

# Should Personalization Be Optional on Paid Streaming Platforms?

## An Experiment on User Preferences for Personalization or Increased Data Privacy

### Introduction

A concept called “acceptability gap” addresses the conflict between people’s willingness to pay for online personal data privacy and receiving personalized services (Herzog et al. 2021). The literature on this concept is mostly about free internet services that utilize targeted advertisement. However, personal data is very important for paid streaming services (PSPs) as well (Chhabra 2017, Prey 2018). Personal data creates the backbone of the personalized recommendations of PSPs. Users of PSPs both pay the PSPs improve their algorithms by providing data. It is not clear whether all users of these platforms use personalized recommendations and would prefer sharing their data for it. Moreover, they may also not be aware of how PSPs leverage personal data, since these platforms do not show targeted ads (Guynn 2020).

### Our Study

We aim to explore:

- Do PSP users’ willingness to pay for PSP service change if they were explicitly informed about how their personal data is used for personalization algorithms?
- Do PSP users perceive opting out of personalization as increased privacy to pay extra for or lack of personalized services to pay less for the service?

### Results

Based on the 2-sample t-test, we did not find any statistically significant difference between the average amount of fee the control and treatment groups were willing to pay for the platform, therefore rejected both hypotheses. Explicit information on how the personal data is used for personalized recommendations did not change how much users would pay for the streaming service. Moreover, as seen on Figure 3, majority of the users believed the service with or without personalization should cost the same.

We used regression models as exploratory analysis and found below indicative results:

- People who believe that their personal data benefits other users are willing to pay less for the PSP. This indicates that if users are aware of how their activity is being used as recommendation to other users, they may expect the PSP to compensate it such as a lower service fee.
- People who believe that PSPs benefit from their data prefer optional personalization more than other users. This indicates that there some PSP users who do not use personalized recommendations at all may not prefer sharing their personal data with PSPs.

### Method

We conducted a randomized controlled experiment conducted on Qualtrics with 527 participants, recruited via Prolific. The participants read about a hypothetical paid streaming music service that provide personalized recommendations. Treatment group read explicit information about how the personalization algorithm works. They read that the platform would group users based on similarity and recommend the content that one user liked to another user. The control group did not read explicit information about how personalized recommendations would work. As shown on Figure 1, the two group were asked how much they would be willing to pay for the service. As shown on Figure 2, they were also asked whether the service with personalization should be more expensive than service without personalization.

Figure 1: Hypothesis A on explicit information about personal data usage vs. willingness to pay for PSP

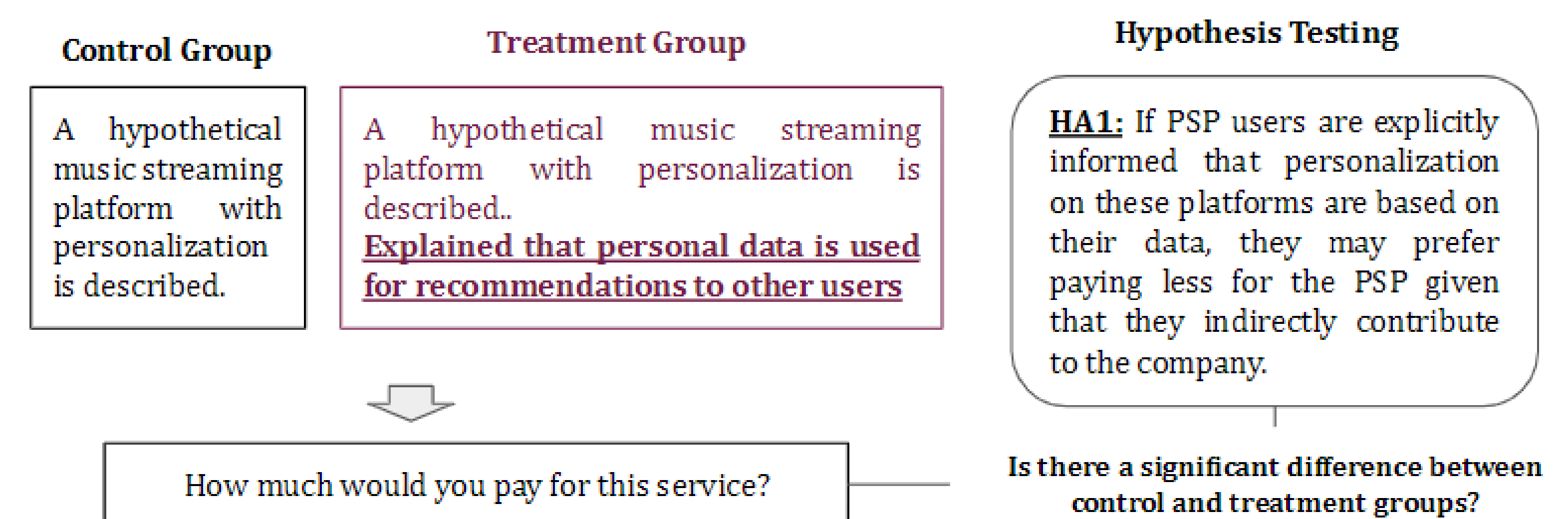


Figure 2: Hypothesis B on fee difference between PSP with personalization vs without personalization.

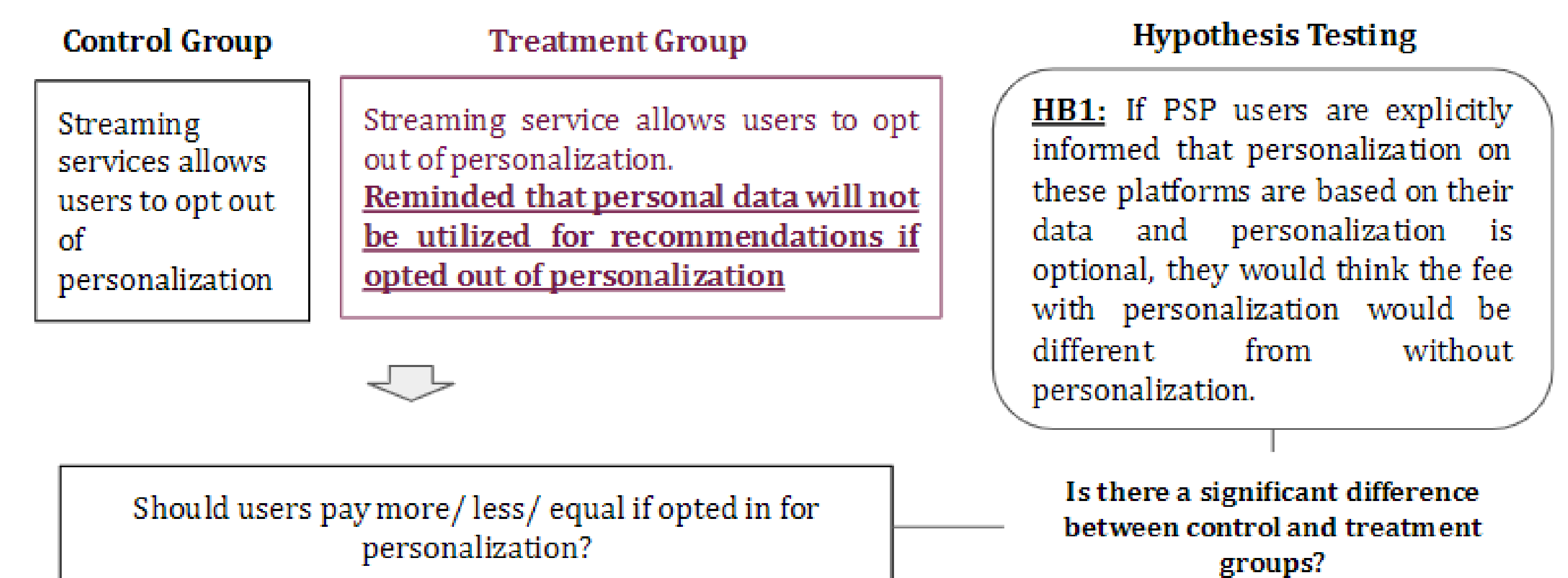
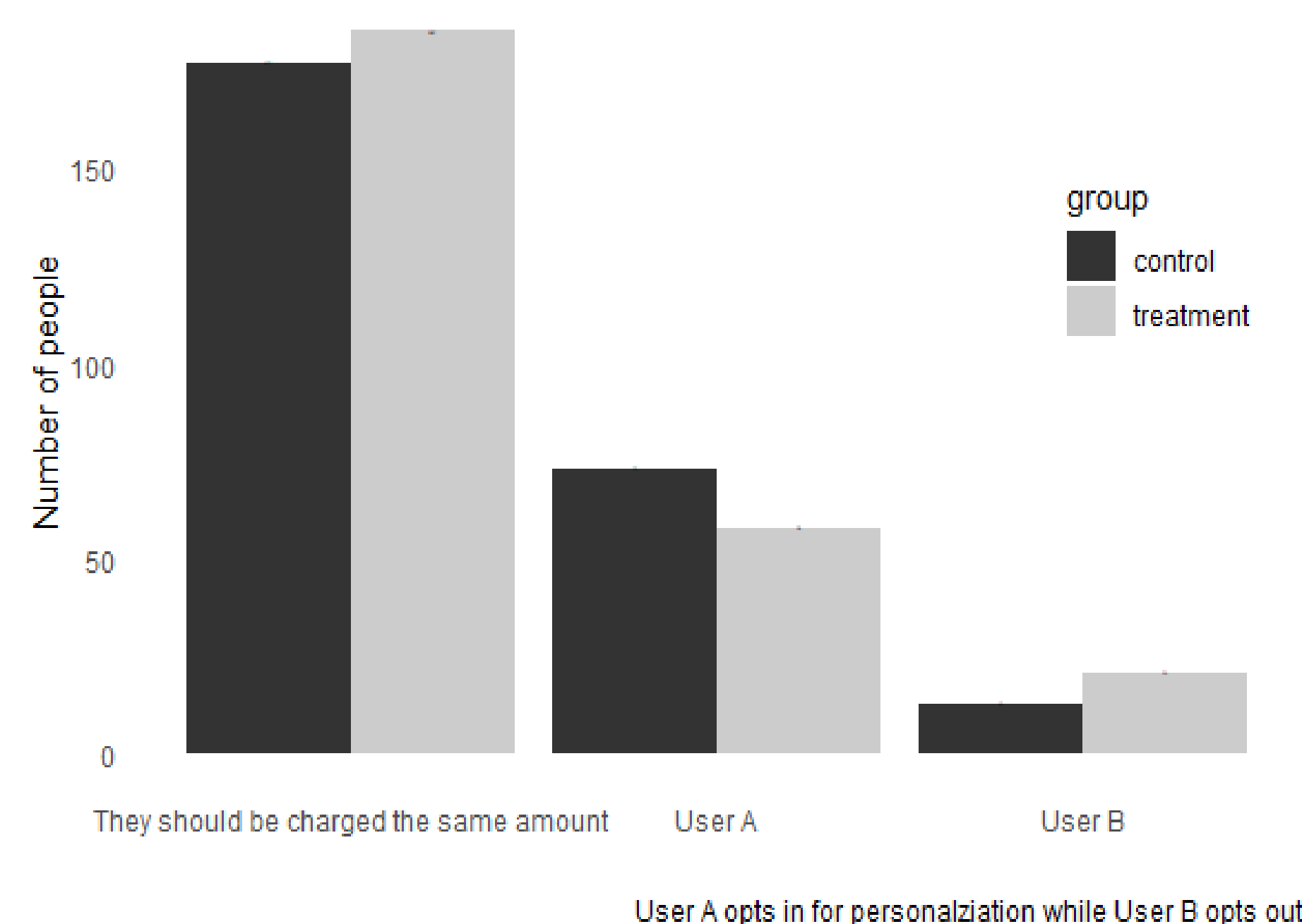


Figure 3: Bar chart on which user respondents think should pay a higher service fee



### Discussion and Further Research

Based on our results, we can not claim that PSP users consider their data as an additional benefit to PSP which would justify personalization to be optional. However, we still find indications that users’ awareness of how much their data is utilized by these platforms is limited and further research can reveal findings to support our hypotheses. We suggest further research to be conducted with a bigger sample, ideally selected specifically from PSP users to reflect opinions that come from real life experience. We also suggest the research to cover different versions of PSP types such as music and movies in order to avoid participants’ subjective experience of a specific PSP company such as Spotify or Netflix.

### Conclusion

Our study indicates that the amount of money PSP users are willing to pay does not change depending on explicit information of how their personal data is used by PSPs. This study adds on the literature about “acceptability gap” showing that when people are asked about sharing data for the sake of personalization, they do not express concerns about data privacy compared to being directly asked about data privacy. On the other hand, we find indications that some PSP users may not use personalized recommendations as much as others and may prefer opting out of personalization and recommend further research on this topic specifically focusing on PSPs.

### References

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