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The Framing Effect

When it comes down to making a decision, there is a wide range of possibilities of how information can be perceived leading to the final choice. By directing how information is presented and shaping the story of our decisions, the idea of framing functions as a silent director. Framing is a cognitive phenomenon that is firmly anchored in the complex mechanisms of the mind. It has the ability to influence viewpoints, opinions, and the process of making decisions. As one dives more into the study of framing and its consequences, it becomes clear that this seemingly unimportant idea is a powerful force that influences our everyday interactions and shapes the way we perceive and react to information.

On a day-to-day basis, there are multiple examples we can find in our lives that include the guiding force of framing. For instance, the majority of consumers find it difficult to explain spending 250 dollars per week on organic goods for home-cooked meals since they are "more expensive," but they can rationalize spending 250 dollars on fast food and other outside food because each transaction "seems" to be less expensive. While it is more acceptable to spend $200 on a new pair of sneakers, fewer individuals consider investing the same amount of money in the stock market. In addition, students frequently procrastinate for hours on end on social media such as TikTok and Instagram, but then complain about how little time they have to complete their coursework, and many ultimately wind up focusing more on their "busyness" and "lack of time" than on studying or completing their assignments.

Understanding how and why the framing effect occurs can better help individuals minimize the pitfalls that occur as a result of being confused. The main two mechanisms that explain this effect are loss aversion and the availability heuristic. When someone exhibits loss aversion, they will prefer a certain gain over a likely gain, even if the likely gain has a higher projected value. People attempt to avoid the emotionally draining experience of losing. Because of this, even though we are unaware of it, information that has a certain benefit is more tempting to us. We prefer positive frames, and framing affects the likelihood of a gain or loss. The availability heuristic states that our minds naturally gravitate toward options that use fewer resources because of our finite capacity to digest information at any given time. For this reason, when faced with a choice, we tend to consider information that is easily obtainable rather than considering other options. We are more likely to select options that are given to us in a clear and concise manner.

There have been countless experiments executed where framing is clearly presented. In a randomized field experiment conducted by Pau Balart, the framing of scoring rules was modified for penalized multiple-choice tests. Multiple-choice tests are among the most comprehensive methods of assessing human capital, with others being driver's license tests, medical residency exams, etc. Different methods are used to score MCT. The "number right guessing" approach gives points for accurate responses and deducts 0 points for incomplete or incorrect responses. Examinees are encouraged to complete all questions, regardless of whether they are familiar with the solution, under this scoring scheme. As a result, questions where a student receives the right answer by accident count toward the score's error component. Examiners often punish incorrect responses in an attempt to reduce this issue. Penalties-based MCT evaluation systems are commonly used worldwide. When incorrect responses are penalized, test-takers can choose not

to take chances by skipping items. As a result, MCTs offer extensive and easily available data on actual risk-taking decisions.

According to the study written by Balart, mixed framing is used to indicate that the usual method of communicating grading in penalized MCTs is to mix scores in the gain and in loss domains. “Under Mixed-framing, correct answers will result in a 1 (normalized) point gain, wrong answers in a loss of $p \in (0, 1]$ points, and non-responses will receive zero points (neither a gain nor a loss).” They suggest a loss-framing in which students are informed that they will begin the test with the highest possible grade; right answers will not subtract or add points, incorrect answers will result in a loss of $1 + p$ points, and no response will result in a loss of 1 point. Both of these scoring rules end up being mathematically equivalent.

The theoretical model predicts that students' performance will rise and their non-response rate will fall as a result of the framing modification. There is an 18%–20% decrease in students'' non-response under the Loss-framing, so the non-response is greater under the mixed framing. It does not, however, raise students' test scores. In fact, the findings lead to the notion that the performance in the Loss-framing is impaired.

Furthermore, this second study’s purpose was to determine how vaccine characteristics and informational gain/loss framing affected parents' willingness to vaccinate their children against the coronavirus illness (COVID-19). In September and October of 2021, parents of children ages 0 to 17 participated in this discrete choice experiment conducted in Hong Kong. The participants were divided into four groups at random based on how the information was presented to them. They were then asked to select potential immunization options based on seven characteristics that were taken from previous qualitative interviews. To examine the impact of characteristics and information framing on parental vaccine acceptability, a mixed logit model

was used. Estimates of the vaccination acceptance rates under various conditions were also made.

The responders were given background material on the COVID-19 vaccination before the formal tasks. According to Kailu Wang's experimental design, "each individual was randomly allocated to one of the different information groups presenting the expected outcome of the vaccine— stratified by age and sex — which were designed based on previous studies." The first set of data concerned the vaccination outcome's gain frame compared to the loss frame. The second concerns whether or not to display, in addition to infection data, the anticipated result of lowering mortality. The mortality information was framed in the same manner as the infection information in the first block, allowing each respondent to view only the gain or loss frame of the data. The data table shows that the efficacy for vaccination plan 1 was 90% and 40% for vaccination coverage among all children under 18 years, while for vaccination plan 2 it was 70% efficacy and 60% coverage.

There were 298 valid responses in all. Parental acceptance was found to be much enhanced by the BioNTech brand, with greater efficacy, less serious side effects, and higher vaccination coverage in children. Also, when compared to gain-framing, loss-framing improved parental acceptance, although the way mortality data was presented had no effect. The results suggest that parents' decisions to vaccinate their children are significantly influenced by a number of factors, such as peer pressure, the significance of vaccine properties, and the framing of gain/loss information. Parents of younger children showed higher levels of vaccine hesitancy. In order to overcome vaccine hesitation, vaccination promotion should take information-framing approaches into account.

In summary, the study of framing reveals a powerful force that discreetly shapes our perceptions and the choices we make in a variety of areas of life. It is important to have a sophisticated understanding of how framing functions and the significant influence it has because of the complex interactions that occur between cognitive biases and the deliberate presentation of information. It is clear from considering the numerous instances in this essay—from grocery purchases to exam scoring to medical decisions—that framing is not just a theoretical idea but rather a prevalent and significant part of our everyday lives. It acts as a filter through which we understand the world, influencing our decisions and attitudes in ways that we might not always be aware of.

Works Cited

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