Easy on the Mind, Easy on the Wallet: Fluency Predicts Stock and Currency Valuation

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What makes items seem valuable? In six studies, we suggest that fluently (easily) processed currency instruments and financial stocks are valued more highly than their less fluent but otherwise similar counterparts. In Studies 1-3, participants perceived greater purchasing power in fluently processed forms of currency, and in Studies 4-6, we showed that stocks with simple names and ticker codes outperformed their disfluently named stocks in the New York Stock Exchange and American Exchange.

[to cite]:

[url]:
http://www.acrwebsite.org/volumes/14513/volumes/v36/NA-36

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**SYMPOSIMUM SUMMARY**

What Makes Ideas Stick? How Characteristics and Contexts of Messages Influence Their Success

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**SESSION OVERVIEW**

Most approaches to persuasive communication focus on aspects of people. Certain individuals are more credible (e.g., experts; Petty et al. 1983) or influential (e.g., opinion leaders; Rogers 1995) and consequently are important to increase persuasion or help messages diffuse. Rather than focusing on people, however, a new stream of research has begun to examine how characteristics of ideas or messages themselves influence their staying power.

This session showcases some of this emerging research and illustrates how focusing on characteristics of ideas or messages themselves provides insight into what sticks and succeeds. For example, when consumers are initially exposed to an idea, what characteristics lead the idea to be perceived as compelling? Over time, which ideas are more memorable, and how do message and environmental characteristics determine people’s ability to recall the messages? And what additional factors might one incorporate to revisit the question of source credibility, such as to examine how the timing of source information impacts stickiness of information? Four papers and a discussant address these ideas.

Alter and Oppenheimer (Paper #1) investigate which ideas seem most compelling on initial exposure. How does the fluency of stock names and ticker codes influence their performance? Results of several lab and archival studies demonstrate the surprising impact of fluent stock names and ticker codes.

Ratner and Riis (Paper #2) investigate how message characteristics impact stickiness after a delay. They show that the relatively simple USDA MyPyramid guideline is not simple enough, and that an even simpler guideline is much easier to remember, is more motivating, and leads to better food choices a full month after a brief exposure. Such a sticky guideline could improve many of the myriad poor choices that contribute to an individual’s obesity.

When are certain urban legends more prevalent and how can we use these findings to get people to eat more fruits and vegetables? Berger (Paper #3) examines how the prevalence of related stimuli in the environment influences stickiness and success. Four studies demonstrate that products are more likely to be chosen and messages are more likely to be successful when their habitats, or set of related environmental triggers, are more prevalent and lead the messages to be remembered.

Finally, Birj, Jihar, and Sengupta (Paper #4) consider how the timing of source credibility information influences stickiness. They find that the impact of source credibility is particularly pronounced when source information is provided after the message. Bad news attributed to a low-credibility source is less sticky when provided after the message. Results suggest that the stickiness therefore can depend critically on the timing of source information.

Chip Heath (Stanford University), the discussant, will integrate the talks, provide his own insights, and suggest directions for future research. Taken together, this symposium addresses how message characteristics influence staying power, and how the environment can enhance or undermine the success of the message. The papers contribute to a research area that is relevant to the diverse interests of many ACR members, including those interested in what makes ideas catch on, attitudes, persuasion, decision making, memory, health behavior, and attitude-behavior consistency.

**EXTENDED ABSTRACTS**

“Easy on the Mind, Easy on the Wallet: Fluency Predicts Stock and Currency Valuation”

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Why do some items seem more valuable than others? Although people routinely assess the value of stimuli in the environment, the processes that underlie valuation estimates are not well understood. Across six studies, we found that processing fluency—the subjective experience of ease with which people process information—fluenced valuation estimates for monetary currency and financial stocks.

We first examined the effects of fluency on currency valuation. In three studies, participants estimated how many of each of ten inexpensive items (e.g., thumbtacks, gumballs) they could purchase with one of two monetary instruments that shared the same nominal value, but differed according to their familiarity (and, therefore, the ease with which they were processed).

In Study 1, participants either estimated the purchasing power of a common (and therefore fluently processed) $1 bill or a rare (and therefore disfluently processed) $1 Susan B. Anthony coin, one of which was depicted at the top of the questionnaire. Participants presented with the $1 bill believed they could purchase significantly more of the ten items than those who were presented with the rare $1 coin. Supporting our proposed mechanism, participants’ familiarity with the rare coin was positively correlated with their estimates of its purchasing power.

We were concerned that participants may have perceived less value in coins than bills, so participants in Study 2 estimated the purchasing power of two common (fluently processed) $1 bills or a rare (disfluently processed) $2 bill. As in Study 1, participants believed the two $1 bills had significantly greater purchasing power than the rare $2 bill. Again, participants who were more familiar with the $2 bill assumed that it had greater purchasing power.

One concern with Study 2 was that participants may have overvalued the two $1 notes merely because there were two notes compared with the single note in the disfluent condition. Accordingly, in Study 3 participants estimated the purchasing power of a common $1 bill or a subtly altered $1 bill that differed from the original in several barely noticeable respects. We were also concerned that disfluency might generally attenuate valuation estimates, so we included a third condition with a real $1 bill in which the 10 items were printed in a difficult-to-read (disfluent) font. We expected participants to perceive the items as less valuable, thereby assuming the $1 bill had greater purchasing power relative to participants in the other conditions. As in Studies 1 and 2, participants believed the real $1 bill had greater purchasing power than the fake $1 bill, despite failing to recognize that it was in fact fabricated. Furthermore, participants believed the real $1 bill had greater purchasing power when the items were printed in a disfluent font. This result suggests that stimuli are valued according to how fluent they are specifically, and that disfluency does not generally depress the tendency to consume or perceive value in the environment at large.
Having shown that fluency influenced perceptions of purchasing power, we sought to show that fluently perceived purchasable commodities—in this case, financial stocks—seem more valuable than their disfluently perceived counterparts. In Study 4, undergraduates predicted how stocks with fluent (e.g., Barnings) and disfluent (e.g., Xagibdan) names would perform over six months. Participants anticipated appreciation in the stocks with simple names, and depreciation in the stocks with complex names.

Although Study 4 demonstrated a causal link between fluency and valuation, we were concerned that investors might ignore fluency when faced with many other cues. Accordingly, in Studies 5 and 6 we investigated the performance of real stocks shortly after they entered the New York Stock Exchange (NYSE) and American Exchange (AMEX).

In Study 5, undergraduates rated how easily they could pronounce the names of 89 companies that entered the NYSE between 1990 and 2004. We then compared these ratings to each stock’s performance, and found that more fluently named stocks performed more strongly during their first week in the market.

The fluent names in Study 5 may have conveyed different semantic information from the disfluent names, so in Study 6, we examined whether 660 stocks with pronounceable ticker codes (e.g., LAM) outperformed stocks with unpronounceable ticker codes (e.g., HLY) in the NYSE and AMEX. Again, stocks with pronounceable ticker codes outperformed those with unpronounceable ticker codes over the first day of trading.

In sum, students and investors valued fluently processed currency and financial stocks more highly than their disfluently processed counterparts. These findings suggest that marketers benefit from creating simple, straightforward, and “sticky” products and advertising campaigns.

“What Good is A Guideline That People Can’t Remember?: The Benefits of Extreme Simplicity”  
Rebecca Ratner, University of Maryland, USA  
Jason Riis, Harvard University, USA

Marketers provide consumer guidelines for many purposes, including product care and consumer well-being. Many such guidelines do not require stickiness, because written documents can be consulted when needed. Some guidelines, however, are needed so frequently that stickiness should be a high priority. Dietary guidelines are one example, as people make numerous food choices each day. The Department of Agriculture’s (2005) customized MyPyramid nutrition guideline was designed to be simple enough to change consumer behavior. Its colorful display provides a visualization of the recommended daily consumption from each of 5 food groups. However, even this relative simplicity may be insufficient to make MyPyramid stick. With obesity levels rising, there is little evidence that consumers are following the guideline. Given the urgency of the obesity epidemic, the stickiness of nutritional guidelines needs to be better understood. We report several studies suggesting that only extremely simple guidelines have much chance of motivating consumers to adopt a more healthful diet.

Previous research has linked complex information and complex choice sets (Iyengar and Lepper 2000) with inferior decision making. Here, we suggest that even modest complexity in a guideline hampers both a consumer’s ability to remember it and motivation to follow it. In one study, participants were presented either with a simple guideline (to eat fruits and vegetables as half of their food intake) or the more complex guideline from the USDA’s interactive MyPyramid website. Immediately after the self-paced exposure to one of the guidelines, participants rated their interest in adhering to the guideline, the ease of remembering the guideline, and the scientific rigor of the guideline. One month later, participants completed a food selection task and then were tested for recall of the guideline.

At Time 1, respondents reported greater motivation to adhere to the simpler guideline than to MyPyramid. Motivation to adhere to the guideline was predicted significantly by how accurately they thought they would be able to remember it (and only marginally by their perceptions of the guideline’s scientific rigor). Most importantly, these same participants showed significant behavioral effects of the guideline manipulation after a delay of one month: participants in the simpler guideline condition selected significantly more fruits and vegetables than did the MyPyramid participants. Recall measures indicated that a majority who had been in the simpler guideline condition correctly recalled their guideline after one month, whereas less than one percent in the MyPyramid condition was able to recall all five recommended numbers after one month. These results are particularly noteworthy given that the MyPyramid participants spent an average of almost 30 seconds studying the guideline, compared to under 10 seconds for participants in the simpler guideline condition.

The results suggest that the compliance benefits of very simple consumer guidelines can be substantial. Consumers are more motivated to follow such guidelines, and they find them much easier to remember, although they believe these are based less on scientific research. We show that even a brief exposure to such a guideline has positive effects on dietary choices after a month-long delay. Future studies should include more extensive tests of diet change, and additional manipulations of guideline exposure. But given that obesity results from thousands of poor food choices over many years, it is encouraging that substantial improvements in the stickiness of dietary guidelines may eliminate some of those poor choices.

“Cultural Habitats: How Fit with the Environment Influences the Stickiness of Products and the Success of Ideas”  
Jonah Berger, University of Pennsylvania, USA

Why do some products and ideas succeed and spread contagiously while others fail? Though researchers have often focused on how aspects of individuals (e.g., how “influential” they are, Katz and Lazarsfeld 1955), or social network structure (e.g., Watts and Dodds 2007) influences whether cultural items spread, much less research has looked at how aspects of these cultural items themselves (e.g., characteristics of products and ideas) influence their success.

We argue that fit with, or frequency of cueing by, the surrounding environment has an important influence on success. Product recall is important to purchase (Nedungadi 1990), but for something to be recalled it must first be cued by the environment, and little work has examined how the distribution of cues in the environment might influence success. We suggest that products or ideas have a habitat, or set of environmental triggers that encourage people to recall, transmit, and act on them. Just as certain regions or areas contain the food and conditions particular plants and animals need to survive, products and ideas have triggers that prime people to be more likely to think about and act on them. These triggers can be self-generated, or encountered in the environment, and can be any sort of stimuli (e.g., newspaper articles, conversation topics, or stimuli encountered while walking down the street) that activate or prime the related product or idea (Anderson 1995).

Importantly, cue prevalence varies across different environmental contexts. People encounter the color green more around St. Patrick’s Day and more articles about politics in election years. We argue that the success of products and ideas will vary with the
prevalence of such related cues. Specifically, we suggest that products and ideas will be more likely to stick in memory and succeed more broadly if they are cued more frequently by the environment.

Study 1 examined whether people would eat more fruits and vegetables if a slogan reminding them to do so was linked to a prevalent environmental cue. Participants recorded what they ate every day over two weeks. Half-way through the period, as part of an ostensibly unrelated study, they were repeatedly exposed to a slogan about fruit and vegetable consumption. Importantly, students’ real-world environments varied: some ate in dining halls that used trays while others did not. Building on this difference, some students received a slogan which linked fruit and vegetable consumption to this cue. Others received a control slogan which was liked more in a pre-test but not cued by the environment. Results indicated that increased cueing by the environment led to greater fruit and vegetable consumption. Compared to the control conditions (same environment, different slogan and different environment, same slogan) participants whose environments cued them to think of the slogan ate 25% more fruits and vegetables.

Study 2 investigated how habitat prevalence influences the success of catchphrases. Participants had dyadic conversations regarding pre-selected topics. They were also given a long list of catchphrases and asked to use some of them in their conversations. Pretesting generated topics that provided more frequent cues for certain catchphrases (e.g., fuzzy math) as opposed to others (e.g., lockbox). Results indicated that particular catchphrases were more likely to be used in conversations which provided more frequent cues.

The next two studies examined whether habitat prevalence would predict success in the broader cultural environment. In the late 1990s, an email circulated suggesting that Microsoft needed people to forward a particular message to test their new email tracing program. If the message reached 1000 people, everyone who forwarded it would get $1000. We tracked the prevalence of this rumor over time using a searchable newsgroup database (Study 3). To proxy for habitat prevalence, we recorded the number of Top 50 newspaper articles that mentioned Bill Gates over that same period. An OLS regression found that habitat prevalence predicted rumor success; the rumor appeared more frequently in times when there was greater public attention to related cues (i.e, Bill Gates). Study 4 found similar results examining the success of a political factoid (about the school problems of the 1940s vs. the 1980s). The factoid appeared more frequently in times when there were more frequent cues to related issues in the public discourse.

This research demonstrates that the prevalence of related cues influences stickiness and success. While people often focus on making messages read more persuasively, these findings illustrate the importance of linking public health campaigns and other initiatives to prevalent environmental cue. Attending to the structure of the environment can increase success.

“When Bad News Sticks: The Effect of Valence and the Timing of Source Credibility on Attitude Strength”
Matthias Birk, Humboldt-University of Berlin, Germany
Gita Johar, Columbia University, USA
Jaideep Sengupta, Hong Kong University of Science & Technology, China

What makes bad news stick? When will they hurt consumers’ brand attitudes and shake their confidence in their evaluations? Consumers are frequently confronted with negative brand information without a clear understanding of how trustworthy the information really is. With the rise of consumer self reports on the Internet, source credibility often remains ambiguous or it becomes clear only after reading the information. In our context, “stickiness” refers to how the negative information affects the strength of the attitude, so that it can continue to have an impact in the future (e.g., the link to behavioral intentions). We propose that negative information can have either a strengthening or weakening effect on brand attitudes depending on two critical factors: a) the credibility of the source providing the information; and b) whether the recipient is made aware of source credibility before or after processing the negative information.

Prior research has shown that early knowledge that a message source is highly credible lowers message elaboration, as recipients accept the new information without much processing (Priester et al. 1999). Based on Grice’s work on conversational maxims (see Grice, 1975) we predict that when relevant (i.e. either credible or non-credible) source information is provided after negative brand information, this will alert consumers to feel that they should have paid greater heed to the brand information. This will cause them to carefully re-think the information that they have just processed. In contrast, when irrelevant or ambiguous source information is given after, this should not lead to heightened elaboration. When the source is credible, such heightened elaboration should lead to increased attitude ambivalence, thus producing an overall weakening effect (cf. Sengupta and Johar 2002). A different prediction obtains, when the source of information is viewed as non-credible.

In this case, once again, being made aware of the source’s lack of credibility after exposure to the negative brand information should cause consumers to carefully rethink this information—however, the low source credibility should cause the elaboration to primarily take the form of counter-argumentation. Such counterarguing should lead to the strengthening of the original attitude, in line with recent findings in the arena of attitude resistance (see Tormala and Petty 2002). When source information is ambiguous neither a weakening nor a strengthening effect should be obtained.

Experiment 1 tested these hypotheses by first providing participants with initial positive brand information about a DVD-Player, followed by negative brand information under four conditions: negative information from a credible source vs. an ambiguous source and whether the source was known prior to or after processing the negative information. The two critical dependent variables were: a) the extent to which the negative information was elaborated; and b) the accessibility of the final brand attitude. In line with our prediction, given a credible source, elaboration was heightened when the credibility of the source was revealed after exposure to the negative information (vs. before); further, this heightened elaboration led to the hypothesized lowering of attitude accessibility. For the ambiguous source, however, no differences in elaboration or accessibility were obtained for the source-before vs. source-after conditions.

Experiment 2 provided participants with a credible source vs. a non-credible source, varying time of source information as in experiment 1. Additional strength-related dependent variables were included. Results from this study supported both the predicted strengthening and weakening effects. Replicating Experiment 1 results for the credible source conditions revealed a weakening effect: making participants aware of source credibility after (vs. before) exposure to the negative brand information led to increased elaboration, increased attitude ambivalence, lowered accessibility and a lowered correspondence between attitudes and behavior. On the other hand, results for the non-credible source supported a strengthening effect: the source-after (vs. source-before) condition led to heightened elaboration, no difference in ambivalence, higher attitude accessibility and a stronger attitude-intention link.

Our results suggest that consumers re-access and elaborate on information when they are subsequently told that the source of the
information was either extremely credible or extremely non-credible, not however when subsequent source information is ambiguous. As a result, bad news is most sticky when presented by a high-credibility source after the information is initially processed, and by a low-credibility source before the information is processed. A third experiment, now in progress, tests the elaboration mechanism presumed to underlie the findings by manipulating the ability to process information. The results have interesting implications on how and when bad news should be presented for maximal impact.

REFERENCES