

# Why it's good to have smart friends: The role of feedback in decision making

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Every day we are faced with a multitude of options, but the majority of choices we make fall into two categories: descriptive choice (based on what we are told or on statistics) and experiential choice (based on our own personal experience). An example of these choices would be deciding whether or not to wear a helmet while cycling. We are told that it is for our safety, so choosing to wear the helmet would be a descriptive choice. However, we see that our friends never wear helmets and they have never been hurt, so in this case choosing not to wear a helmet would be an experiential choice.

Psychologists study decision making by using either a descriptive choice paradigm (participants choose between various options, with all possible probabilities and outcomes fully described to them) or an experiential choice paradigm (participants are not provided with any information regarding probabilities and outcomes before making a choice). In the experiential paradigm, participants learn about the outcomes by making choices and receiving feedback on their decisions. Numerous studies have shown that people will make different decisions depending on if they are provided with experiential or descriptive information. Research has also shown that in experiential paradigms, participants will initially choose the riskier option, but following feedback, will select the safer option. So, what *really* influences the decisions we make? Do we just leave it to chance or do we listen to advice offered by others?

Indiana University psychologists Ryan Jessup, Anthony Bishara and Jerome Busemeyer wanted to know how feedback affects decision making by combining the two choice paradigms. Participants had to select between two monetary options. The first choice resulted in them earning very little money, but they were guaranteed to receive it. With the second option, there was a chance of earning a lot more money, but the odds of earning it were very low (participants were provided with the probability of success before making their choice). Participants were randomly assigned to groups receiving either no feedback on their choices or receiving feedback (indicating their winnings in previous trials).

The results, reported in the October issue of *Psychological Science*, a journal of the Association for Psychological Science, suggest that feedback plays a key role in decision making. The psychologists discovered that participants responded differently, depending on whether or not they were given feedback, even if they were presented with complete descriptive information. The participants who did not receive feedback tended to overweight small probabilities and preferred the larger, but more uncertain outcomes. The individuals who received feedback underweighted small probabilities and preferred a small, but certain win. The researchers note that the group receiving feedback began to treat the small probabilities in a more objective way, suggesting that feedback may result in rational decision making.

The authors conclude that this study “has implications for behavioral choice theories in economics and psychology, as well as for neurophysiological studies aimed at uncovering the neural substrates

underlying choice behavior.”