People can recognize, learn, and apply default effects in social influence

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Defaults influence decisions, but Zlatev et al. (1) argue that people are unaware of those influences and unlikely to learn them. The claim is important and surprising, and it comes as a conclusion to their very thorough piece of scholarship. Nevertheless, the appearance of default neglect may instead reflect the selection and presentation of stimuli. People are both aware and capable of learning about default effects.

Participants ["Choice Architects" (CAs)] identified a choice frame designed to generate a particular response in another decision maker ["Choice Maker" (CM)]. Across three different contexts (choices over jobs, medicine, and car insurance), CAs failed to set defaults optimally. Zlatev et al. (1) interpret this as a general failure "to understand or use defaults to influence others." Such a claim depends on the particular default nudge. In fact, when we asked people to set defaults for three examples from the literature, CAs were excellent. We mimicked the default game of Zlatev et al. (1) for retirement savings (2), lightbulb selections (3), and organ donations (4). Unlike the null results reported by Zlatev et al. (1), people chose the optimal default 63.8%, 63.2%, and 68.8% of the time in each of those respective scenarios, and each was significantly greater than chance (details are available at https://osf.io/pq9hb/).

Zlatev et al. (1) further claim a more general shortcoming: People do not learn default effects even when seeing the direct consequences. They showed participants a sequence of 20 individual choices, each randomly selected from a pool of CMs. Although, on average, over the first 19 rounds, CMs selected the default 63% of the time, CAs were no more likely to apply the default frame on the 20th round ($P = 0.37$). Zlatev et al. (1) interpret this as evidence that people cannot learn default effects. Our reanalysis shows that people learned from what they saw, but not everyone saw a default effect.

The distinction is in the details of the operationalization. Because Zlatev et al. (1) selected CMs from a larger pool, the average default effect was 63%, but the specific default effect observed by a single participant varied considerably. For example, one participant saw only four CMs select the default in the first 19 rounds. That participant, sensibly, did not use the default on the 20th round. Alternatively, four participants saw 17 CMs select the default, and all of those participants, again sensibly, used the default on the 20th round. Fig. 1 shows that CAs' tendency to use the default was highly sensitive to the strength of the default effect they observed (log odds slope = 0.26, $P < 0.001$) (an analysis is available at https://osf.io/pq9hb/). CAs' naiveté allows for learning: When people saw that defaults increased the desired outcome, they selected defaults, but when they saw that defaults decreased the desired outcome, they avoided defaults. When the outcome was close to showing neither tendency, CAs showed neither tendency themselves.

Choice defaults are effective nudges, and contrary to the claims of Zlatev et al. (1), we think that people might know how to use them.

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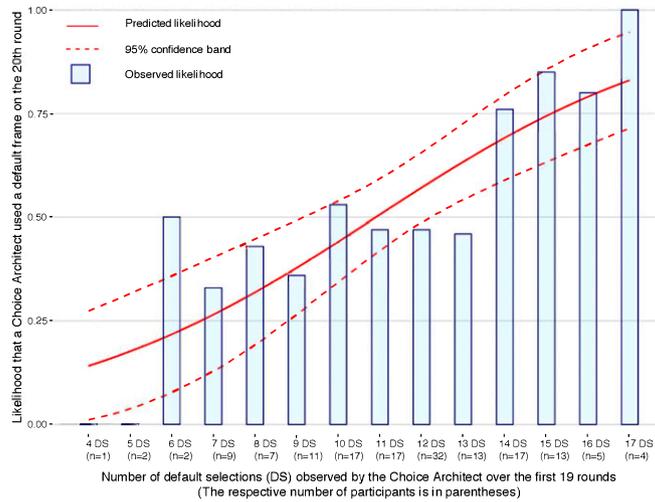[2]To whom correspondence should be addressed. Email: minah.jung@stern.nyu.edu.

Fig. 1. Observed and predicted likelihoods that a CA would choose the optimal default frame. Each bar represents the observed likelihood that the CAs who saw the respective number of default selections would choose the optimal default frame. The red curve is the predicted likelihood by the logit regression Logit(P) = α + βX, where P is the predicted likelihood and X is the number of default selections observed in the first 19 rounds. The two dashed curves form a 95% confidence band of the predicted curve.

1 Zlatev JJ, Daniels DP, Kim H, Neale MA (2017) Default neglect in attempts at social influence. *Proc Natl Acad Sci USA* 114:13643–13648.
2 Madrian BC, Shea D (2001) The power of suggestion: An analysis of 401(k) participation and savings behavior. *Q J Econ* 116:1149–1187.
3 Dinner I, Johnson EJ, Goldstein DG, Liu K (2011) Partitioning default effects: Why people choose not to choose. *J Exp Psychol Appl* 17:332–341.
4 Johnson EJ, Goldstein D (2003) Medicine. Do defaults save lives? *Science* 302:1338–1339.