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Claremont McKenna College

How to Increase Elaboration Levels:

An Adapted Elaboration Likelihood Model

Submitted to Professor David Day

by Alex McDonald

for Senior Thesis Spring 2021

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Abstract:

Persuasion is a topic that has been debated for centuries, yet scientific literature surrounding the topic has been almost non-existent until 50 years ago. A popular persuasion model thus far, the Elaboration Likelihood Model, provides a framework for studying persuasion but lacks ease of application. I suggest an improvement to the model by including self-referencing and interaction to clarify how to apply the research and provide a real-world application with this adapted model.

"My most beautiful achievement in life was my ability to persuade my wife to marry

me." - Winston Churchill

Introduction

Despite leading Britain to a triumphant victory in World War II, Churchill still

claims that his biggest achievement was his ability to persuade. Persuasion is key to

success, especially as a leader. For these reasons, people generally desire to persuade in

more effective ways. Yet, most instead settle with the idea that persuasion is something

only bestowed upon the greats like Churchill. Many do not realize that behind this

complex curtain of persuasion, there lies a vast collection of science that can offer as a

guide for how to better influence and persuade others. Armed with this knowledge, one

can increase their persuasion significantly and find more success in every facet of their

lives.

One might think that using tactics to persuade their peers might be manipulative

or deceptive, but that is far from the truth. Much like a hammer can be used to fix and to

destroy, persuasion can be used as a tool to help and to hurt. In the right hands,

persuasion can be used to accomplish incredible things. In business, we can persuade

people to realize a problem and to move forward with a solution. In our relationships, we

can persuade others to tackle hard challenges because we know that they will be better

for it. In our family lives, we can persuade our children to head to bed so they can focus

better in school. Persuasion is crucial to our success and thanks to many scholars on the

matter like Dr. Robert Cialdini, we now have a road map to better this tool. Cialdini

outlines six principles of persuasion and backs up each principle with empirical scientific

studies (Cialdini, 2006). From his work and many others, it is clear that one can choose to be more or less persuasive, and so becoming a student of persuasion should be a priority for everyone that hopes to achieve success.

After reviewing the literature, I believe that I have found the best way to persuade. The ideal circumstance is to persuade using a strong argument on a listener with high elaboration, or attention, levels. However, the available literature on the topic only discusses how to plan with given elaboration levels, resulting in a dearth of available literature on how to increase elaboration levels to get to the ideal persuasive circumstance. I plan to address this gap by examining the literature to find the best practices for how to increase elaboration levels in order to persuade more effectively.

To accomplish this goal, I will add to the most popular persuasion model to not only discuss how to persuade given certain elaboration levels but also how to increase these elaboration levels. In order to effectively convey this information, I will first need to summarize the history of persuasion research and the model that I add to, the Elaboration Likelihood Model, to arm the reader with a foundation of what scholars on persuasion have discovered thus far. Second, I will discuss the ethics of using these persuasive tactics. Persuasion is a powerful force and so one must ensure that they do not abuse this power. Third, I will present the two most prevalent ways of increasing these elaboration levels. This will be the key to maximizing our persuasive efforts in a way that also keeps people persuaded after an interaction with the communicator. Finally, I will evaluate Coronavirus messaging with this new persuasive lens, followed by crafting my own persuasive Coronavirus message using my adapted persuasion model. My hope is that after reading this paper, one will not only be better informed but ready to implement

this research into their daily life. A tool is only valuable so long as we use it, and the goal of this paper is to persuade people to wield this tool with both integrity and confidence.

The Foundations of Persuasion Research

Although formal research on persuasion is fairly new, persuasion literature has been around since the onset of civilized society. The first and most influential work on persuasion comes from over 2,000 years ago in Ancient Greece. Aristotle's *Rhetoric* provided the common Grecian with a guide on how to best persuade. In his work, Aristotle teaches three modes of persuasion: Ethos (credibility), Logos (reason), and Pathos (audience emotions). He says that you can persuade in the most effective way by establishing yourself as a credible person, by providing a reasonable argument, and by appealing to the emotions of your audience. Aristotle claims that one should have a mix of all three modes in order to maximize persuasive effectiveness, and it seems to work. According to King's College professor Edith Hall, *Rhetoric* was so useful that the ruling class tried to keep this work a secret for fear of the commoners becoming too influential (Hall, 2019). But with the introduction of the scientific method, claims are no longer sufficient. Science now rules society and thanks to the "godfather of persuasion," the science on persuasion is plentiful.

Science-based persuasion research essentially started in the second half of the 20th century when Dr. Robert Cialdini provided scientific evidence for favoring certain persuasive tactics over others. After decades of research, Cialdini came up with his six principles of persuasion which he outlined in his seminal book Influence: The Psychology of Persuasion (2006). The six principles are reciprocation, commitment and

consistency, social proof, liking, authority, and scarcity. In exploring each tactic which he called "weapons of influence," Cialdini conducted studies to support each of his principles. Through writing this book, Cialdini did not intend that this information be used by manipulation artists to take advantage of the less educated. He originally wanted his research to serve to "inoculate" people from being manipulated through the unethical use of different persuasion tactics. In the ending of his book, after readers have armed themselves with Cialdini's principles, he tells readers that they "should be willing to use boycott, threat, confrontation, censure, tirade, nearly anything, to retaliate" against those who abuse this power (Cialdini, 1984, pg. 280). Those armed with this knowledge can easily use this for malicious purposes and so as now educated students of persuasion, Cialdini asks them to stand up to the manipulators and prevent them from taking advantage of the brain's compliance with persuasion tactics. Cialdini was a firm believer in upholding ethical standards for using these principles in the real world, which then makes it necessary to discuss the ethics of persuasion before returning to the foundational persuasion research.

When dealing with people in any capacity, ethics should be at the forefront of the discussion. Some might assume that persuasion is inherently unethical, but persuasion scholars like McCroskey (1982) would actually describe it as "ethically neutral." Persuasion is simply the tool through which we carry out our actions and this can result in both benevolent and malevolent outcomes. To provide an example of how persuasion tactics can be abused, one only needs to review Milgram's famous shock study. In this study, people were asked to inflict pain in the form of an electric shock to a confederate (a trained actor) for every question that they answered incorrectly (Milgram, 1963).

Participants were not harmed in the study as the purpose was to understand to what extent people could be persuaded to inflict pain on others. What Milgram found was that these persuasive efforts worked *shockingly* well. People started shocking confederates to a purportedly lethal level because of an authoritative figure's directive that "you must continue." Milgram exposed a human willingness to harm due to someone in a lab coat instructing them to do so. Following this study, one should remember to trust the internal compass over an authority figure if they are being asked to do something unethical. Although the outcome here was only theoretical, Milgram intended for this study to show that Americans would not comply with authority in the same way that Nazi officers did during WWII. Unfortunately, Milgram found that persuasive tactics mixed with authoritative clothing was all that was necessary to convince any participant to shock strangers at a lethal level. This example shows the possible kinds of malevolent outcomes should persuasive tactics be abused.

Conversely, an example of a benevolent outcome from persuasion would be from a study by Weber and Martin (2006) on increasing the number of registered organ donors. In their study, Weber and Martin tested different themes of messages to see what worked best to encourage the most compliance with donation requests. What they found was that narrative messages worked much better than statistics-filled messages for encouraging people to sign organ donor consent cards, likely because this information was easier to digest for those not wanting to exhibit mental energy. Through this study, we can theorize that more people should use narrative messages to convince non-motivated listeners to register for organ donation, resulting in a beneficial outcome for society as a whole. These two examples show that persuasion can be used to harm to help

and that it is up to the practitioner to make sure that this tool is used to better the world rather than tear it down.

A study key to understanding persuasion research, and for understanding the rest of this thesis, is the Elaboration Likelihood Model, or ELM (Petty & Cacioppo, 1986). The ELM is a flowchart designed to resemble how a listener hears and focuses on the information being presented to them. I chose to use this model to analyze persuasive efforts because of how widely it has been referenced (nearly 12,000 recorded citations at the time of writing this thesis).

Before discussing this model, a few key terms should be defined. The first term, elaboration, is defined as the process of relating incoming message content to pre-existing beliefs, or in simpler terms, focusing harder on message content (Hamilton, 2012). Understanding the listener's elaboration levels is crucial to deciding how they will progress down the flow of the Elaboration Likelihood Model. The second term to understand is the central route of persuasion. The central route of persuasion consists of using logic, arguments, and facts to convince the audience to change their mind. Persuading using the central route is the preferred route of persuasion as this is known to result in the most attitude change and attitude persistence. Third, the peripheral route of persuasion consists of mental shortcuts that one can take to decipher information without spending excessive mental energy. Common examples of mental shortcuts to decipher information can be humor, music, attractive communicators, etc. Interestingly enough, the peripheral route of persuasion has recently gained popularity in other disciplines including behavioral economics, just under a different name.

Richard Thaler, winner of the Economic Sciences Nobel Prize, recently defined his term nudge as "any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives" (Thaler & Sunstein, 2008, p. 6). Thaler and Sunstein later expound upon this by saying that if one were to put fruit at eye level, this would count as a nudge. In this example, when the seller places fruit at eye level, he or she is essentially just providing a peripheral cue in the form of availability to influence and persuade the consumer to buy the fruit. Although Richard Thaler is a brilliant economist, this idea of a nudge has been around for a longer time in psychology; it was just under the name of the peripheral route of persuasion instead of a nudge.
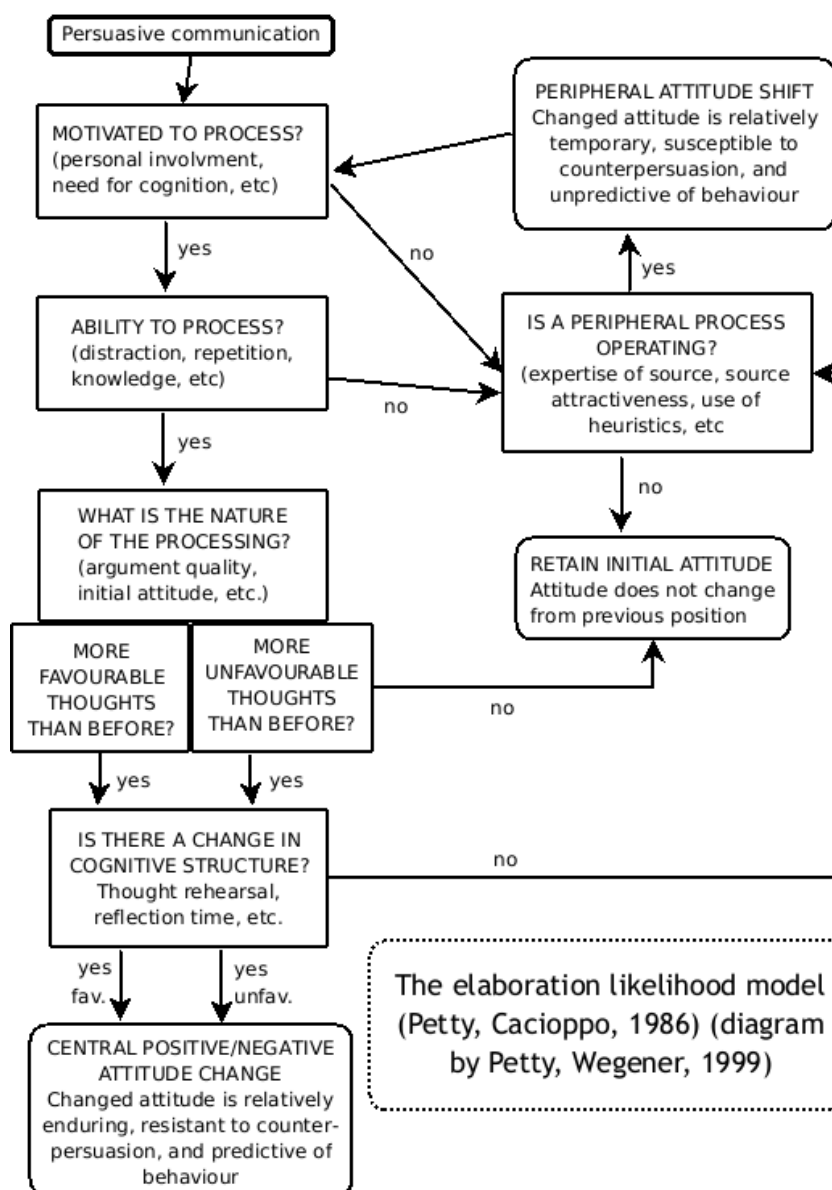
In progressing through the ELM's central route, the listener must pass three theoretical gates of processing before one can conclude that a message has changed someone's attitude. The first gate is personal involvement in the message or an obvious need for elaboration. Before proceeding down the central route, our listener must believe that this incoming information is relevant to their life or in need of their attention. If this condition is satisfied, then the message will continue through the central route until it hits the second gate: the need for mental capacity. The term mental capacity means that there must be no such things like distractions, gaps in knowledge, mental illnesses, or anything else that might hinder the comprehension of the message's progression through the central route. After the message passes this gate, the communicator must consider if the listener indeed changed his or her mind about one of their beliefs. For example, if the listener used to believe that climate change was a myth but after listening to the message believes that climate change is real, this would be proof of passing this last gate. If the

message flawlessly passes through all of these barriers, one can conclude that they have just persuaded using the central route of persuasion, which according to the ELM is the most preferable route to take. However, most messages will fail to make it past each of these gates.

If the message fails to progress through the central route at any point, it will either result in no attitude change or possible attitude change using the peripheral route of persuasion (which is especially common given the current environment in which social media bombards users with countless messages). The peripheral route consists of mental shortcuts, sometimes referred to as heuristics to understand information. This means that the listener does not want to spend too much mental energy and would rather look for cues like humor to decide if a message is valuable and worth understanding. According to the ELM, the downside with the peripheral route is that once one's attitude changes, these attitudes have less of a likelihood of persisting since the idea was never elaborated upon, or linked to pre-existing beliefs. Since elaboration, by definition, is contingent upon linking information to pre-existing ideas, this would be considered the less effective route of persuasion.

Although the peripheral route corresponds with lower levels of elaboration, there are certain situations in which the peripheral route is preferred. At this point, one might notice that advertisements consistently use the peripheral route because they can instill attitude change for those who likely are not paying full attention to their message. For example, one study by Cho (1999) found that humor, music, attractive sources, and visuals were the determining factors for changing attitudes in online advertisements. Another study by Meyers-Levy and Peracchio (1995) found that beautiful colors were the

best way to persuade others in newspaper advertisements. These examples show us that if

one were to settle with a listener with low elaboration, they should take advantage of

these more peripheral factors to get their point across. To see a complete diagram of the

ELM and how messages flow through these gates using central or peripheral routes,

please refer to the figure below.

Persuasive communication

MOTIVATED TO PROCESS?
(personal involvment,
need for cognition, etc)

yes

ABILITY TO PROCESS?
(distraction, repetition,
knowledge, etc)

yes

WHAT IS THE NATURE
OF THE PROCESSING?
(argument quality,
initial attitude, etc.)

MORE
FAVOURABLE
THOUGHTS
THAN BEFORE?

MORE
UNFAVOURABLE
THOUGHTS
THAN BEFORE?

no

yes fav.

yes unfav.

IS THERE A CHANGE IN
COGNITIVE STRUCTURE?
Thought rehearsal,
reflection time, etc.

no

yes
fav.

yes
unfav.

CENTRAL POSITIVE/NEGATIVE
ATTITUDE CHANGE
Changed attitude is relatively
enduring, resistant to counter-
persuasion, and predictive of
behaviour

no

PERIPHERAL ATTITUDE SHIFT
Changed attitude is relatively
temporary, susceptible to
counterpersuasion, and
unpredictive of behaviour

yes

IS A PERIPHERAL PROCESS
OPERATING?
(expertise of source, source
attractiveness, use of
heuristics, etc

no

RETAIN INITIAL ATTITUDE
Attitude does not change
from previous position

The elaboration likelihood model
(Petty, Cacioppo, 1986) (diagram
by Petty, Wegener, 1999)

By looking at the ELM model, one can see that high elaboration levels are required to take the central route, but how does one measure such an intangible concept? In the ELM, Petty and Cacioppo (1986) used a thought-listing technique to measure elaboration levels. Thought-listing consists of communicating a message to a recipient and then asking them to write down any thoughts that came to their mind. Petty and Cacioppo argued that the number of message-relevant thoughts (as determined by trained message coders) provides a "rough index" for how to measure these elaboration levels. Since the ELM, plenty of other researchers have also used the thought-listing technique for measuring elaboration. For example, in a more recent study by Shen and Seung (2017), the authors provided further support for why one should use the thought-listing technique to measure elaboration as it relates to achieving attitude change. Although there is no perfect measure for evaluating elaboration levels, thought-listing has remained the most widely used measure for understanding people's focus levels on the argument itself and how it relates to increased attitude change. Despite the rigorous ELM flowchart provided by Petty and Cacioppo, the authors failed to include that there is an alternative path to take when faced with those lower in elaboration: to raise the listener's level of elaboration in order to once again take the central route. Staying within the central route is crucial for lasting persuasive effectiveness and this is why I adapted their ELM model to include how to increase elaboration levels in order to stay within the central route. The adapted ELM can be found below.
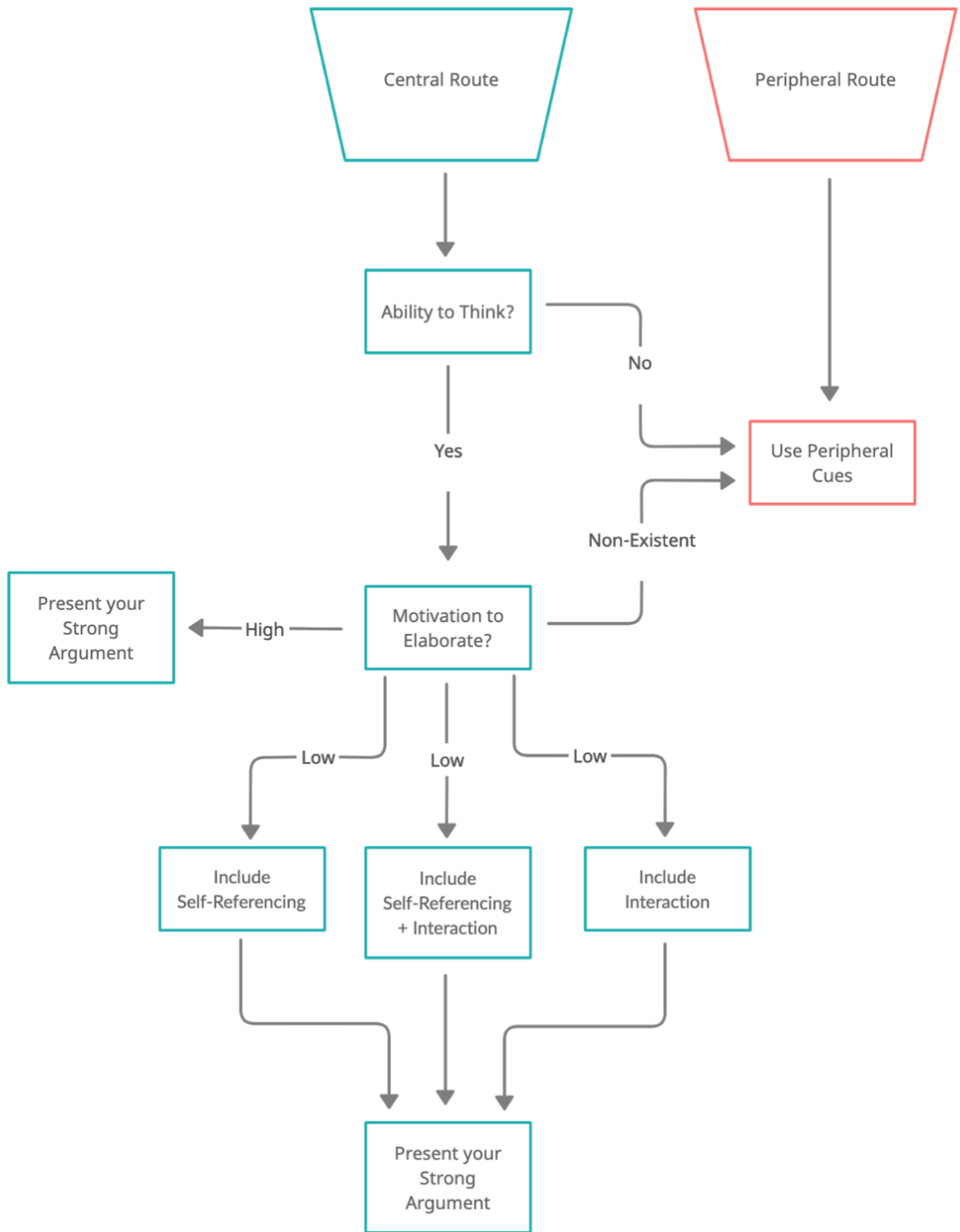
Ways to Increase Elaboration

Now that I have discussed the ELM in its full capacity, I will examine how to increase this elaboration level in listeners assuming that the communicator's message contains a "strong argument". According to the ELM, a strong argument is an argument that contains statistics or logical reasoning to persuade, which requires a high level of elaboration to process. For the purposes of this thesis, one can assume that they have a strong argument prepared and that the only hurdle in their persuasive efforts is increasing elaboration levels. After reviewing the literature, I have found the two most effective ways of increasing elaboration levels: self-referencing and interaction. According to Burnkrant and Unnava (1995), self-referencing is a type of processing in which information is related to the "self-structure." The term self-structure is used to highlight the availability of links between any incoming information and pre-existing beliefs, with these successful links resulting in increased message elaboration (Anderson & Reder, 1979). In other words, any advertisement that includes the pronoun "you" would be incorporating self-referencing. To further cement this theory, a meta-analysis of over 100 studies provides support for the cause and effect relationship of self-referencing on increasing levels of elaboration (Symons & Johnson, 1997).

To provide an example of self-referencing in action, one can look at a study on the effects of self-referencing on elaboration levels in online advertisements. Escalas (2007) presented participants with either a neutral message or a self-referencing message to promote a hypothetical shoe brand named Westerly shoes. The neutral message showed a picture of a man running through the forest with a caption that read, "introducing Westerly running shoes..." before going into a benefit statement.

Conversely, the self-referencing message showed the same picture but had a caption that read, "we'd like to introduce you to Westerly running shoes, designed with you in mind..." before going into a benefit statement. Using the thought listing measure of elaboration, Escalas found that the advertisement with self-referencing resulted in higher elaboration levels, which thus resulted in higher attitude changes in the form of more favorable brand evaluations. One can even see this same effect extended from online advertisements to movie showings. Even when it's not the director's intent, scholars on the topic can still see that self-referencing induces higher levels of elaboration for comedy moviegoers (Das et al., 2017). Participants in this study watched a couple of clips from the sports-comedy movie "Cool Runnings" and were later asked about their intentions to be active themselves. Das et al. found that as opposed to the movie clip with no self-referencing, the movie clip with self-referencing resulted in higher intention scores to be active. Through these studies, we can see that in both static online advertisements and non-intentionally persuasive film clips, self-referencing increases elaboration levels which then increases persuasion in the form of attitude change.

Another way to increase elaboration levels is to encourage the listener or participant to interact with the message being delivered to them. Interaction can be defined by the extent to which one can modify "the form and content of a mediated environment in real time" (Steuer, 1992, p. 14). Interaction is crucial to persuasion because it invites the participant or listener to be active in their process to evaluate a certain attitude, which necessarily increases elaboration. For example, in E-commerce, shoppers are sometimes allowed to modify the form of the product they're viewing to increase interactivity. Xu and Sundar (2012) conducted a study with an online shopping

site that allowed customers to interact with their product by being able to zoom in and out or by dragging the mouse around to see products from a 360-degree angle. This level of interactive capability compared to a static product picture dramatically increased the number of products sold. Xu and Sundar believe this is because of how customers can easily relate the interactive product to holding and rotating the product in real life. In this example, interaction increases elaboration (through relating to pre-existing notions of shopping in-person), which subsequently increases persuasion (measured as a higher number of products sold). To provide another example outside of E-commerce, one can see that interaction can even be used to influence politics. A study by Sundar et al. (2003) found that the number of informational buttons (buttons that result in a drop-down of information) that are available on a political candidate's website increased participants' intent to vote for said candidate. For those hoping to campaign for specific candidates, website interactivity should thus be a high priority. Whether one looks at economic or political environments, interactivity seems to increase persuasion in multiple contexts.

It should be noted, however, that like most things in life, these principles can only be used in moderation. If one were to self-reference too much or to introduce too much interactivity, then persuasive capabilities actually decrease. The reason for this is that if there is too much elaboration on a given topic, it can be perceived as cognitive effort and will then be generally avoided (Fiske & Taylor, 1984). Further, when too much cognitive effort is spent elaborating and there is no resolution or tangible benefits as a result of this effort, negative views of the elaborated topic emerge (Garbarino & Edell, 1997).

To give an example of elaborating too much from a self-referencing perspective, one can take a look at a study on BMW vehicle perceptions by Wanke et al. (1997). The

researchers asked participants to either list one or ten reasons why *they* might want to purchase a BMW over a Mercedes. What they found was that when participants only had to think of one reason, their perceptions of BMW were higher than before the study. This means that elaborating on a positive aspect of BMW's (by self-referencing) changed their perceptions in a similarly positive way. However, when participants were asked to list ten reasons why they might prefer a BMW over a Mercedes, their perceptions of a BMW actually decreased. This is likely due to their excessive elaboration levels triggering an adverse reaction through too much perceived effort, resulting in negative feelings towards a BMW after the study. Through Wanke et al.'s study, we can see that increasing elaboration can actually have negative consequences on attempts to persuade, and should thus be avoided.

This same effect of excessive elaboration can also be seen in circumstances with too much interactivity. In a study by Liu-Thompson and Shrum (2009), the authors showed participants either a low-interactivity website or a high-interactivity website for a fake consumer brand. What they found was that those browsing the highly interactive website actually had less favorable attitudes of the product compared to those who browsed on the low interaction website. The authors claimed that this result was due to the fact that for most of the participants, the highly interactive website was difficult to use which elicited frustration. This frustration would then be associated with the product itself and would convince the consumer that the product itself was less desirable. In this study, one can see that even with interactivity, they must keep it below a certain threshold to ensure that they do not frustrate anyone involved to the point where they associate a product with a negative experience. However, discussing perhaps outdated studies on

how to increase elaboration levels cannot adequately explain the ways in which one can and should increase elaboration levels. Therefore, given the exorbitant number of messages being constructed around Coronavirus safety protocols, I decided to provide a modern-day example of these tactics in action by evaluating and improving upon a message from Duke Health's website.

An Evaluation of Coronavirus Messaging

During the height of the Coronavirus pandemic, the Center for Disease Control and Prevention (CDC) acted as the baseline for Americans hoping to understand how to respond to the pandemic. Unfortunately, even the CDC did not know how to properly combat this virus, leading to a plethora of false information or "fake news," spreading across the country. The CDC, for example, issued warnings telling people to not wear masks, followed by a message in the next month telling people that it was now necessary to wear face masks. Some speculate that this inconsistency in Coronavirus preventative messaging was due to the Trump administration's interference with the CDC (Chow, 2021). Regardless of the cause, people began ignoring the CDC and instead turned to social media for their Coronavirus messaging. Unfortunately, this resulted in an entirely new issue: the spread of "fake news." Fully five percent of coronavirus related content on Facebook was found to send blatantly false information (Mejova & Kalimeri, 2020), resulting in Facebook needing to take down seven million posts, while issuing a warning label on 98 million posts (Lerman, 2020).

In a country that has become less trustworthy of government regulated sources of information, social media and non-government regulated sources have taken the forefront

of Coronavirus messaging. Due to so many people no longer getting their Coronavirus related news from the CDC, I chose to evaluate Coronavirus messaging in a third party source. To take a look at what is most effective, one can take a look at a study by Banker and Park (2020) in which they tested several advertisement captions on Facebook. What they found was that advertisements that used self-referencing were more effective for eliciting click-throughs to CDC content compared to captions that did not self-reference. Specifically, the captions either read "protect your community" or "protect yourself", and the protect yourself caption resulted in many more click-throughs.

Taking what we know about the current climate surrounding Coronavirus messaging and how the same principles seem to still boost persuasion during the time of the Coronavirus pandemic, I will now construct my own persuasive message to encourage mask-wearing behavior. As a baseline, I will start with a message that I found from an article on Duke Health's website (Biggers, 2020):

First, I would like to make it clear that this example is one such example available on their website and does not reflect Duke Health's entire messaging campaign. Other Coronavirus related messages do incorporate self-referencing or interaction. Nonetheless,

I will use this as a starting point to improve upon. Following the adapted ELM provided earlier in this thesis, one can observe that there is no self-referencing or interaction within this message. There is no connection to the "self-structure" using you or some other way to connect to the self and there is no way to interact with this message. For sake of clarity, I will assume that I am trying to persuade a theoretical person named George, an intellectually capable individual (i.e., one who is not mentally challenged) who is scrolling the internet after a long day of work. According to my adapted ELM, the first step is to judge if George has the mental capacity to comprehend messages. Given that he is intellectually capable, the message bypasses this gate and proceeds to the next step. Now, I determine what his motivation for elaboration looks like. Based on the fact that he just got off of work, I can assume that his motivation to elaborate on Coronavirus-related messaging is low. Given that his elaboration is too low to be persuaded by a strong argument, I will use both self-referencing and interaction to motivate him to increase his elaboration levels. To do this, I present him with this adapted message instead:

Wear your mask to show off your KINDNESS

Wear Both Masks
Those who wear two masks as opposed to one mask are 32% less likely to contract Coronavirus.

In this new Coronavirus related message, there is both a reference to the self by including "your" and a hypothetically clickable button. Each mask is now supposed to represent an interactive button that initiates a drop-down consisting of a strong argument (in this case an argument with statistics included). This message should prove to be successful in persuading others because I have just included a reference to the self and an interactive component, which should both raise George's elaboration levels high enough to where a strong argument can persuade using the central route. After scrolling through the website and clicking on this Coronavirus message, George should now be persuaded to wear his mask more often than before.

Conclusion

This thesis has attempted to answer the question of not just how to persuade but how to persuade by increasing elaboration levels, a topic that has been the focus of very little research. We have reviewed literature and ethics surrounding persuasion, discussed the two most prevalent ways to increase elaboration levels, and have applied such findings to revamping a real Coronavirus related message. Specifically, we have learned that in order to persuade more effectively and to increase the amount of time that these newly formed attitudes last within the audience, we should persuade using the central route.

To persuade using the central route, audience elaboration levels must be high. In order to ensure that audience elaboration levels are high, the literature points to self-referencing and interaction within the message to persuade in the most effective way. Nonetheless, we must always keep in mind that self-referencing and interaction within

the message still have diminishing and eventually negative returns on elaboration levels. If one were to make someone self-reference too much or make the interaction too cumbersome, the high level of cognitive effort could eventually lead to a frustrated individual. Once frustrated and upset, the literature tells us that they will associate this negative feeling with the message itself, therefore making people less compliant with incoming messages than they were prior to the message. In order to effectively persuade using the central route of persuasion, one must make sure to include self-referencing and interaction but not overdo it to the point of causing frustration. According to the literature, the revised Duke Health Coronavirus message applies the appropriate number of tactics to ensure frustration does not occur.

However, like any study, there are still limitations to the literature reviewed in this thesis. First, this guide to persuasion can only serve as helpful if we assume that the actual message we are sending is a strong argument. Thus far, we have defined a strong argument as an argument that uses reasoning and statistics in a logical way to convince someone to change their attitude about a certain topic. If there was an area to discuss further, it would be what constitutes a strong argument and providing a system to measure how strong an argument is. Second, the revamped Duke Health Coronavirus related message is hypothetical and has not been tested for persuasive effectiveness yet. One should consider conducting a study to determine if the revamping of our message increases elaboration levels as hypothesized, which then increases persuasion. Without an actual test to see if the message performs better than the original Duke Health message, this theory will have to remain an educated speculation based on studies thus far on how to increase elaboration levels to then increase persuasion assuming we have a strong

argument. Nonetheless, this adapted ELM should act as a helpful guide on understanding as well as implementing persuasion research in a way that is both concise and easy to use. The hope is that after reading this thesis, one can be both ethical and ready to use this adapted ELM in their daily lives.

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