

## Background

- Music plays a crucial role in creating social bonds (Savage et al., 2021).
- Prior research has shown that moving in synchrony with others enhances social connection and prosocial behaviours (Mogan et al., 2017).
- However, the role of music preferences in social bonding has received little attention.
- Shared music preferences often indicate similarity and reinforce social identity. For example, individuals are more likely to bond with others who share their musical tastes (Boer et al., 2011).
- Despite this, limited research has explored whether listening to preferred music with others, without prior knowledge of their preferences, influences social bonding.
- The current study investigates the effect of shared music preference on social bonding in group settings where participants are unaware of each other's preferences

## Study Aims

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

**How does the effect of music preference differ for different genres, such as Pop and K-Pop?**

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- and post-listening, and group cooperation through a public goods game post-listening. We also measured their movements with motion capture.

## 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=6, K-Pop Fans N=6, K-Pop Non-Fans N=6, N total = 96).
- Participants were seated in a circle (Figure 1 & Figure 2) 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.

### Measures:

Participants completed the following measures:

- Likability of other group members [pre- and post-listening]
- Cooperation through a public goods game (Figure 3) [post-listening]
- Synchrony via cross-correlation (CC) of each group's head movements during music listening

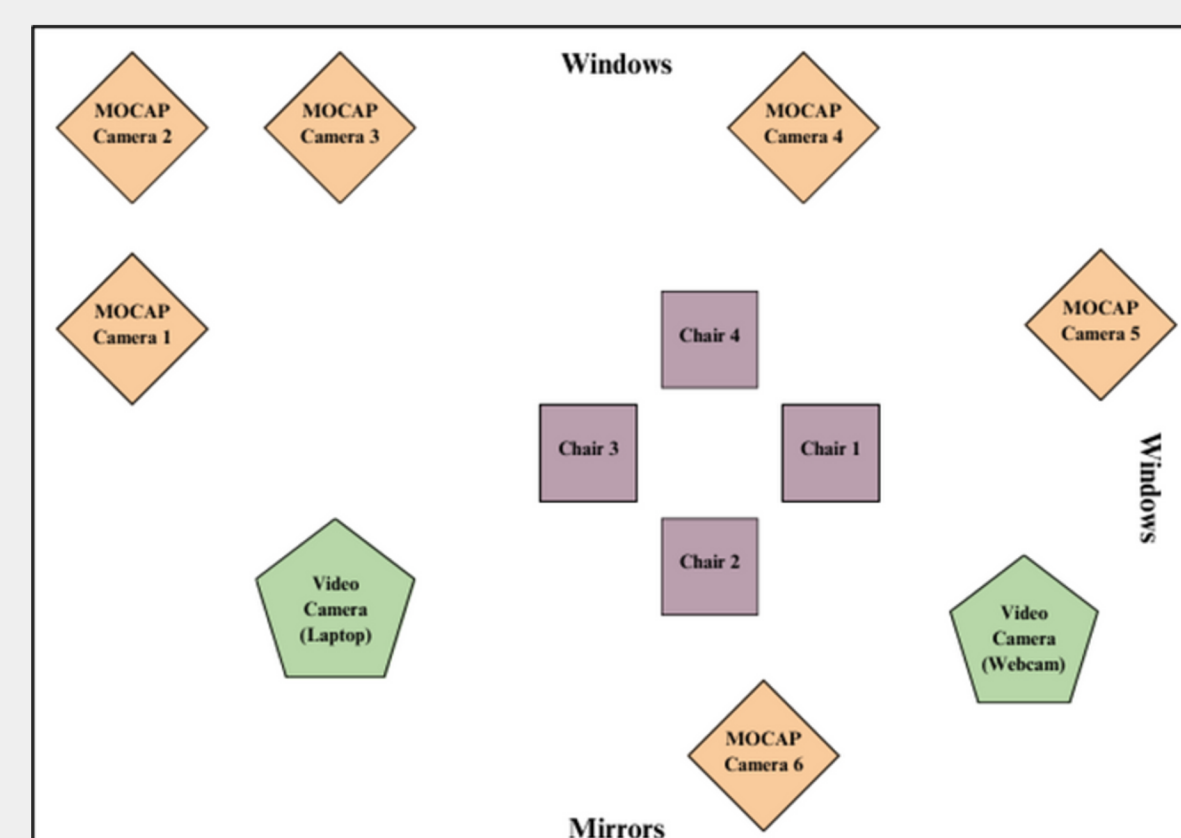


Figure 1.



Figure 2.

Song Information				
Song #	Title	Artist	Genre	BPM
1	22	Taylor Swift	Pop	104
2	Woman	Doja Cat	Pop	108
3	Party in the U.S.A.	Miley Cyrus	Pop	96
4	Give Me Everything	Pitbull (featuring Ne-Yo, Afrojack & Nayer)	Pop	129
5	Hips Don't Lie	Shakira (featuring Wyclef Jean)	Pop	100
1	DNA	BTS	K-Pop	130
2	CROWN	TOMORROW X TOGETHER	K-Pop	111
3	Gee	Girls' Generation	K-Pop	100
4	Egotistic	MAMAMOO	K-Pop	98
5	Me Gustas Tu	GFRIEND	K-Pop	106

Table 1.

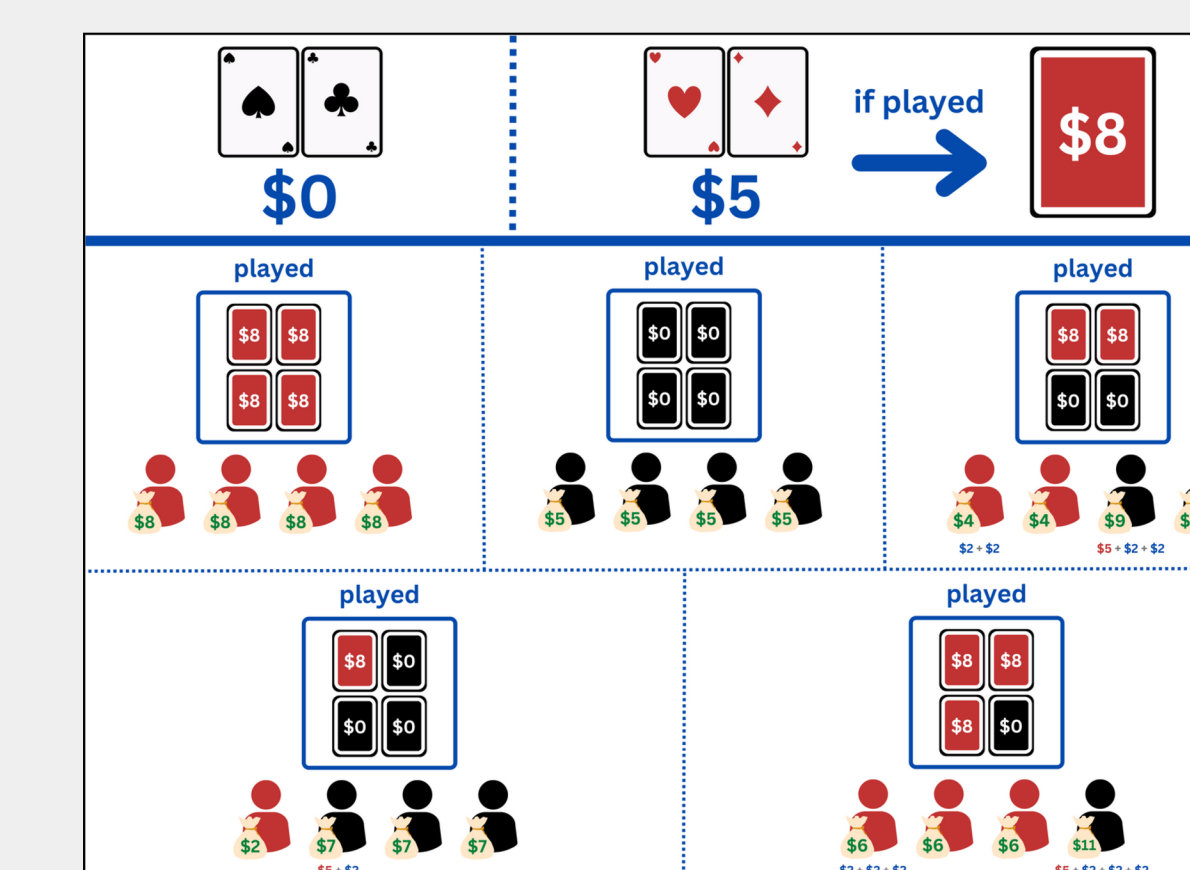


Figure 3.

## Discussion

### The influence of music preference on social bonding is different depending on genre

For Pop, the preference alone is a strong indicator of similarity and affiliation, while for K-Pop, listening together appears necessary to establish the bond.

Pop Fans liked each other more at baseline than Pop Non-Fans, even without knowing each other's preferences, suggesting a shared social identity or common stereotype that connects people who like Pop music. This pre-existing connection may prime positive social evaluations, whereas Non-Fans may lack this immediate sense of shared identity, resulting in lower baseline liking.

In contrast, K-Pop Fans did not show this effect at baseline, but bonded more after music-listening, indicating that shared experiences may play a more critical role in forming connections among K-Pop Fans.

The increased synchrony among Pop Fans vs. Pop Non-Fans suggests that shared positive preferences promote synchrony. However, this effect was absent in the K-Pop groups.

Overall, this study suggests that for Pop, music preference acts as a social signal that primes positive evaluations, while for K-Pop, the shared listening experience is more crucial for triggering social bonding.

## Results

- Fans enjoyed the playlists more than the Non-Fans for both genres (Figure 7).
- Fans help each other more than Non-Fans in the public goods game for Pop only (Figure 5).
- Fans showed higher head synchrony compared to Non-Fans for Pop only (Figure 6).
- Pop Fans showed the highest average similarity ratings compared to other groups (Figure 4).
- Pop Fans liked each other more than Non-Fans even before music-listening (Figure 8A).
- When collapsed across genres, Fans liked each other more than Non-Fans liked each other after music-listening (Figure 8C).

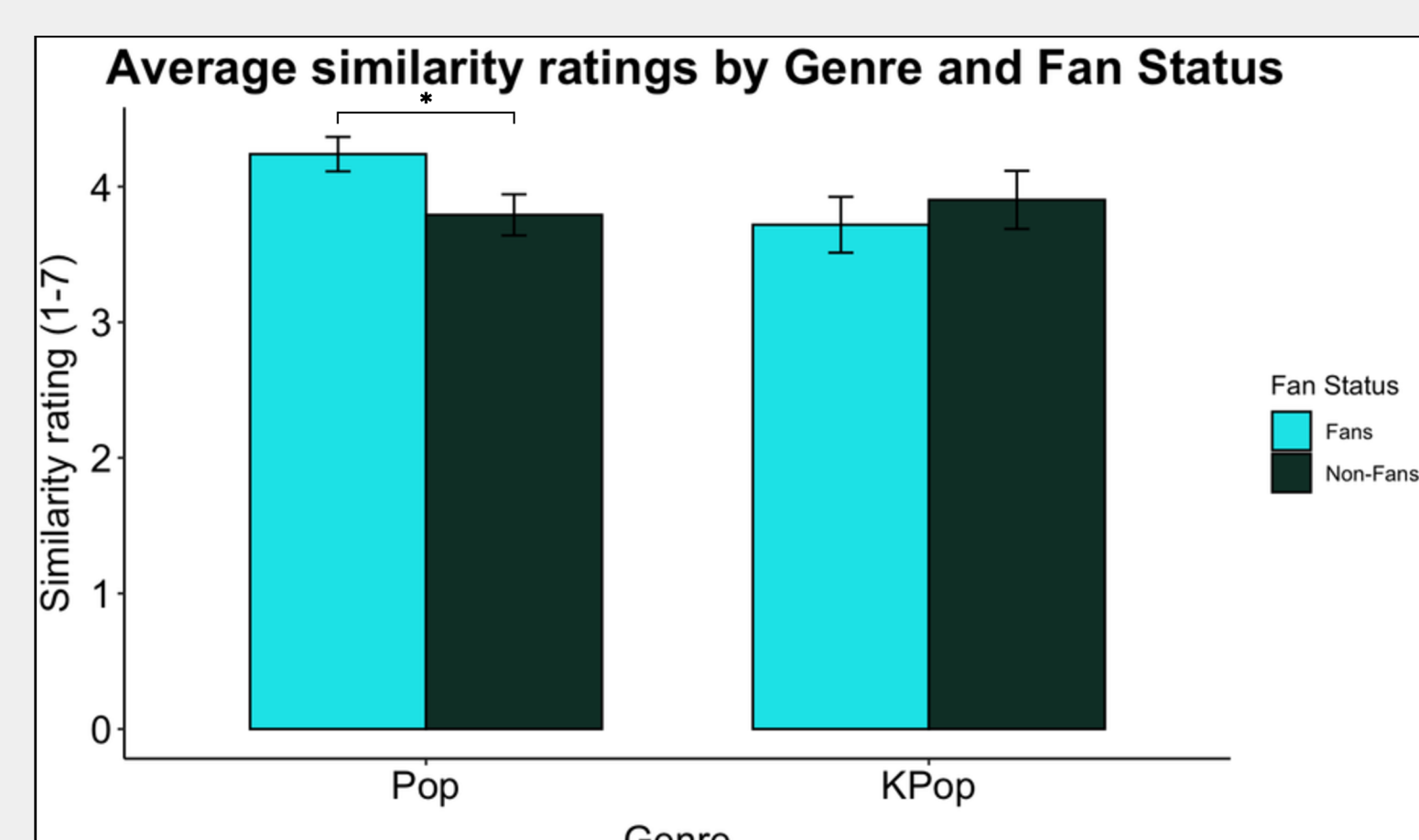


Figure 4.

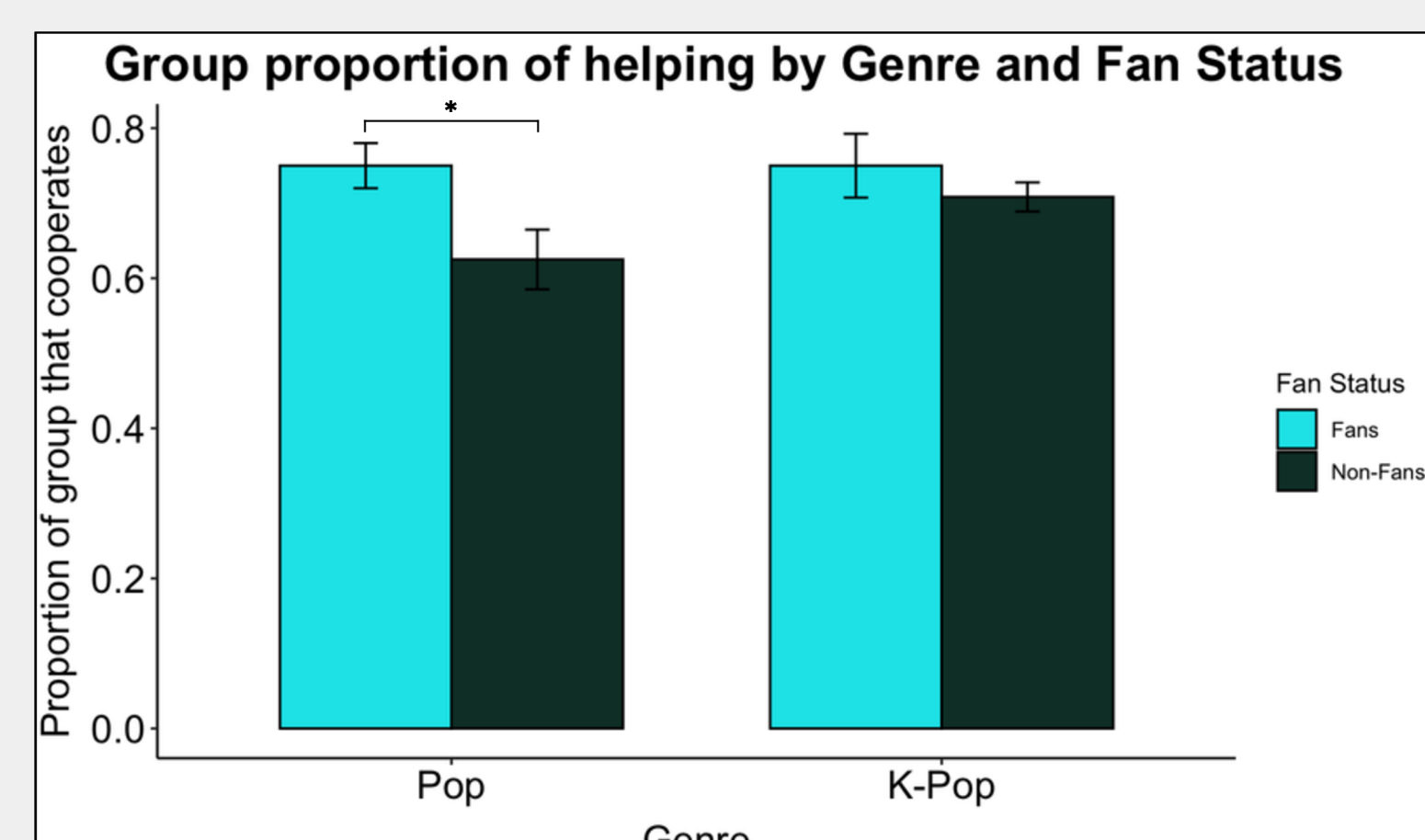


Figure 5.

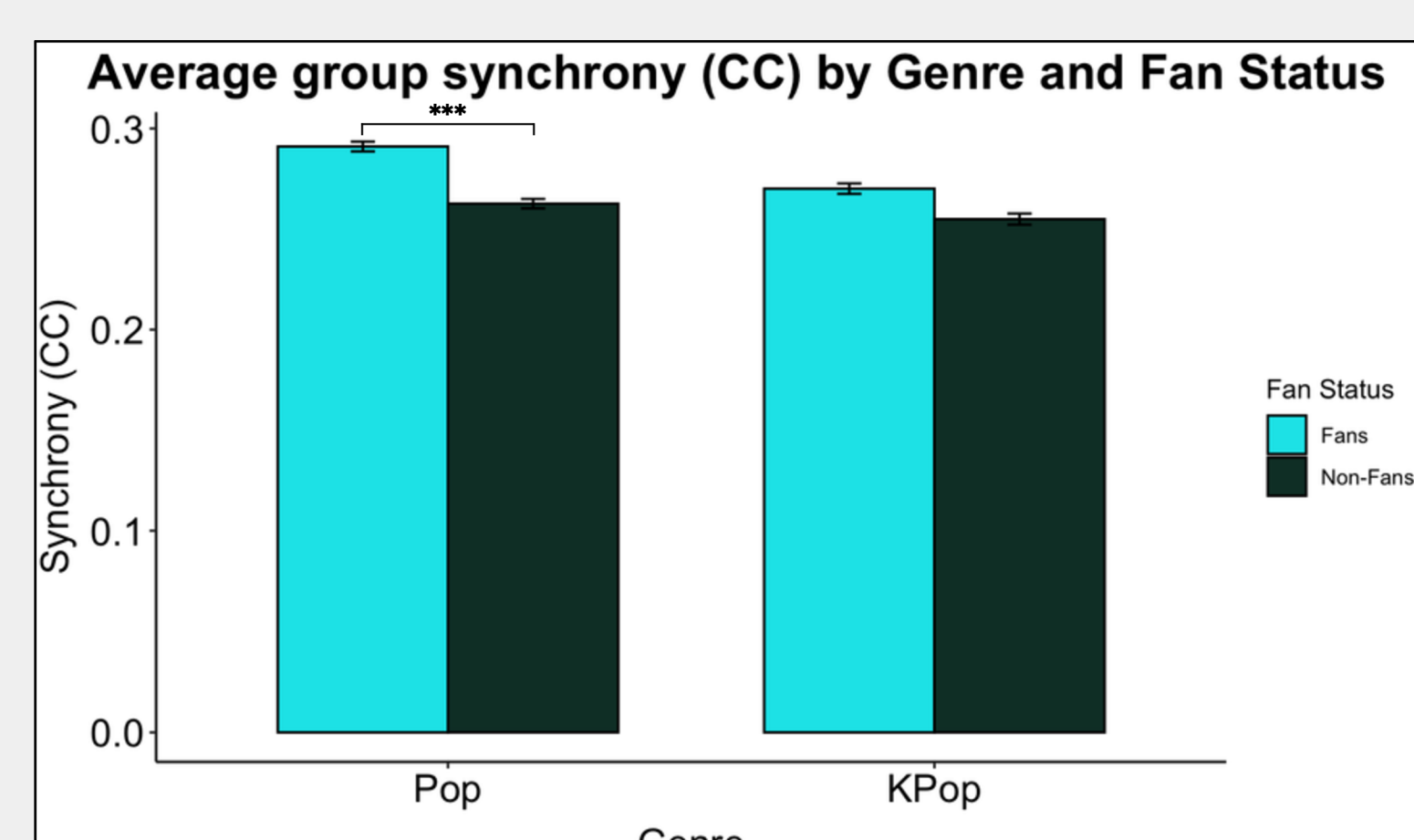


Figure 6.

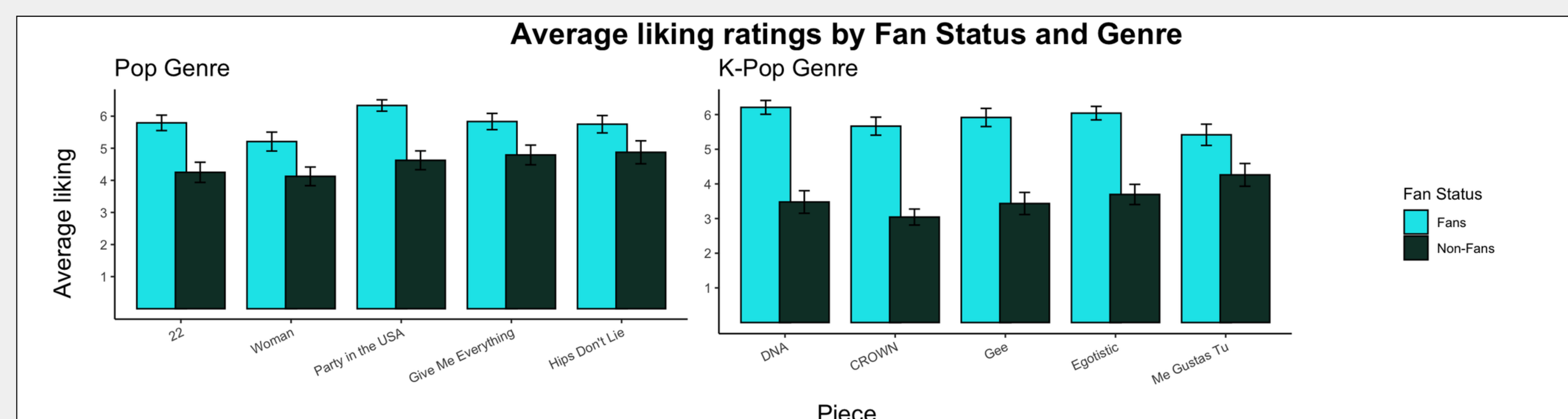


Figure 7.

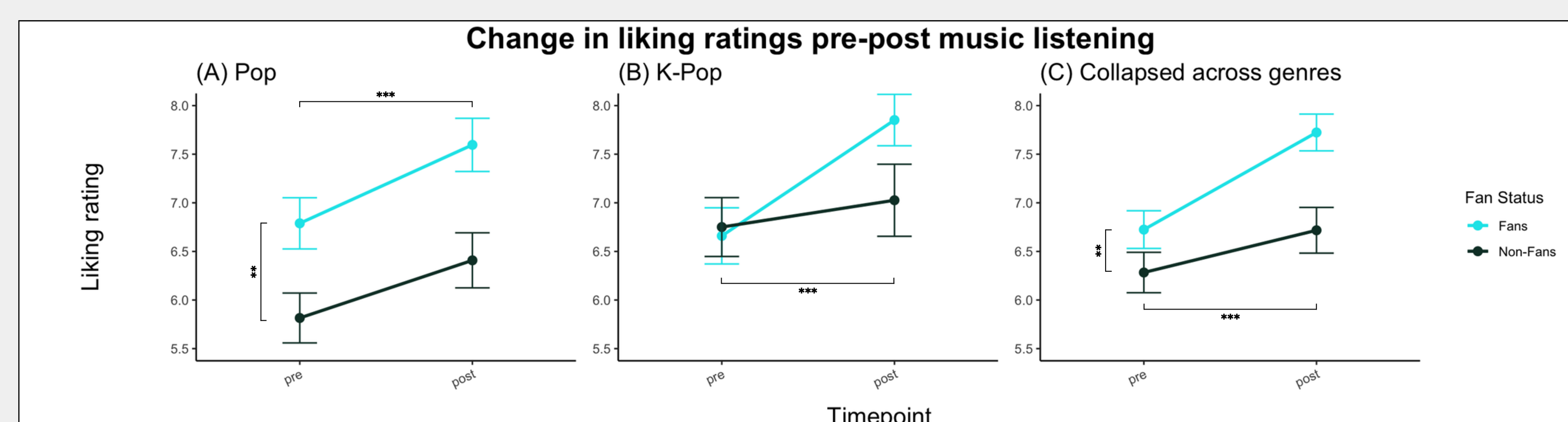


Figure 8.

## 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>
- Savage PE, Loui P, Tarr B, et al. Music as a coevolved system for social bonding. *Behavioral and Brain Sciences*. 2021;44:e59. doi:10.1017/S0140525X20000333