[MSB637] Week8 Thought Paper **20223484 이연수**

1. Wertenbroch, Klaus (1998), "Consumption Self Control by Rationing Purchase Quantities of Virtue and Vice," Marketing Science, 17 (4), 317-37.

Main hypothesis: Ceteris paribus, consumers are less price-sensitive for relatively vice products (vs. virtue) and this is not due to consumers' preference for virtues over vices.

This article makes an interesting finding that consumers' change of preference over time and degree of self-control affect price elasticity. I find this article especially inspiring in that the current pricing strategy from the field study (which is presumable from experience, i.e. past data) reflects the proposed theory. Practitioners could have noticed the difference in price elasticity between alcoholic/nonalcoholic beer and regular/light cream cheese, as indicated by the field data. This study generalizes such findings with concrete theory, providing a promotion strategy for more diverse products (even for new products with no existing data). Considering the prevalence of fat-reduced products, with relatively virtue-vice products everywhere, this article gives an impactful practical implication.

However, I think this article has a critical logical confound. I think the price elasticity difference between relatively virtues and vices could be due to different consumers. Specifically, there is a chance that vice consumers simply do not like stockpiling one product more than virtue consumers. The products included here are mostly products that are considered healthy. I suppose virtue consumers are more likely to constrain their diets compared to vice, which leaves them with a limited consideration set. On the other hand, vice consumers have more room to seek variety. I think this difference may have led vice consumers to avoid stockpiling more since doing so will take away their freedom of enjoying more diverse products for quite a while. Of course, they can buy other products while stockpiling but it will further increase the inventory holding cost and also might induce more guilt of buying more with stocks at home. Considering that people prefer to seek variety when stockpiling, it is not surprising that vice consumers do not want to stockpile much compared to virtue consumers who have limited options already.

If it were true that vice consumers just hate stockpiling compared to virtue consumers, then what about the moderating effect of impulsiveness? I argue that impulsiveness could still be a moderator when the main effect is not due to self-control but rather to preference over stockpiling. Since hedonics are more attracted to making tempted, impulsive choices right at the moment, trading off the joy of exploring a variety of products to save costs might be more difficult for them compared to prudents. Thus, for vice products, as quantity increases, the willingness to pay per unit will decrease steeper for hedonics than prudents. In contrast, for virtue products, there aren't much variety to seek, so hedonics and prudents do not show such behavior. Hedonics might even stock more since they are more eager to be tempted by low prices (now that drawback of stockpiling is gone). Thus, for virtue products, as quantity increases, the willingness to pay per unit will be similar (or less steep) for hedonics than prudents. This is consistent with the pattern shown in Figure2. I wonder if this argument is valid.

Another limitation of this study is that most of the products studied here are health-related. Although the authors assert that the theory is not entirely due to how health-related the categories are, it would have been much more convincing if more non-health-related categories were included. The definition of relatively virtue-vice used in this study extends beyond health. According to the manipulation of field studies, the concept of vice-virtue also regards long-term social effects or any other long-term costs and benefits. I wonder if non-health categories like fair-trade coffee and regular coffee would show similar patterns of relatively virtue and vice. I think it will be better to include some non-food categories as well.

Lastly, I have some concerns about the wording authors used to ask subjects to assess relatively virtue-vice. When evaluating immediate consequences, subjects were told that long-term health or social effects or others are identical. On the other hand, when evaluating delayed consequences, they were told that taste, ease of use, fun, temptation, or others are identical. I understand that people care more about taste and fun in the short run and more about social effects and health in a long run.

However, I think it may bias people's answers in some cases. To elaborate, I do not think people's preference for fair trade coffee will differ over time since it has rather an immediate effect of advocating fair trade. People do not care more about fair trade as time goes by. Nonetheless, with the wordings used in the manipulation process, people may prefer regular coffee for immediate consequences since it is explicitly mentioned that social effects are identical. In the same way, people may prefer free-trade coffee in the delayed consequences since they do not explicitly mention social effect, which is the key discriminator between free trade coffee and regular coffee. Although I believe that the wording in the manipulations did not bias the answers much, I believe more care should be taken to define vice-virtue and to ask people for assessment.

2. Schwartz, Janet, Daniel Mochon, Lauren Wyper, Joasianse Maroba, Deepak Patel, and Dan Ariely (2014), "Healthier by Precommitment," Psychological Science, 25(2), 538-546.

Main hypothesis: There will be people who voluntarily participate in the commitment device with the potential loss and no additional incentive besides what households were already receiving and the binding commitment effect of the device will affect participants' behavior (in a way that increases healthy food consumption).

This article examines the viability of a counterintuitive incentive system that exerts the threat of forfeiting the incentives in contrast to others that focuses on rewards. The proposed commitment device is practically impactful since it is not only effective but also economically sustainable.

To claim that the proposed commitment device is sustainable, one must also ensure that people will keep participating for a long time. Although the authors conducted a large size field experiment for 6 months, which is long enough to show the viability of the proposed method, 6 months period is not sufficient to claim its sustainability. According to the article, during the experiment, only one-third of the participating households met their goal each month, implying that many households lost their partial cash-back bonus during the experiment. I wonder if they were satisfied with their participation despite losing money. I also wonder how many households were willing to continue the participation after 6 months I understand that 15% of the participants dropped out during the experiment, but other participants could have stayed in the program since they felt lazy to drop out and they knew that the commitment ends in 6 months anyway.

I also wonder how failing to receive a cash-back bonus in one month will affect the household's consumption in the next month. We have read an article that argues that failure can be worse than not having a goal for an all-or-nothing type of goal. The commitment device in this article differs from such type of goal since you have the following months to try again. However, you cannot earn back the cash-back bonus already forfeited last month and since the reward relies on how much healthy food you consume in that month, it is not feasible to double the reward to make up for the previous month. I wonder if the deteriorating effect of failure occurred in this commitment program.

Lastly, I want to propose some ideas for related future research. This study set the goal for all consumers – a 5% increase in healthy food consumption. One can study the effect of letting the participants decide their own goals. This might motivate consumers to actively participate since they chose their own goals. On the other hand, consumers might hesitate to join the program due to the difficulty of setting their goals – they might find this task vague with no idea of what goal would be feasible. One might test the effect of letting participants decide their goals but provide aid such as statistics of their past shopping records or other participants' goals. Another interesting research could be to explore how to modify the given commitment system. For instance, a commitment system where participants receive 50% of the cash-back could economically be less effective but might be more effective in encouraging continued participation. Informing the participants that they can win a cash-back bonus in case they meet the goal instead of telling them their bonus will be forfeited when they fail could also affect people's behavior even though both are basically the same. Giving the participants to apply for a lottery in case they meet their goals consecutively n-times could also further motivate participants. I believe that these ideas will contribute to optimal incentive system design.

3. Baumeister, Roy F., Ellen Bratslavsky, Mark Muraven, and Dianne M. Tice, (1998), "Ego depletion: Is the active self a limited resource?" Journal of Personality and Social Psychology, 74 (May), 1252-65.

Main hypothesis: Self-control and acts of choice share an energy source that depletes temporarily, which impairs the subsequent behavior of self-control or acts of choice.

This study is meaningful in that it consolidates two streams of previous studies on self – self-control and active decision-making. It not only provides a new perspective on explaining various phenomena found earlier such as people avoiding control but also serves as a basis for various future works related to self and volition.

I will first address the logical confounds not addressed by the authors. In experiment 2, an act of choice was not the only difference between the high-choice and no choice (or control) groups. High-choice group was also put in a possibly uncomfortable situation in which they could make a choice but with a highly recommendable answer. Although they were explicitly told that it was up to them to make a choice, the situation made it quite clear that their participation would be useless if they choose otherwise. Participants in the high-choice group might have felt like they were ostensibly given options, which might have led to a feeling of helplessness or less interest in participation. They might have thought, "They do not really want me to choose what I want to choose because they already have an answer. Why should I participate actively when I am only supposed to do what I am expected to do?"

I also had some doubts about experiment 4. The authors assume that passive choice does not engage in an inner process of choosing or deciding. I agree that passive choice and active choice are different but I am not sure if this assumption captures the difference well. How can we tell if a passive choice is a consequence of not engaging in an inner process or an actual liking? I guess the authors tried to avoid this question by using a dull movie (presumably not liked by anyone) in the experiment. However, there is no manipulation check on whether the participants actually were eager to quit watching the movie. Since watching the movie did not require many cognitive resources and you can just mindlessly stare at the screen, some participants (especially those who are tired) could have considered it not that bad. I also wonder how distracting pressing the button was for the passive-quit group. The participants in the passive-quit group had to take care not to accidentally drop their hand off the button, which could be distracting, especially for those who are already tired.

To continue the discussion about experiment 4, I think the authors' claim that ego depletion mediates the passive-option effect is too bold. As mentioned in the article, the passive-option effect is not new and found in previous literature. The tendency of choosing a default (which is known to be universal) could also be related to the passive-option effect. According to the authors, the passive-option effect was only found in the ego-depletion group. This seems to contradict the previous studies unless all the previous experiments' settings were somehow ego-depleting. I think a more thorough investigation of the relationship between the passive-option effect and ego depletion is needed. In addition, I wonder why the authors named the movie watching conditions active-quit and passive-quit. Since they were arguing that ego depletion leads people to act more passively, thereby watching more when they are passively watching and less when they are actively watching, it would have been easier if the names of the conditions were passive-watch and active-watch. I first found it hard to follow the logic because of the notation.

Lastly, I want to go over the self-regulation models that the authors proposed. In the first experiment, the authors argue that among the three models, the third model that states self-regulation resembles energy fits the best. I find all three models interesting and it got me wondering: if self-regulation relies on some inner resources, then can we enlarge the inner resources, thus develop self-regulation? Is the amount of energy that self-regulation (or other acts of self) relies on fixed? Generally, children are worse than adults at controlling themselves. Does this mean that the amount of such energy expands as we grow up? Or could it be the case that we learn how to utilize the energy efficiently while the amount of energy stayed fixed throughout our entire life? I think this skill point of view gives a lot of interesting research ideas.

4. Dewitte, Siegfried, Sabrina Bruyneel, and Kelly Geyskens (2009), "Self-Regulating Enhances Self-Regulation in Subsequent Consumer Decisions Involving Similar Response Conflicts," Journal of Consumer Research, 36(3), 394-405.

Main hypothesis: Self-regulating enhances self-regulation in the subsequent consumer decision if it is similar to the prior task in terms of response conflict. When consecutive tasks are dissimilar, self-regulating impedes self-regulating as in ego-depletion theory.

This article is significant in that it discovers that when consecutive decision makings involve similar response conflicts, the well-known ego-depletion effect can be reversed. It broadens the viewpoint on self-regulation beyond the self-regulatory strength model, generating many interesting research questions. It also contributes to creating a new realm of research by taking an interdisciplinarity approach, linking neuroscientific research and psychological research.

First, I find this article difficult due to unfamiliar concepts such as response conflict and control process. Together with the subjectivity of the term similarity, response conflict similarity and control process similarity were hard to assimilate. The authors use the terms response conflict similarity and control process similarity interchangeably in this article. I wonder if this is always the case. Moreover, people may use different control processes for the same response conflict. For instance, under food constraints (response conflict), someone may watch others eat (먹방) for vicarious pleasure while others choose to avoid any stimuli that remind them of food. Then do people use the same control process consistently for the same response conflict? If they do not, then the assumption that response conflict similarity and control process similarity are closely related and thus could be used interchangeably, might not hold.

Second, I wonder if the cognitive control process can be trained. The cognitive control model argues that when response conflict is detected, control processes change the sensitivity to stimuli, thereby improving current task execution at the expense of decreased flexibility. I wonder if we repeat the same response conflict, then the change of control process and its reversion could be automated or become more efficient with more experience, in terms of time. On the other hand, from the performance point of view, I wonder if the cognitive control process can be refined. If the same response conflict is repeated, will we learn over time how to focus on relevant cues and keep away from distraction in a long run?

Third, I am interested in whether the finding of this article only applies to consecutive decisions. For instance, in experiment 4, if participants were shown a dissimilar task and then a similar task after going through 12 tasks of the same response conflict, what will the result be like for the last similar task? Will self-regulation enhance despite one dissimilar task in the middle? Would participants show self-regulation depletion in the two consecutive tasks since they are both different from their prior? If the participants took a break between two similar tasks, would self-regulation in the subsequent task still enhance? Does the length of break time moderate enhancing effect? I think answering these questions could deeper the understanding of self-control