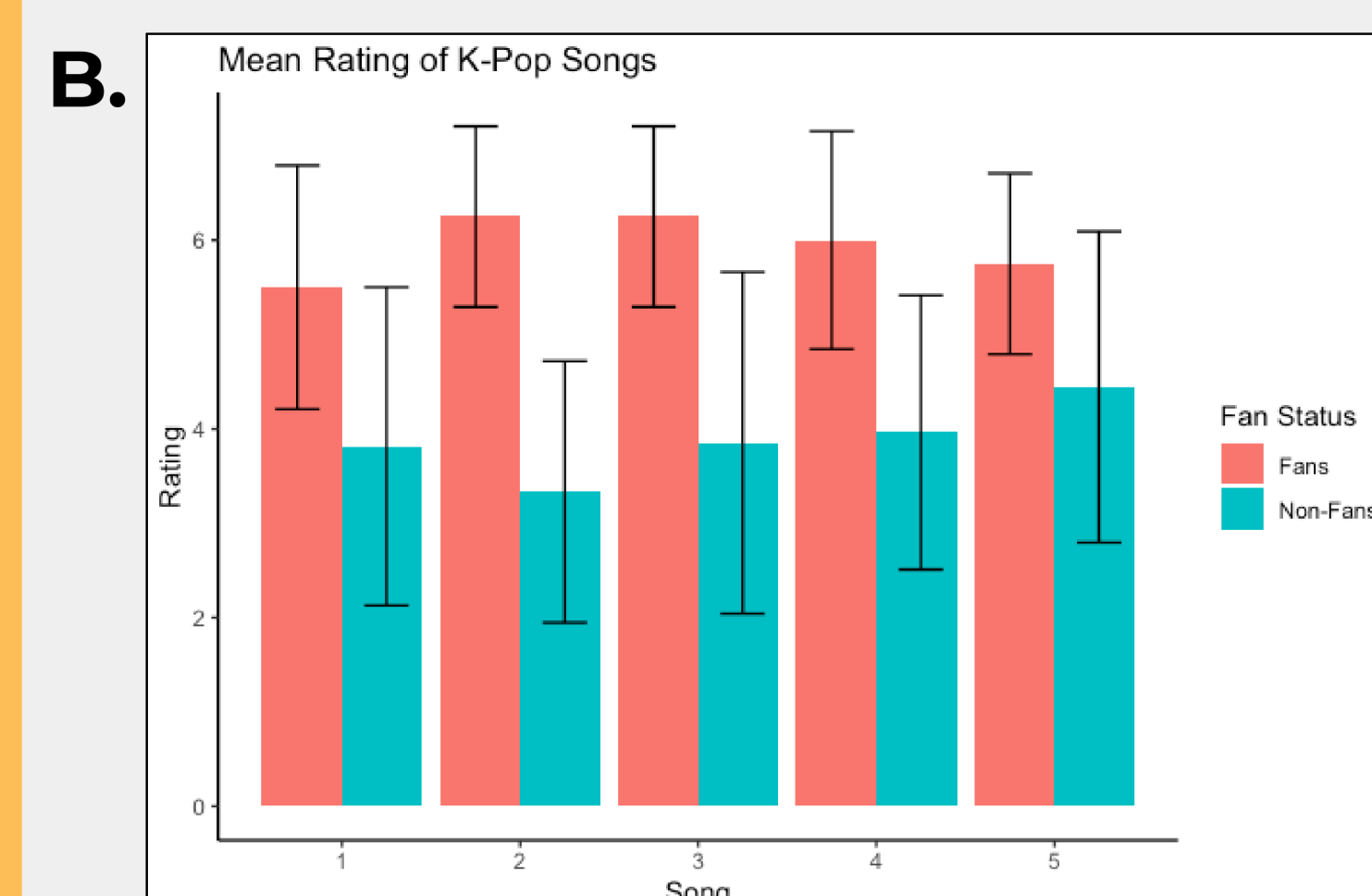
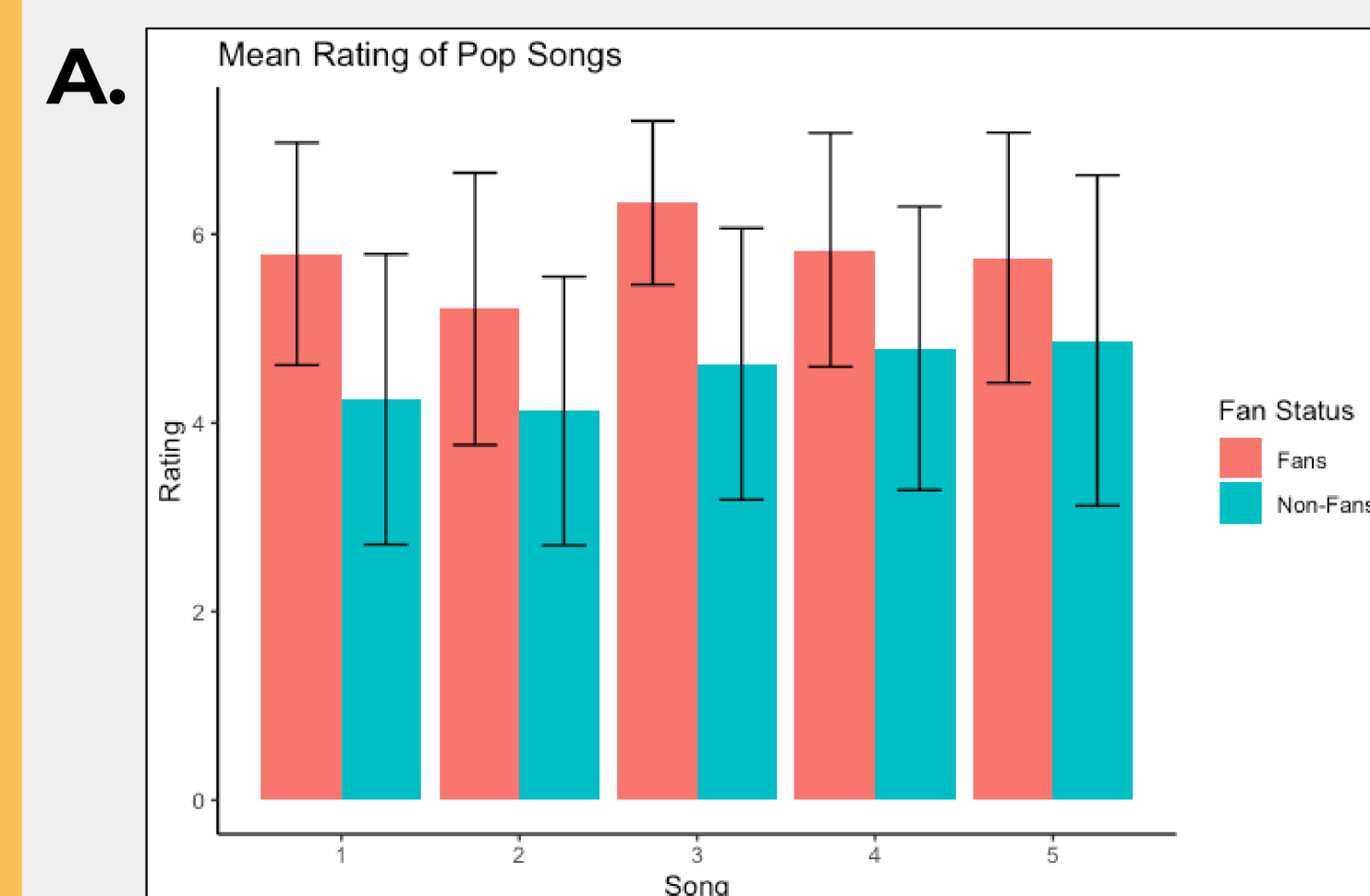


Figure 4.

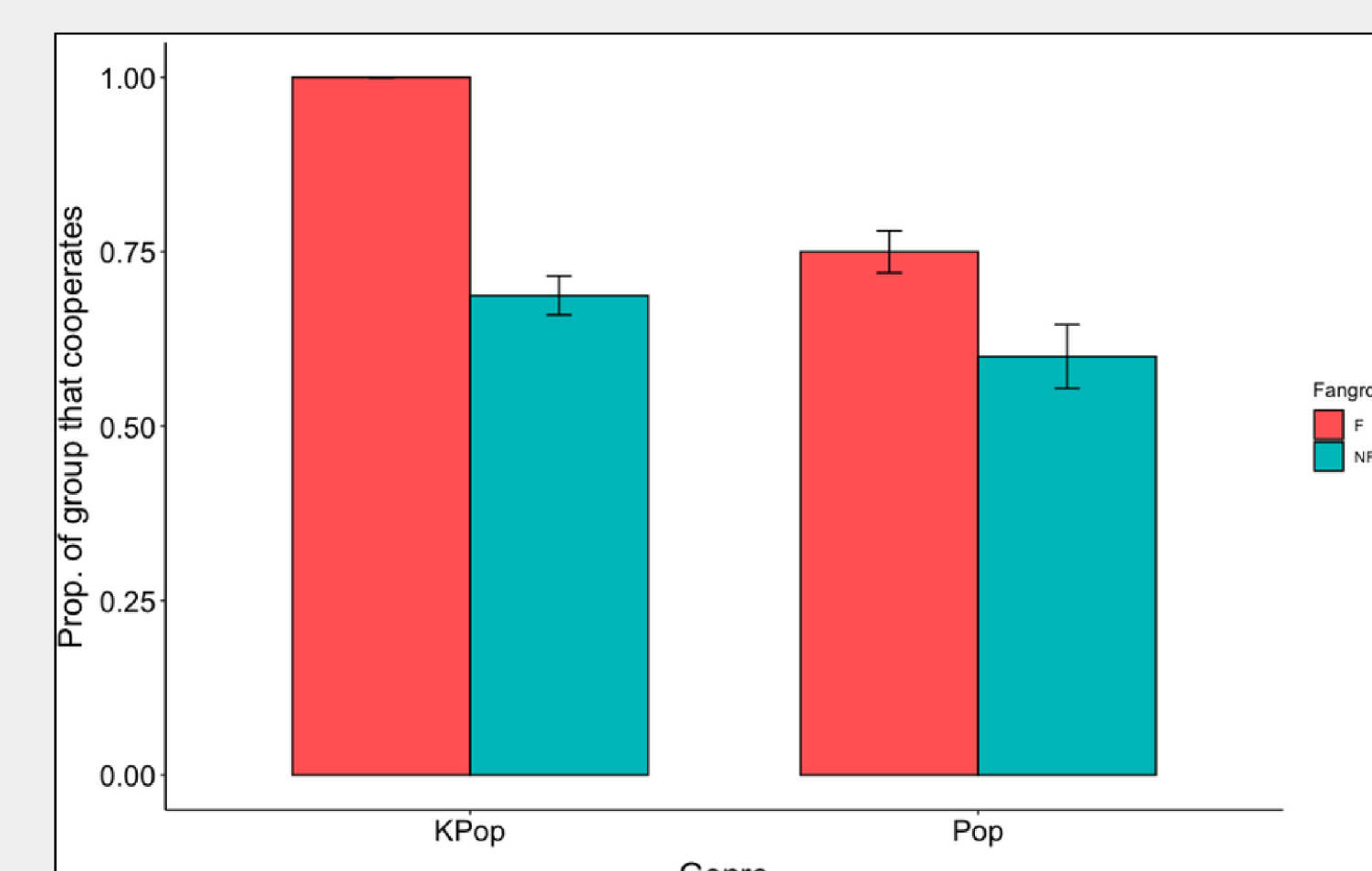


Figure 6. Mean percentage of cooperating participants in the public goods game cooperation

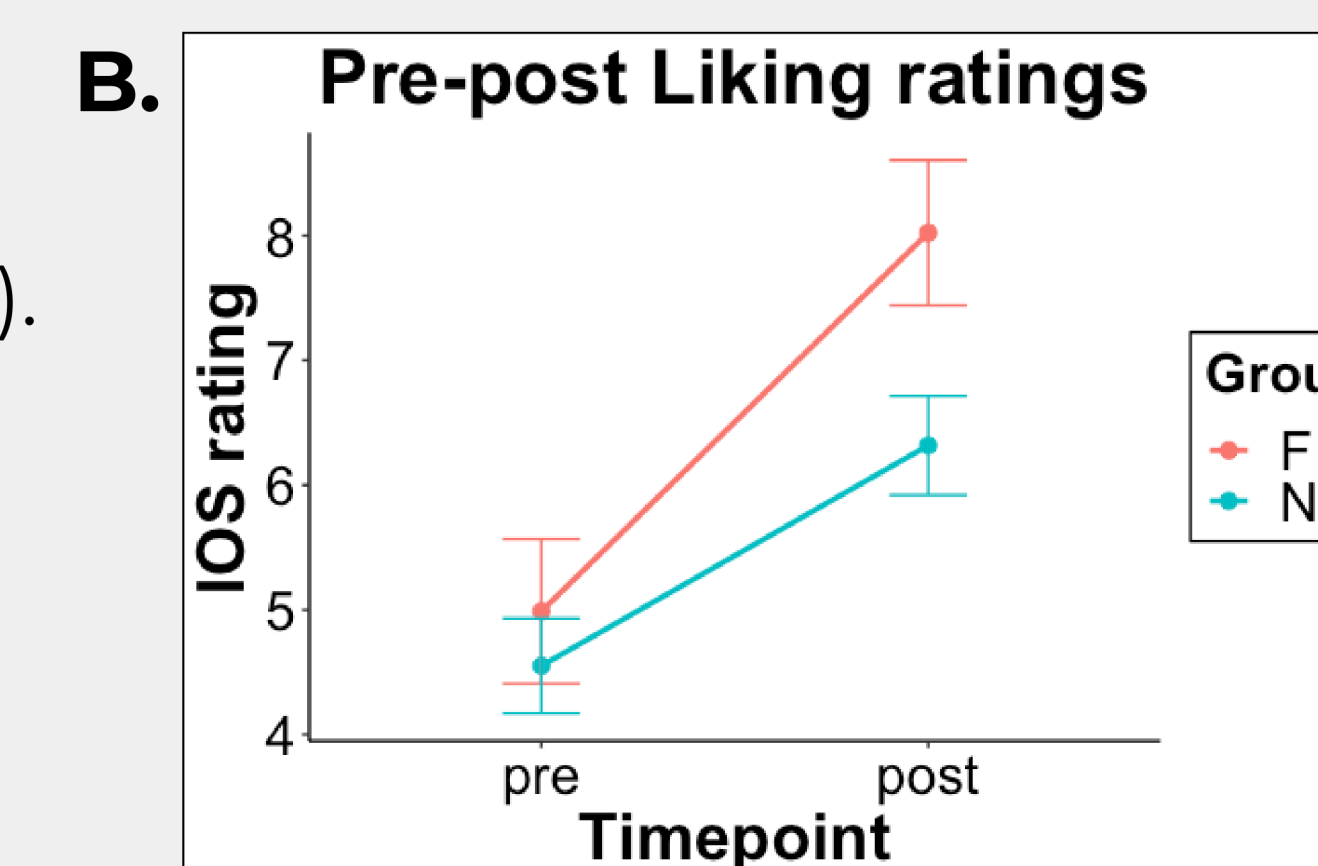
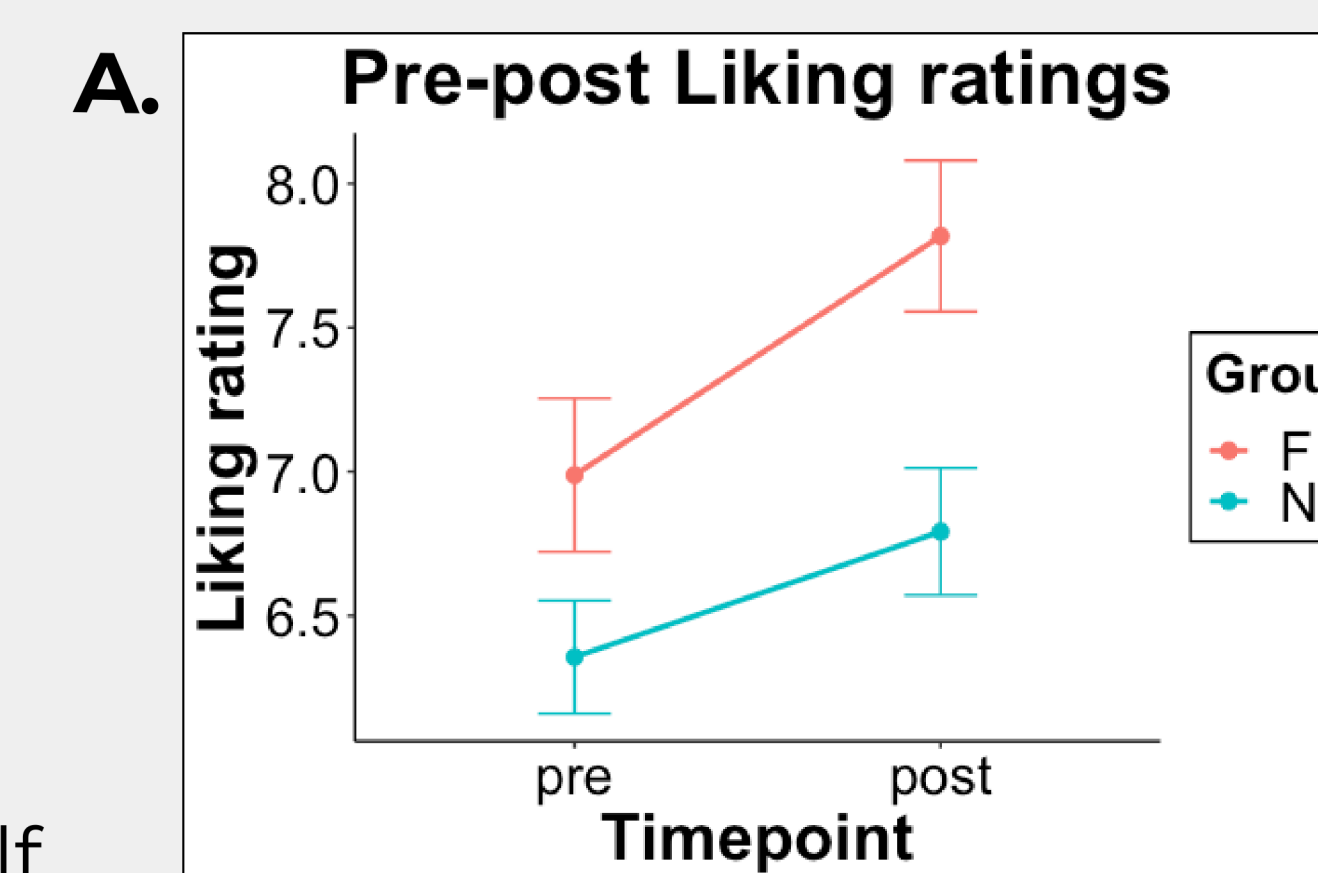


Figure 5.

Discussion

- Overall, Fans liked the playlists more than Non-Fans, confirming our preference manipulation worked.
- Preliminary results suggests that both groups bonded from pre- to post-music listening (in terms of liking ratings and IOS ratings) regardless of fan status. This indicates that simply sharing a preference, whether that preference is positive or negatively valenced, when listening to music could influence bonding.
- Interestingly, Fans appeared to like each other more than Non-Fans pre-listening. This indicates that maybe those who share fan status are more similar to each other, and this may be reflected in their liking ratings
- Fans appear to help each other more post-listening, but analysis is ongoing.

Future Directions

We anticipate the results of the study will help us understand the effects of music preference on bonding, a question relevant for the universal cultural significance of music.

Questions for future research:

- Why do Fans appear to like each other more than Non-Fans pre-listening?
- What are the effects of other music genres?
- What if the music was played asynchronously between participants?
- How does group size affect the effects of sharing social music preferences?

References

- Boer, D., Fischer, R., Strack, M., Bond, M. H., Lo, E., & Lam, J. (2011). How shared preferences in music create bonds between people: Values as the missing link. *Personality and Social Psychology Bulletin*, 37(9), 1159-1171. <https://doi.org/10.1177/0146167211407521>
- Mogan, R., Fischer, R., & Bulbulia, J. A. (2017). To be in synchrony or not? A meta-analysis of synchrony's effects on behavior, perception, cognition and affect. *Journal of Experimental Social Psychology*, 72(March), 13-20. <https://doi.org/10.1016/j.jesp.2017.03.009>
- Swarbrick, D., Bosnyak, D., Livingstone, S. R., Bansal, J., Marsh-Rollo, S., Woolhouse, M. H., & Trainor, L. J. (2019). How live music moves us: Head movement differences in audiences to live versus recorded music. *Frontiers in Psychology*, 9(JAN), 1-11. <https://doi.org/10.3389/fpsyg.2018.02682>