

The Effect of Ingroup Identification on Conformity Behavior in Group Decision-Making: The Flipping Direction Matters

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Abstract

Various social influences affect group decision-making processes. For instance, individuals may adapt their behavior to fit in with the group's majority opinion. Furthermore, ingroup favoritism may lead individuals to favor the ideas of ingroup members rather than the outgroup. So far, little is explored on how these phenomena of social conformity and ingroup favoritism manifest in group decision-making processes when a group has to decide in favor or against an item. We address such a scenario where the 'flipping direction' of conformity (in favor or against an item) matters. Specifically, we explore whether and how the ingroup favoritism manifests differently in terms of conformity behavior depending on the 'flipping direction'. The results show that group inclusiveness does not play a role in the general tendency to conform. However, when it comes to a negative flipping direction, a higher feeling of group inclusiveness seems to play a role; yet, for individualist cultures only.

Keywords: social conformity, ingroup identification, flipping direction, cultural differences

1. Introduction

Group decision-making is an integral part of our daily activities; many of these decision-making processes occur in an online setting. We meet friends online (e.g., Niland et al., 2014), learn together online (e.g., Hennebry and Fordyce, 2017), or jointly decide on a travel destination (Delic et al., 2018). Online communities pursue collaborative shopping (e.g., Mladenow et al., 2015) or engage in social matters (e.g., Park et al., 2021). In organizational settings, many professional decisions are made in teams rather than by

an individual (Bainbridge, 2002).

While group decision-making is considered superior to individual decision-making (Bainbridge, 2002), various social influences are at play that may impact the result. In this paper, we focus on the influences of (i) group identification (specifically *ingroup vs. outgroup*), (ii) social conformity (specifically: *conformity with the majority*, and (iii) cultural aspects (specifically Hofstede's cultural dimension *individualism* (Hofstede et al., 2010).

First, it is widely acknowledged that identifying with a group can affect an individual's behavior (Jackson and Smith, 1999). For example, the more someone identifies with a certain political party, the more this person will support that party with a vote. Similarly, employees that identify with their company's image are more likely to cooperate with members of that company to meet business goals (Jackson and Smith, 1999). A negative effect of group identification is that it may lead to ingroup favoritism (Rahal et al., 2020), which is also referred to as ingroup bias (Semnani-Azad et al., 2012).

Such ingroup favoritism and discrimination against the outgroup influences group decision-making. For instance, individuals are more generous in decision-making if it benefits a person from their ingroup rather than their outgroup (Rahal et al., 2020). Also, the ingroup members have a stronger social influence than outgroup members (Mackie et al., 1990).

Second, in group decision-making processes social conformity is at play. This refers to a change of behavior or belief to fit in with a group (Wijenayake, van Berkel, et al., 2020a; Wijenayake et al., 2019); particularly when challenged by an opposing majority and conforming with the majority opinion (Asch, 1955; Bond, 2005).

While there is generally a wealth of literature

studying the phenomena of social conformity and group identification, little is explored on how these effects manifest in group decision-making processes *when the group has to decide in favor or against an item*. For instance, an extensive number of conformity studies (for a meta-analysis see Bond (2005)) have followed Asch's study design (Asch, 1955). In this paradigm, the participants are confronted with a situation where there is a clear and objectively correct answer (in the original experiment: judging the lengths of lines). The experiment assesses whether people conform to a clearly incorrect answer. In other scenarios, though, the correct answer is either not that clear (e.g., when assessing the trustworthiness of a news article (Wijenayake et al., 2021)) or an objectively correct or wrong answer does not exist (e.g., in moral judgments (Kelly et al., 2017) or in decisions based on personal preferences (Bauer and Ferwerda, 2020; Ferwerda and Bauer, 2022)). For example, Bauer and Ferwerda (2020) found differences in the conformity effect if an individual was in favor of an item or against it. In their study, only a minority vote against an item (here: not adding an item to a group list) was required to induce a participant to conform to voting against that item, whereas only a majority in favor of an item could induce a participant to conform with that majority to have the item added to the group list. In other words, the conformity effect manifests differently in terms of 'flipping' one's opinion from adding to not adding an item, compared to the other way round.

In this work, we address such a scenario where the 'flipping direction' might matter. *We explore whether and how ingroup favoritism manifests differently in terms of conformity behavior dependent on the 'flipping direction' (in favor or against an item)*.

Third, while the social conformity phenomenon is observed across cultures (Milgram, 1961), numerous studies (e.g., Bond and Smith, 1996; Hong et al., 2016; Zhang et al., 2007) indicate that people from collectivist cultures manifest higher levels of conformity than those from individualist cultures. Such cultural differences were also observed concerning the flipping direction. For instance, Ferwerda and Bauer's (Ferwerda and Bauer, 2022) findings suggest the cultural differences between collectivist and individualistic cultures are bigger when flipping from adding to not adding an item, than in the opposite flipping direction.

Against this background, *we also study the role of the cultural dimension while exploring the effect of ingroup favoritism on conformity behavior dependent on the 'flipping direction'*.

The remainder of this paper is structured as follows: In Section 2, we present the conceptual basis and discuss related work. In Section 3, we detail the study design

and the employed methods. After presenting the results (Section 4), we round off this work with a discussion and an outlook on future research (Section 5).

2. Conceptual basis and related work

In this section, we first lay out the conceptual basis of ingroup identification (Section 2.1). Then we discuss related work on social conformity in online groups (Section 2.2) and specifically address the role of the flipping direction in social conformity (Section 2.3). Finally, we present related work on cultural differences in conformity behavior (Section 2.4).

2.1. Ingroup identification

Numerous terms and approaches have been used to describe an individual's connectedness to a group or the importance that one ascribes to group membership, or an individual's identification with a group (for an overview, see Tropp and Wright (2001)). Tropp and Wright (2001) argue that the varied definitions have one common underlying theme on the most basic level: the construct of ingroup identification. Tropp and Wright's (Tropp and Wright, 2001) conceptualization of ingroup identification goes beyond a mere self-categorization; it recognizes that individuals vary in the degree to which they "include the ingroup in the self" (Tropp and Wright, 2001). Thereby the identification with a group is not to be considered binary (i.e., ingroup vs. outgroup) but rather a "degree to which [individuals] include the ingroup in the self" (Tropp and Wright, 2001).

Individuals that highly identify with an ingroup more likely see themselves as ingroup members (Spears et al., 1997) tend to feel close to other ingroup members (Doosje et al., 1995). A high degree of ingroup identification can also have negative effects, which is typically referred to as ingroup favoritism (Rahal et al., 2020) or ingroup bias (Semnani-Azad et al., 2012). For instance, a high degree of ingroup identification may deceive people to accept valid criticism of their own group and may lead to unjustly judging people outside their group (Jackson and Smith, 1999). For instance, individuals identifying with an ingroup are concerned about how their ingroup is treated relative to the outgroup (Petta and Walker, 1992). This may, for example, lead to aggression and amplify online hate (Ray and George, 2021). Further, individuals that highly identify with an ingroup tend to be more open to criticism from people with ingroup status rather than from the outgroup (Adelman and Dasgupta, 2019). Similarly, people tend to behave in ways to benefit ingroup members (Rahal et al., 2020). For example,

Rahal et al. (2020) found biased generosity in intergroup decision-making, where prosocial individuals were more generous towards a person from their ingroup rather than the outgroup.

In addition, research suggests that ingroup members have a stronger social influence in decision-making than outgroup members (Mackie et al., 1990). More specifically, an ingroup member's persuasiveness increases with the strength of the used argument; yet, outgroup members tend to be equally unpersuasive regardless of the argument's strength (Mackie et al., 1990).

Recent research has extended the study of ingroup identification to human-robot interactions (Sebo et al., 2020), where findings suggest that humans may also perceive robots as ingroup or outgroup (Rosenthal-von der Pütten and Abrams, 2020). For instance, in the study by Eyssel and Kuchenbrandt (2012), German participants showed an ingroup bias towards a robot that was developed in Germany, whereas a robot from Turkey was evaluated less favorably.

2.2. Social conformity in online groups

Social conformity is a concept from social psychology referring to a change of behavior or belief to fit in with a group (Wijenayake et al., 2019). The most influential study of social conformity goes back to Asch's experiments from the 1950s (Asch, 1955). Asch's experimental design was adopted in an extensive number of studies (for a meta-analysis see Bond (2005)) and is recognized as a classic experiment in social psychology (Larsen, 1974). In this study design, the participants had to judge the lengths of lines and were then confronted with other people's judgments. A key finding is that individuals tend to give up their opinions when confronted with an opposing majority opinion (Asch, 1955; Bond, 2005; van Leeuwen et al., 2015)—without necessarily holding that opinion or believing that the behavior would be appropriate (Walker, 2015).

In the online context, various aspects of social conformity have been researched. For instance, the conformity effect is leveraged for social nudges on e-commerce platforms to influence user behavior (Zhu et al., 2012). Wijenayake, van Berkel, et al. (2020b) studied the effect of social presence on social conformity in online communities. Differences in conformity with human agents or computational agents have been observed (Hertz et al., 2019). Other research threads investigate conformity with social robots (e.g., Qin et al., 2022) or the effects of gender perception on conformity in online interaction (e.g., Wijenayake et al., 2019).

In a typical scenario following Asch's paradigm individuals tend to agree with a clearly incorrect, yet unanimous majority. Outside Asch's paradigm, the correct answer is either not obvious: (e.g., an estimation of the number of beans in a glass bottle (Jenness, 1932) or the assessment of the trustworthiness of news on social media (Wijenayake et al., 2021)) or is subjective (e.g., personal preferences (Bauer and Ferwerda, 2020; Ferwerda and Bauer, 2022) or political views (M. Maruyama et al., 2017; M. T. Maruyama et al., 2014)).

In (online) group decision-making processes, the correct answer is typically not obvious or even existing; thus, an experimental design outside Asch's paradigm is relevant. For example, in the context of "fake news," Wijenayake et al. (2021) found that the conformity effect is particularly accentuated when a majority is critical of an article's credibility. In other words, the strength of the conformity effect depends on the majority's sentiment toward the article. Similarly, other studies (e.g., Bauer and Ferwerda, 2020; Ferwerda and Bauer, 2022) found differences in the conformity effect if an individual was initially in favor of an item or against it. Bauer and Ferwerda (2020) found that only a minority vote against an item (here: not adding an item to a group list) was required to induce a participant to conform to voting against that item. In contrast, only a majority in favor of an item could induce a participant to conform with that majority to have the item added to the group list. In other words, the conformity effect manifests differently in terms of 'flipping' one's opinion from adding to not adding an item, compared to the other way round. A similar effect—where the flipping direction mattered—was also observed in Ferwerda and Bauer (2022).

2.3. The role of the 'flipping direction' in social conformity

In the context of situations where an objectively correct answer does not exist or is not obvious, some studies have found differences in conformity behavior concerning the *flipping direction*.

For instance, Wijenayake et al. (2021) studied the role of conformity behavior in the spread of misinformation. Specifically, they found that the conformity effect was particularly accentuated if a person was challenged by a majority that was critical of an article's credibility.

In the context of moral decision-making, Kundu and Cummins (2013) found that the conformity effect led to more pronounced results compared to moral decision-making without social influence. Their results

indicate that the conformity effect was slightly more accentuated in a positive direction (i.e., deeming a scenario more permissible if the majority rated it so), compared to conformity in a negative direction (i.e., conforming with the majority deeming a scenario impermissible whereas doing less so when assessing the situation alone).

The role of the flipping direction in conformity behavior was also the focus of two studies where the participants had to create a group music playlist (Bauer and Ferwerda, 2020; Ferwerda and Bauer, 2022). In both studies, the conformity effect was more pronounced when voting against an item (thus, conformity in a negative flipping direction) than in favor of it. Thereby, the differences concerning the flipping direction manifested in two aspects. First, a minority vote against an item was sufficient to induce a negative flipping behavior (Bauer and Ferwerda, 2020), whereas inducing flipping in a positive direction (thus, inducing to vote in favor of an item) required a majority to conform (Bauer and Ferwerda, 2020). Second, the cultural differences (here: individualist vs. collectivist cultures) in conformity behavior seem to be more pronounced when the flipping direction is negative compared to a positive direction (Ferwerda and Bauer, 2022).

2.4. Cultural aspects

Cultural aspects play an important role in group interactions. For instance, in terms of ingroup identification, national culture may build the grounds for activating ingroup versus outgroup categorizations (Brewer, 2008). Further, cultural aspects can influence perceptions and judgments that, in turn, affect group dynamics (Smith and Berg, 1987) and behaviors (Ferwerda and Schedl, 2016; Skowron et al., 2017). Both may result in ingroup bias where the joint cultural background is the connecting element for the ingroup identification (Semnani-Azad et al., 2012). Comparing negotiation processes in the context of the United States and of India, Semnani-Azad et al. (2014) found substantial cultural differences concerning the ingroup bias.

An extensive number of conformity studies investigating cultural differences ground their hypotheses on Hofstede's construct of *individualism–collectivism* (Hofstede, 1980; Hofstede et al., 2010; Triandis, 1990). As it is considered acceptable in individualist cultures to place one's personal goals and preferences ahead of collective ones, social conformity seems to be less observable compared to collectivist cultures (Bond and Smith, 1996; Hong

et al., 2016; Zhang et al., 2007), where it is socially desirable to put collective goals first (Triandis, 1990).

For instance, Hong et al. (2016) studied an online community where consumers rate and review restaurants. In that context, consumers from collectivist cultures were less likely to deviate from the average prior rating in their own reviews than consumers from individualist cultures (Hong et al., 2016). Similar to Bauer and Ferwerda (2020), Ferwerda and Bauer (2022) investigated differences in the conformity effect if an individual was initially in favor of an item or against it. Besides confirming that the willingness to flip to a negative outcome was higher than flipping toward a positive outcome, their results suggest that the conformity behavior was far less pronounced for participants from individualist cultures compared to collectivist ones.

3. Methods

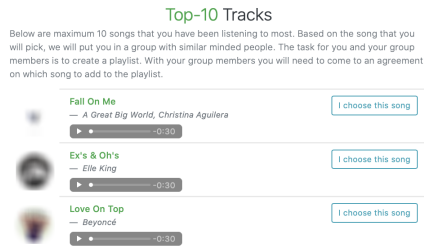
This study's goal was to investigate whether the conformity effect is influenced by the feeling of belonging to the group. Additionally, we investigated whether cultural background plays a role in this process. For this, we included two contrasting cultures: the United Kingdom (UK) and India. According to Hofstede's cultural dimensions, the UK (89) has one of the highest scores on the individualist dimension whereas India (48) exhibits one of the lowest (Hofstede et al., 2015, version 2015-12-08). The contrast between these cultures is also confirmed through Schwartz' dimensions of affective autonomy, intellectual autonomy, and egalitarianism (UK: 4.26, 4.62, and 4.92, respectively; India: 3.48, 4.02, and 4.45, respectively) (Schwartz, 2008).

3.1. Study design

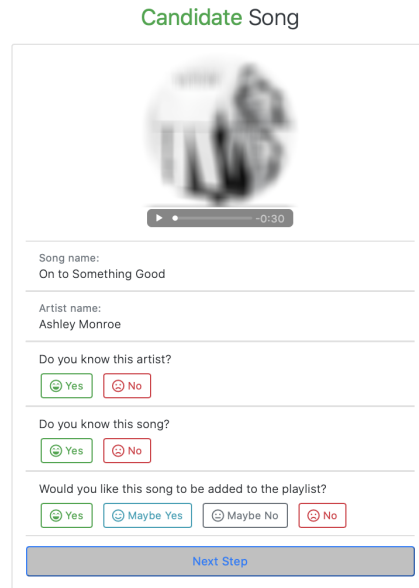
We developed an online experiment—with a mixed factorial design—to investigate the effect of group belongingness on conformity behaviors (including the role of the flipping direction) and to compare the effect between the UK and India. The study participants needed to collaboratively create a music playlist consisting of 10 songs. Through voting on a song, the song was added to the group playlist when a consensus was reached (i.e., all members needed to agree).

After giving an introduction on the purpose of the study and basic demographic questions, we assessed the Spotify accounts of the participants to retrieve relevant songs for the study through the Spotify API.¹ Through the Spotify API we retrieved the top-10 most listened

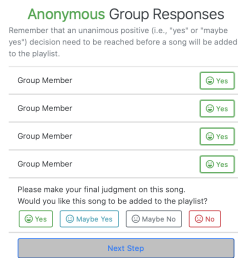
¹<https://developer.spotify.com/>



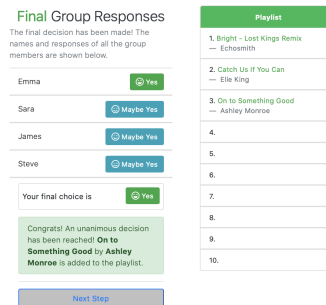
(a) Screenshot with a participant’s most played songs for choosing one seed song.



(b) Screenshot with candidate song to be added to the playlist



(c) Screenshot showing the group’s votes, allowing the participant to revise their voting.



(d) Screenshot showing a song added to a group’s playlist after reaching consensus.

Figure 1: Screenshots of the study design.

songs of the participant. Participants were then asked to select a song from the list that would be used as a reference to find similar-minded group members to start creating the playlist with (see Fig. 1a).

We simulated the creation of groups of five members (including the participant) as this would allow a majority vote of three, which has been shown to be sufficient to induce conformity behaviors (Asch, 1955). To remain full control over the behaviors of each group member, and thereby remaining control over how conformity behavior is induced, the only real person in the group was the participant. We simulated the existence of the other group members by using bots.

The reference song that a participant has chosen at the start was used as the seed song to find relevant songs for the study. Through the “get recommendations”

endpoint of the API, relevant songs were retrieved. By varying the “target_popularity” parameter to 25 or 75, songs with different chances to be initially favored or disliked by the participant were selected².

For each song that was put forward, the participant was asked whether they would like to have the song added to the playlist (response options were: *yes*, *maybe yes*, *maybe no*, and *no*; Fig. 1b). Participants were then put on hold for randomly 5–10 seconds to wait for the other group members to provide their response. The bots were (individually) programmed in such a way that there was a 30% chance that they would vote in line with a participant and a 70% chance to vote against them.

²This design choice is based on the assumption that a highly popular song is more likely to be favored than a—in comparison—unpopular song (Celma, 2010).

Response options of the bots are the same as for the participants.

After the waiting period, the responses of the group members were revealed anonymously. This was done to ensure that the only observed conformity effects are not confounded by variables such as gender perceptions of names (e.g., Wijenayake et al., 2019). Given the anonymized responses of the group, the participant was given the opportunity to revise their initial response (see Fig. 1c). The participant was additionally told that after the final decision was made, the final responses together with the identities of the whole group would be revealed.

For better control of the experiment, the bots were programmed to only change within the sub-scale (i.e., *yes/maybe yes* or *no/maybe no*) of their initial response with a 50% chance. Upon presenting the final responses of the group together with their identities, depersonalization and anonymity effects as shown in prior work (e.g., Postmes et al., 2000) were controlled for. The order of presentation of the identities was randomized in each round to avoid learning effects of the order.

A positive unanimous final decision (i.e., *yes/maybe yes*) of the group was needed for a song to be added (see Fig. 1d). The study would proceed with the next song until a playlist of 10 songs was reached or when after 30 attempts no complete playlist was achieved (to avoid that the study would continue endlessly). After the study came to an end, an additional question was asked about the group feeling of the participant by using the “Inclusion of Ingroup in the Self” measure (Tropp and Wright, 2001) that visually measures the level of group identification on a 7-point scale (see Fig 2).

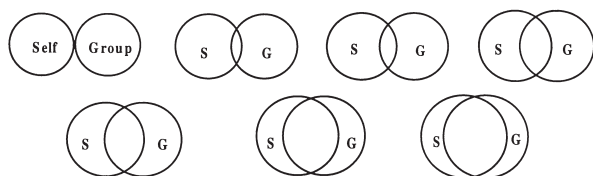


Figure 2: The “Inclusion of Ingroup in the Self” measure (Tropp and Wright, 2001). The respondents were asked to select the pair of circles that “you feel best represents your own level of identification with your group”, where $S = self$, $G = group$.

3.2. Measures

If a participant indicated either *yes* or *maybe yes* in their assessment of a song, we regard this as a

positive assessment of the song (i.e., *adding* a song to the playlist). If a participant indicated either *no* or *maybe no* in their assessment of a song, we regard this as a *negative* assessment of the song (i.e., *not adding* a song to the playlist).

To measure the flipping behavior, we compare the user’s initial and final assessment of a presented song. If a participant initially gives a positive assessment (i.e., either *yes* or *maybe yes* on the question of whether they want to add the song to the playlist) and then changes to a negative one (either *no* or *maybe no*), this indicates that the respective participant flipped their behavior. The same is true for changing one’s assessment from a negative one (i.e., either *no* or *maybe no*) to a positive one (i.e., either *yes* or *maybe yes*). If the initial and the final assessment match or a participant changes the assessment only within the positive spectrum (i.e., changes between *yes* and *maybe yes*) or within the negative spectrum (i.e., changes between *no* and *maybe no*), this represents *no flipping* behavior.

The flipping direction can be either “add to not add” or “not add to add”. “Add to not add” indicates that a participant changes the assessment of a presented song from a positive to a negative one (i.e., either *yes* or *maybe yes* to *no* or *maybe no*). “Not add to add” indicates that a participant changes the assessment of a presented song from a negative to a positive one (i.e., either *no* or *maybe no* to *yes* or *maybe yes*).

3.3. Data

We recruited participants via the agency Kantar³ considering a consumer price index of EUR 8.00 for both, the UK as well as India. Our initial dataset consisted of 212 participants of which 113 were from the UK and 99 were from India. The country was determined based on the participants’ self-report on the question “Which country do you most associate with?” We included two attention checks⁴ to detect invalid responses. After filtering out the invalid entries, we were left with a total of 199 participants: UK (109) and India (90). Age and gender distribution of the UK: overall median age 35 with 37 male (median age 44) and 72 female (median age 33). The Indian age and gender distribution: overall median age 25 with 62 male (median age 25) and 28 female (median age 25).

As the number of rounds needed to come to a fully compliant playlist (i.e., a playlist with 10 songs) depended on a participant’s tendency to comply, the number of rounds needed for each participant varied a

³<https://www.kantar.com>

⁴The attention questions were in the format, “Answer this question with agree” or “disagree”, respectively. Participants who did not answer these questions correctly were removed from the final dataset.

lot; with a minimum of 10 and a maximum of 30 rounds (note: the experiment came to an end when the playlist reached 10 songs or when a participant reached the end of round 30). Hence, to control for the unequal number of rounds, the data for each participant was accumulated and normalized to represent a score in the closed interval $[0, 1]$; thereby, a score closer to 1 represents a higher degree of overall flipping behavior of a participant.

4. Results

Fig. 3 provides a general overview of the users' flipping behaviors per country and flipping direction. In Section 4.1, we detail the results of the flipping behaviors. Section 4.2 presents the results on the effect of group inclusiveness.

4.1. General flipping behaviors

We started with a paired-sample t-test to investigate whether there are any differences between the two behaviors of flipping directions (Fig 3). Looking at the overall effect without differences between countries into account ($t(190) = 8.239, p < 0.001$), participants changed their decisions more often from adding a song to not adding ($M = 0.49, SD = 0.33$) than the other way around ($M = 0.30, SD = 0.28$).

When it comes to the individual countries (i.e., India and UK), similar effects were found (Fig 3). Our Indian participants show significant effects ($t(90) = 6.596, p < 0.001$) when it comes to changing decisions from adding a song to not adding it ($M = 0.57, SD = 0.24$) opposed to not adding a song to adding it ($M = 0.34, SD = 0.34$). When looking at the

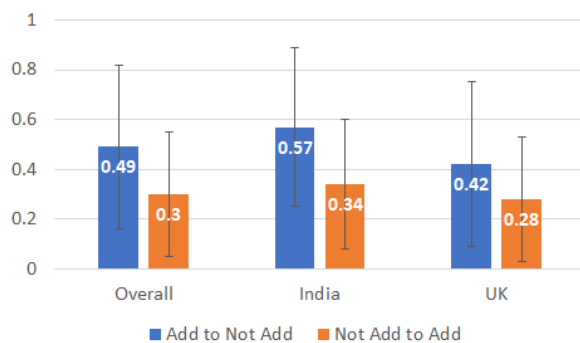


Figure 3: Average flipping behaviors of all countries combined and per country based on individual normalized values in the closed interval $[0, 1]$. Scores closer to 1 indicate a higher degree of overall flipping behavior.

UK participants, similar results are found ($t(90) = 5.116, p < 0.001$). However, looking at the mean values the UK participants expresses a lower degree of changing their decisions (add to not add: $M = 0.42, SD = 0.33$, not add to add $M = 0.28, SD = 0.24$).

An additional linear regression analysis was conducted to investigate whether there significant differences between the countries. Results show that the Indian participants had a significantly higher degree of changing their decisions compared to the UK participants when it comes to adding a song to not adding a song ($R^2 = 0.15, F(1, 197) = 10.454, p = 0.001$). No significant effects were found between India and UK between the flipping decisions from not adding a song to adding a song ($R^2 = 0.14, F(1, 197) = 2.883, p = ns$).

4.2. The effect of group inclusiveness

A linear regression was conducted to investigate the effect of participants' group inclusiveness on the tendency to change their initial response to add or not add a song to the playlist. Overall, without taking into account the participants' country affiliations, a significant effect was found of group inclusiveness on flipping behaviors. In particular, changing a decision from adding a song to not adding a song is influenced by the degree participant felt connected to the group ($R^2 = 0.17, F(1, 197) = 15.969, p < 0.001$). However, group inclusiveness does not play a significant role for changing decisions from not adding to adding a song ($R^2 = 0.10, F(1, 197) = 1.985, p = ns$).

When looking at the individual countries, no significant was found within the Indian participants for adding to not adding a song ($R^2 = 0.13, F(1, 88) = 2.812, p = ns$) as well as for not adding to adding a song ($R^2 = 0.10, F(1, 88) = 0.042, p = ns$). The UK participants showed a significant effect of group inclusiveness when it comes to adding to not adding a song ($R^2 = 0.16, F(1, 107) = 6.702, p = 0.011$), but not for not adding to adding a song ($R^2 = 0.19, F(1, 88) = 1.029, p = ns$).

Comparing the group inclusiveness effect between countries by adding an interaction effect of country and group inclusiveness, no significant effect was found for either adding a song to not adding a song ($R^2 = 0.18, F(1, 196) = 8.679, p = ns$) or not adding to adding a song ($R^2 = 0.13, F(1, 196) = 1.256, p = ns$).

5. Discussion & future work

To investigate the differences in flipping behaviors by group inclusiveness as well as differences between

the UK and India, we conducted our analyses in two steps: 1) we investigated differences in flipping behaviors in general by looking at the overall picture and differences within and between countries; 2) we investigated the effect of group inclusiveness overall and within and between countries.

Our results show that there is a difference in the strength of conformity attempts by the group depending on the direction of the flipping. When looking at the overall effects, we found that participants were more inclined to flip their initial responses when the direction was negative (adding a song to not adding a song) than when it was the other way around. This pattern was also found when taking the sub-samples, UK and India, separately. Especially for this negative direction of flipping, India in particular showed a higher degree of conformity than the UK.

When considering group inclusiveness, we used the “Inclusion of Ingroup in the Self” measure (Tropp and Wright, 2001) to assess to what extent the participant felt that they belonged to the group. In general, the results show that group inclusiveness does not play a role in the tendency to conform to the group. Also, when looking at the inclusiveness effect within and between India and the UK no effects are found, except for a particular flipping direction within the UK. A higher degree of group inclusiveness seems to have an effect within the UK when it comes to a negative flipping direction (adding a song to not adding a song). For this particular direction, it seems that a higher feeling of group inclusiveness plays a role in the tendency to conform to the group.

From these findings, we suppose that India—as it represents a collectivist culture—already conveys a certain degree of group cohesion so that the ingroup identification does not add a lot to the group cohesion. In the UK—as an individualist culture—the effect of ingroup identification on conformity behavior is observable. Future research needs to investigate in-depth why this effect occurs specifically when it comes to a negative flipping direction. Building on our findings, we consider it an important next step to extend our work to embrace a wider scale of cultures. Further, we deem it worthwhile to build on our findings and extend them to other group-decision tasks. In this work at hand, we chose a group-decision setting with an everyday activity without long-term impact (here: adding music to a group playlist). For future research, it would be worthwhile to explore the effect of ingroup identification on conformity behavior in settings where the decision is of existential relevance.

Our findings contribute to the construction of theory as our results imply that social conformity has to be

addressed at a fine-grained level; namely, considering the flipping direction. These findings are in line with previous research (Bauer and Ferwerda, 2020; Ferwerda and Bauer, 2022; Kundu and Cummins, 2013; Wijenayake et al., 2021); yet, our findings complement that the ingroup perception may be considered, too; with different effects across cultures. In this regard, our findings also have practical implications for group decision support systems. Often, such systems take the group members’ preferences as given; only few studies consider that group members may conform with a majority. Given the theoretical implications, research also needs to explore and derive concrete design implications for group decision-making systems.

Acknowledgments

This research was funded in whole, or in part, by the Austrian Science Fund (FWF): V579.

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