Lawnmowers, Peanut Slabs, and a decision making heuristic: An experiential activity for introducing management students to the anchoring effect

Introduction

Heuristics are pervasive mental shortcuts that simplify – but also often derail – human (including managerial) decision making. Psychological research has documented many heuristics seemingly built into the human mind, and management educators often teach these heuristics in undergraduate as well as executive-level courses, usually as part of a module on decision making. This experiential activity, which I developed for and use in my introductory, undergraduate management course, allows students to learn about one of the most common and consequential heuristics: *the anchoring effect*, which refers to the human tendency to be overly influenced (often to an irrational degree) by an initially-presented reference point or piece of information (the anchor) when making decisions (Furnham & Boo, 2011). I've run this activity more than 20 times at the time of writing, and each time have attained similar results that allow students to both understand the anchoring effect, and appreciate its powerful (though often difficult to spot!) impact on decision-making.

Theoretical Foundation

This activity is a modern adaptation of the classic experiments conducted by Daniel Kahneman and Amos Tversky (1974) on the anchoring effect, which were later popularised in Kahneman's (2011) well-known book *Thinking, Fast and Slow.* Since those initial experiments, the anchoring effect has proven to be one of the most robust heuristics, having been widely-documented in replications of Tversky and Kahneman's experiment, as well as many others (see Furnham & Boo [2011] for a review).

Learning Objectives

- 1. Students develop a sound understanding of the anchoring effect
- Students see how the anchoring effect, and heuristics more generally, can influence managerial decision making
- Students appreciate that often, the anchoring effect affects decision making in ways that we're not even aware of

Exercise Overview

This activity works best with a large class of at least 50 students or more. It can be run live online (e.g., via Zoom), in-person, or in hybrid settings, all to good effect. I usually teach it in the context of a broader module on managerial decision making. The activity requires about 10 minutes of pre-class preparation on behalf of the teacher, and about 7-8 minutes of in-class time.

This activity relies on the Mentimeter online polling platform, which is free to register for and use (users can unlock additional features on the platform by paying a fee, but these features aren't needed for this activity). See <u>www.mentimeter.com</u>

Step 1. Before the class, I create two "word cloud" polls in my Mentimeter account. One of these polls asks: "Bunnings sells 50 lawnmowers in Wellington per month. How many cars does Toyota sell in Wellington per month?" (the lawnmower poll) The other poll asks: "Whittaker's sells 50,000 Peanut Slabs [a popular New Zealand chocolate bar] per month. How many cars does Toyota sell in Wellington per month?" (the Peanut Slab poll).

IMPORTANT: Ensure the "Hide Results" option is selected for both polls so that students don't see the results until you want them to.

Step 2. At the very beginning of the class in which I do the activity, before any discussion of heuristics (so that students don't guess the purpose of the activity), I show students the slide below. This instruction effectively creates two evenly-sized and randomly-allocated groups in the class, one that responds to the lawnmower poll, and the other that responds to the Peanut Slab poll. I explain to students that the instruction they see "will seem a bit weird, but just give your best guess as a number, you'll see how this fits with the class later".

If your birthday is on an **even-numbered** day of the month → Go to menti.com, code 6723 7825

If your birthday is on an **odd-numbered** day of the month → Go to menti.com, code 6931 8753

Step 3. When we get to the part of the class where we cover heuristics, I present the slide below to students with the technical definition of the anchoring effect. I then ask them "does this ring any bells? Maybe related to something we did at the very beginning of today's class?" Usually there's a student who sees the connection, and points out that it seems to have a link with the polls they were asked to complete at the very start of the class.



Step 4. I commend the student on seeing the connection, and then show the class what each group saw as part of the poll activity **while keeping the results of both polls hidden**. I then ask the class two (largely rhetorical) questions:

- Is there any logical connection between how many lawnmowers Bunnings sells and how many cars Toyota sells? (Students shake heads)
- Is there any logical connection between how many Peanut Slabs Whittaker's sells and how many cars Toyota sells? (Students shake heads)

I follow these questions up with the comment: "OK, so we've established there's no connection. So as a rational, intelligent human being, your decision about what number to guess should have been completely unaffected by that weird initial piece of information, right?!" (Students nod heads, usually with a sheepish grin because they know they're about to find out they've been tricked!)

Step 5. The big reveal! I tell students "Right, let's take a look at what actually happened". I then unhide the results for each poll (easily done by pressing the H key on the keyboard when in Mentimeter), which shows the results for each poll. I click back and forth between the

polls (open in separate tabs in the internet browser) and ask them what they notice. Almost always a student will raise their hand and explain the punchline of the activity: the "lawnmower" group who were "anchored" to the irrelevant small number (50) generally guessed low, while the "Peanut Slab" group who were anchored to the irrelevant large number (50,000) generally guessed high. The images below show the results of the two polls from a recent group I conducted this activity with (the larger the font size of the number = more students guessed that number):



Step 6. I explain to students that this activity and end result is an illustration – albeit a simplistic and harmless one – of how the anchoring effect can creep into our decision making, and impact our choices: in this case, their guess as to how many cars Toyota sells in Wellington per month. I then present the slide below to them, and explain how in business and organisational settings, the consequences of the anchoring effect can be much more

significant. For example, when marketers deliberately exploit it to make products seem like better value by displaying high "old" prices against low "new" prices, or how making the first offer in a high-stakes negotiation about a price/fee can act as an anchor, and shape the negotiating partner's entire frame of reference for what a good negotiation outcome looks like:



Step 7. For more advanced or engaged classes (e.g., post-experience students), you can follow these provided examples up by asking if they can think of a time where they saw the anchoring effect having a significant effect in their own lives or work. Time can also be provided for students to discuss these recollections in groups or in pairs before discussing as a class.

Step 8. Because of its memorability and effects on students, I often leave this activity to the end of my coverage of the different kinds of heuristics that can affect decision making. It makes for a good conclusion to this part of the decision making class, because it provokes thought and discussion amongst students about the potential consequences of heuristics (including the anchoring effect) in management and business settings.

MOBTS Session Description

As mentioned above, this activity does require a large group in order for it to work effectively. If the MOBTS session is large enough (i.e., 30 people or more), I would follow the steps outlined above, and conduct this activity with session participants, so that they can experience how it works first hand. I would then explain to participants how to prepare and execute the activity from a teaching perspective. As mentioned above, this session works just as well online, so this session could be offered in hybrid mode to ensure a sufficient number of participants. The timeline for the session would be roughly as follows:

0-10 minutes: Run activity with participants
10-20 minutes: Background and introduction to the activity, including learning objectives and overview of the Mentimeter platform
20-25 minutes: Tips for ensuring the activity works well
25-35 minutes: Q&A

If the MOBTS session is smaller (i.e., fewer than 30 people), I would not conduct the activity with participants, but simply step through how to run it from a teaching perspective. The timeline would essentially be the same as that shown above, but without the first 0-10 minutes where I run the activity with participants.

References

Furnham, A., & Boo, H. C. (2011). A literature review of the anchoring effect. *The Journal of Socio-Economics*, 40(1), 35–42. <u>https://doi.org/10.1016/j.socec.2010.10.008</u>

Kahneman, D. (2011). Thinking, Fast and Slow. Penguin Books.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, *185*(4157), 1124–1131.