

Reply to Ihmels and Ache (2018): Event-Based Conformity Versus Regression to the Mean

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In a previous article, we (Kim & Hommel, 2015) challenged existing social-psychological accounts of conformity (Asch, 1951) by arguing that what looks like conforming behavior might simply emerge from a failure to distinguish between observations of one's own behavior and that of others. We tested this idea by adopting the experimental design of Klucharev and colleagues (Klucharev, Hytönen, Rijpkema, Smidts, & Fernández, 2009; Shestakova et al., 2012), in which participants rate the faces of unfamiliar same-gender individuals twice—once before and once after they are exposed to what they are made to believe is the average rating of the same faces by an important reference group. Under these conditions, the participant's second rating tends to be biased by the intervening event: It becomes more positive or negative if the group rating was more positive or negative, respectively, than the participant's first rating. We replicated this observation but found the same bias if the "reference-group rating" was replaced by an intervening event without any social meaning, such as the presentation of visual numbers falling within the range of the judgment scale or of movies of a hand pressing a key with a corresponding number. We felt that this finding ruled out a social account of the bias but suggested instead that participants may simply store both their own judgment and the intervening event (without keeping track of the authorship) in corresponding event files (Hommel, 2004; Hommel, Müsseler, Aschersleben, & Prinz, 2001) and then, when encountering the same face again, retrieve the available event files and report some (possibly weighted) average of the response they imply.

In their commentary, Ihmels and Ache (2018) argue that the very effect we intended to explain may actually not exist—at least not in the design we adopted from Klucharev et al. (2009) and other researchers. As Ihmels and Ache demonstrated in a reanalysis of our data, statistically correcting for possible regression-to-the-mean

effects makes the conformity effect disappear. This might point to a statistical artifact, but other interpretations are possible: The effect may be real but restricted to extreme ratings, which individuals might be more prone to "correct."

We therefore decided to test the regression-to-the-mean account directly by replicating our basic experiment (for details of the method, see Kim & Hommel, 2015; for data and further details see https://osf.io/7hf98/?view_only=c5202c0826e24763b1b20708dc055028) without the intervening event. Sixteen Dutch female participants were simply presented with the same set of pictures showing female faces in two experimental sessions and were asked to judge their attractiveness on a scale from 1 (*very unattractive*) to 8 (*very attractive*). Because we used the same program as in our original study, we constructed the pseudovisible "direction" based on the (now withheld) intervening event that we would have presented in the original study (a judgment equal to, 1–3 points lower than, or 1–3 points higher than the first rating of the participant). As expected, an analysis of variance (ANOVA) of the changes in the attractiveness ratings produced a significant effect of direction, $F(1.33, 19.93) = 7.39, p < .01, \eta_p^2 = 0.33$, which in a Bayesian ANOVA indicated very strong evidence ($BF = 38.233$). These findings provide direct support for Ihmels and Ache's argument that the shift in the ratings that we previously took as a conformity effect occurs even in the absence of the intervening event, presumably reflecting regression to the mean.

Given that our design was used in numerous previous demonstrations of "conformity effects" as well, these observations suggest that such effects no longer

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exist—which would feed earlier reports of a decline of conformity effects in Western societies (Bond & Smith, 1996). It is thus possible that the original observations of Asch (1951) and contemporaries were so much interwoven into the zeitgeist of their times that they reflected more of a historical peculiarity than a universal aspect of human behavior (cf. Gergen, 1973). Interestingly, the degree to which stimuli trigger the retrieval of event files can be controlled (Colzato, Steenbergen, & Hommel, 2018; Keizer, Verment, & Hommel, 2010), and the degree of that control relies on cultural metacontrol biases toward cognitive persistence (in individualistic cultures) or flexibility (in collectivistic cultures; see Hommel & Colzato, 2017). If we consider the fact that our participants hailed from The Netherlands, a country in the Top 5 on Hofstede's international individualism scale (Hofstede, Hofstede, & Minkov, 2010), our null finding would be consistent with the assumption that conformity reflects stimulus-induced event-file retrieval. If true, this suggests that more robust conformity effects can be found in more collectivistic societies. Indeed, in a recent follow-up study we successfully demonstrated, in a new design that made regression-to-the-mean effects impossible, that Chinese participants tested in China show significantly stronger conformity effects than Western European participants tested in The Netherlands.

Action Editor

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Author Contributions

D. Kim and B. Hommel developed the study concept. Both authors contributed to the study design. Testing, data collection, and data analysis were performed by D. Kim. D. Kim and B. Hommel both wrote the manuscript, and B. Hommel provided critical revisions. All authors approved the final version of the manuscript for submission.

Declaration of Conflicting Interests

The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

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