Seeking Advice – A Sampling Approach to Advice Taking

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Abstract

While decision makers‘ judgments emerge from an internal distribution of information, advice merely consists of a single numerical estimate. These skewed samples have been assumed to lead to the often documented underweighting of advice in judgment revision. However, the information ecology usually provides the opportunity to sample additional information, for example by asking for additional advice. Providing this very opportunity in a sampling paradigm, we found that (1) decision makers generally sample more than the single piece of advice offered in the classical research paradigm, (2) sampling increases for advice that is distant from the own judgment and (3) advice weighting increases with greater sampling of additional advice.

Theory and Hypotheses

- Averaging of independent judgments increases accuracy (Galton, 1907)
- Decision makers often do not average their own judgment and advice received but overweight their own judgment (Yaniv, 2004a)
- Decision makers have larger samples of information relating to their own judgment than to the advice (Yaniv, 2004b)
- BUT: information search is not confined to decision makers‘ minds; the information ecology provides additional information to be sampled (e.g., additional advice)
- Given this opportunity, decision makers should:
  1. Display willingness to sample
  2. Sample more information, when it is less consistent
  3. Weight advice stronger, the more supporting information they sampled

Method

Exp. 1: N = 35 University students (25 ♀, 10 ♂),M_{age} = 23.00, SD_{age} = 6.18),
Exp. 2: N = 44 University students (30 ♀, 14 ♂),M_{age} = 26.48, SD_{age} = 8.81),
Exp. 3: N = 58 University students (45 ♀, 13 ♂),M_{age} = 21.10, SD_{age} = 3.34).

- Give initial estimate (calorie content of 20 dishes)
- Receive one piece of advice (close to or distant from initial estimate)
- Possibility to sample up to 19 additional pieces of advice (not in Exp. 1)
  - Exp. 2: advice highly consistent on given trial (M_{SD} = 24.93)
  - Exp. 3: advice less consistent on given trial (M_{SD} = 163.61)
- Give final estimate

Results

Results are based on multilevel models with random intercepts for participants and items. Effects of predictors are fixed and best-fitting model was identified using model comparisons.

Advice seeking:

- Self-determined sample sizes exceed single piece of advice classically offered: Experiment 2, M = 8.05 (SD = 7.00), $t(43) = 7.27$, $p < .001$, d = 1.10; Experiment 3, M = 10.26 (SD = 5.98), $t(57) = 10.52$, $p < .001$, d = 1.77
- Sampling increases when advice is distant: Experiment 2: b = 1.53, se = .20, t = 7.82; Experiment 3: b = .87, se = .18, t = 4.83 (see Figure 1)

Advice weighting:

- Weight of advice (WOA) increases when advice is distant rather than close: Experiment 1, b = .12, se = .01, t = 10.65; Experiment 2, b = .23, se = .02, t = 11.21; Experiment 3, b = .06, se = .02, t = 3.64 (see Figure 1)
- WOA increases with increasing sample size: Experiment 2, b = .015, se = .003, t = 5.66; Experiment 3, b = .007, se = .002, t = 3.40

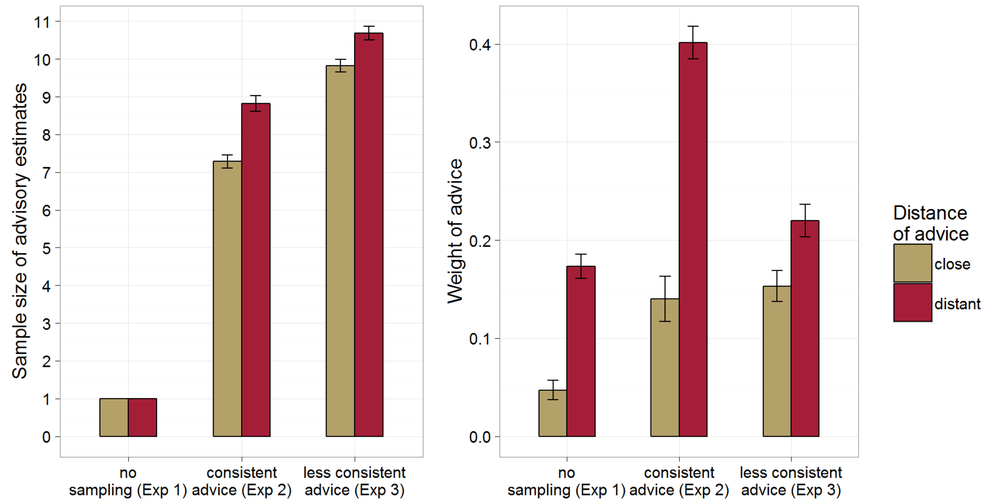

Figure 1. Sample size and weight of advice (WOA) on close and distant trials for Experiment 1, 2 and 3. Error bars represent standard errors of the means.

Discussion

- Decision makers display substantial sampling that is also sensitive to context factors (distance and consistency of advice)
- Advice weighting is sensitive to the information samples created through advice seeking
- Advice seeking must no longer be neglected when studying advice taking!

References

Galton, F. (1907). Vox populi. *Nature*, *75*, 450–451.
Hütter, M. & Ache, F. (2016). Seeking advice: A sampling approach to advice taking. *Judgment and Decision Making, 11*, 401-415.
Yaniv, I. (2004a). Receiving other people’s advice: Influence and benefit. *Organizational Behavior and Human Decision Processes*, *93*, 1–13.
Yaniv, I. (2004b). The benefit of additional opinions. *Current Directions in Psychological Science*, *13*, 75–79.

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