[MSB637] Week9 Thought Paper **20223484 이연수**

1. Berger, Jonah and Katherine L. Milkman (2011), "What Makes Online Content Viral?" Journal of Marketing Research, 49(2), 192-205.

Main hypothesis: Positive content is more viral than negative content in general. The activation (or arousal) evoked by the emotion has a positive impact on virality

This article is important since it initiated the research on what drives virality. It demonstrates the role of emotion in inducing people to share the content and also shows the mediating effect of arousal by using both real-world data analysis and in-lab experiments. It also has managerial implications in that it proposes another way content can get viral without relying on opinion leaders.

I would like to make some suggestions on how to improve the model in study 1. First, the authors' hypothesis about activation was confusing at first since there is a slight difference between their arguments in study 1 and study 3. In study 1, they conclude that "affect-ladened content, regardless of valence, is more likely to make the most e-mailed list". On the contrary, in study 3, they show that high-sadness content is less likely to be shared than low-sadness content since sadness deactivates, rather than activates. According to the statement on affect-ladened content in study 1, this result should have been reversed since high sadness content is more affect-ladened than low sadness content. I acknowledge that the main argument that they intended to make is that high arousal (activation) drives virality. If so, I think it would have been better to create two emotionality variables, each for activating/deactivating emotion. Then, the model can separately estimate the effects of emotionality on activating emotion (e.g. amusement, anger) and deactivating emotion (e.g. sadness), which are predicted to be positive and negative, respectively. The authors did include specific emotion terms, but this only captures how each valence influences virality differently and fails to capture how the degree of emotion has different effects on virality depending on the type of emotion.

Second, although the authors tried to include several control variables to account for alternative explanations, I think there still could be an omitted variable bias. Specifically, the authors argue that they disentangled preferential transmission from mere base rates by including all published articles. That is, the presented effect of positivity does not include the effect of people encountering positive articles more than negative ones, i.e., the presented positivity coefficient represents the differences between virality of positive and negative content when all others (including encounter possibility) hold equal. The underlying assumption for this statement is that the probability of encountering a positive article is the same as that of a negative article, given that both articles are identical in terms of all control variables (e.g. home page location, author's fame). I believe how intriguing the title is and whether there is a summary on the homepage with the title (vs. just the title) could also affect the probability of encountering a positive/negative article. When reading newspapers, people usually skim through the titles first. An article is more likely to catch one's eyes if it has a more intriguing or bold title. I understand that how intriguing the title is could be subjective and difficult to measure. I suggest that it could be approximated by the length of the title or whether it includes extreme words such as 'never', or it could be coded by humans, like the way specific emotion variables were coded. In figure 1, I notice that even in the same section, some articles have titles and brief summaries on the home page while others only show titles. I think this might also affect the encounter possibility since having the summary alongside the title could be interpreted as being more important to the home page users.

Lastly, it would have been better if the authors reported the marginal effect in study 1 since the coefficients of the logistic regression model cannot be interpreted directly. The authors do provide interpretation based on the one-standard-deviation increase, but since the variation is different for each variable, additionally presenting the average marginal effect would have been helpful. In addition, the authors argue that their results in study 1 "remained meaningfully unchanged in terms of magnitude and significance" in Table 4, Model 6, but the coefficient of positivity is much bigger compared to that of other models. The coefficient of emotionality in model 5 is also very different from those of other models. I wonder if these models are really consistent in terms of magnitude and significance. I think the authors should have been clearer about the robustness check.

2. Lerner, Jennifer S., Deborah A Small, and George Loewenstein (2004), "Heart Strings and Purse Strings: Carryover Effects of Emotions on Economic Decisions," Psychological Science, 15(5), 337-341.

Main hypothesis: Emotion triggered will have a carryover effect and influence the subsequent financial valuation. Specifically, disgust will reduce both selling and choice price (more in selling price) whereas sadness will reduce the selling price and increase the choice price.

This article makes a significant finding that the carryover effects of emotions occur even when subsequent behavior involves financial consequences and also shows how different emotions (disgust and sadness), which are both negative can have a different impact on subsequent economical decision-making. It is also noteworthy that the effect of emotion is big enough to cancel out or reduce the endowment effect.

I first want to point out a logical confound in the experiment that has not been properly addressed. In the preliminary analysis, the authors provide manipulation check results - participants in the disgust (sadness) condition self-reported more disgust (sadness) than others. I believe there also should be an examination of whether the control group is well-controlled. That is, it should be checked whether participants in the control group did not feel any other specific emotion significantly. There is a chance that the clip portraying fish shown to the control group lead participants to feel unintended emotions such as calmness or peacefulness. Since the control group's results serve as a basis for which treatment groups' results can be compared, control groups feeling any specific emotion could bias the result.

I understand the reasons why the authors investigated the choice price instead of the buy price. However, most of the economic decision-making that people encounter in real life is more related to the buy price. Thus, to give realistic managerial implications, it is necessary to check how emotions affect economic decisions in a buy situation. Considering that buying situation involves losing money that one already possesses, the result might be different from that of the choice situation (as noted by the authors). Giving participants money for experiment participation in advance and then giving them a series of choices that involves exchanging part of the money to get a highlighter set can be used as a buying condition. The comparison between the buying and choice conditions will allow the investigation of how feelings of losing money influence consumers' decision-making and its effect size.

I wonder what factors can influence the findings of this study. In other words, how can we prevent our emotions from affecting subsequent unrelated decisions? For instance, if the participants were explicitly required to make their purchase rationally, would the result be different? Before that, do participants realize that their decision-making is being influenced by emotions? I think the influence of emotion is subconscious, and thus the result will be unchanged even when participants try to be rational. I wonder if the results would still be the same if the participants are given time to reflect on their current feeling and track where that feeling comes from before making decisions? I believe this might change the result since participants can now cognize their current feeling (and that this feeling is not related to current appraisal) more consciously. I also wonder if the economic value involved in the subsequent decision-making will moderate the effect size of the carryover effect. As the economic value gets bigger, the more cautious and prudent people will be, which might lead to a less carryover effect. If so, I wonder if the carryover effect of emotion is related to system 1 and system 2 cognitive processes. Are people able to disentangle the carryover effect from their evaluation and override their first instinctive choice if given time to think about it? In a similar vein, I also wonder if the carryover effect size will be bigger for impulsive people compared to prudent people. I believe addressing these questions will help understand the underlying process of the carryover effect and how to aid people in overcoming the influence of irrelevant previous emotions.

3. Garg, Nitika, Brian Wansink and J. Jeffrey Inman (2007), "The Influence of Incidental Affect on Consumers' Food Intake," Journal of Marketing, 71(1) 194-206

Main hypothesis: Incidental affect influences people's consumption levels, such that for a hedonic product, consumption levels are happy < neutral < sad, and this affect-consumption level relationship for a hedonic product is attenuated by the presence of nutritional information. For a less hedonic product, the affect-consumption level is reversed to sad < neutral < happy. Moreover, for sad people, the consumption level is higher when they are offered a hedonic product (vs. less hedonic) and for happy people, the consumption level is higher when they are offered a less hedonic (vs. hedonic) product.

This article is important in that it establishes an integrative theoretical framework underlying the incidental affect that encompasses both the affective evaluation model and the mood management model. It also replicates the incidental affect on a general population and identifies the boundary conditions - nutritional information and product type. The moderating role of nutritional information provides practical implications for public policymakers and consumers.

The proposed framework is based on the assumption that hedonic products are perceived as having mood-changing properties while less hedonic products are not. As mentioned briefly in the discussion, this does not hold for all hedonic/less-hedonic products. Moreover, some people may find a specific product as mood-changing but others may not. Even for the same person, perception of mood-changing cues may differ over time or mood. Specifically, I think how people perceive an activity/product as having mood-changing properties depends on their current mood. For instance, I eat snacks a lot when I am stressed but when my stress level is above a certain limit, I refrain from any snacks. Perhaps, when people's emotions get intense, they perceive an activity/product as less mood-changing since they feel like it cannot change their current mood. If it were true, then extremely sad people might consume fewer hedonic products in comparison to moderately sad or neutral people since they do not find the hedonic product as mood-changing and thus rely on affective evaluation instead, regarding the product as less captivating. I think future research could investigate more the moderating role of product type and intensity of emotion to find out more restricted boundary conditions.

Next, I would like to discuss the moderating role of nutritional information. In this study, participants were forced to read the nutritional information as part of the experimental process. However, as mentioned in the discussion part, people seldom read the nutritional information in the real life. Making the nutritional information salient could make more people read it but I wonder if this saliency effect will be big enough. There are many reasons people do not pay attention to nutritional information. While the inconspicuous design is definitely one of the reasons, I believe a more important reason is that people do not feel the need to read the nutritional information unless they are restricting their diets. People have lay beliefs about the nutritional state of foods (e.g. popcorns are bad for your health, raisins are not). Thus, unless they want to strictly keep track of their diet, they do not care enough to read the nutritional information. Another reason for not paying attention to the nutritional information is because people see it everywhere on every product. Our eyes may be so used to seeing nutritional information that they regard it as not important. In this case, even if nutritional information gets more salient, we will get used to it over time and it will not become salient again. In addition, people sometimes may prefer not to see nutritional information due to the predicted negative emotion. For instance, people in bad mood may want to eat popcorn but at the same time, they know that popcorns are bad for your health. To get rid of cognitive dissonance, people may try to suppress their thought about health, which leads them to avoid reading the nutritional information. That is, while nutritional information is capable of decreasing the consumption of hedonic food for sad individuals, it might not have such an effect in real life since they refrain from reading the information.

Lastly, as I was reading this week's articles, I wondered if emotion and mood are different concepts. Last week before class, I had a discussion with Youngjun Kim, who told me that self-control and self-regulation feels different to him. I argued that those were the same concepts since they were used interchangeably, only to find out in class that those two are indeed different concepts, which are frequently confused by many. I wonder if emotion, mood, and valence mean the same thing and if

they were not, what are the differences between the concepts, and how important is the distinction between these concepts.

4. Gilbert, Daniel T. and Timothy D. Wilson (2007), "Prospection: Experiencing the Future," Science, 317, 1351-54.

This article reviews previous literature on the prospection of hedonic consequences of events that haven't been previously experienced. I first found it interesting that this study focuses on hedonic reactions. People simulate future events frequently and derive many anticipations based on them. I wonder if other types of anticipations have other mechanisms. For instance, someone may simulate proposing to one's partner before actually taking it to the action. By doing so, he/she tries to estimate the partner's future reaction. The estimation of another person's reaction cannot be acquired through the prospection mechanism demonstrated in this paper. I wonder how people estimate others' behavior in one's simulation. From real-life experience, I think it will also be prone to errors - people often behave in unpredicted ways. I wonder if there is a framework (like the one proposed in this article) for it as well.

I also wonder if the proposed prefeeling process differs for positive and negative emotions. This article uses many examples and some of the simulated events evoke positive feelings while others do not. Based on my knowledge, 'hedonic' is related to positive feelings, which got me a little confused. Does the theoretical framework in this article only apply to positive feelings induced by simulation or does it apply to all feelings? This article also reminded me of the incidental affect. If we literally feel the prefeelings, as suggested in this article, then do these prefeelings influence subsequent unrelated events? For example, if I simulate winning a lottery, then I will prefeel the extreme thrill. Will it affect my subsequent mood and behavior?

I also wonder how individual differences will affect this process. For instance, there are some popular memes about people with intuition (N) - sensing (S) Myers-Briggs type. Those memes exaggerate how N-type people always have crazy imaginations going inside them, focusing on all the details, while S-type people do not imagine things much. I wonder if these kinds of differences affect the quality of prospection of hedonic reactions. Do imaginative people prefeel more vividly compared to others? Are N-type people less prone to error since they care more about details and contextual factors? Lastly, the ponderation of the N-S type led me to wonder how imagination and prospection are different. I assume that prospection regards only the events that could happen in the future while imagination is not. For instance, I can imagine 'if I were a boy…' but I cannot prospect the same thing. The real question is, is prospection a subset of imagination? Can it be defined as an imagination process that regards probable future events of the individual? What about simulation?