A Test of the Elaboration Likelihood Model in an Electronic Medium:

The ELM and its Compatibility with Electronic Fundraising

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Intro/Abstract

This study researches the effects of visual errors, specifically typing mistakes referred to as "typos," in the field of fundraising, how these typing errors affect persuasive ability in an electronic message, and the likelihood of the message receiver ignoring typos in message processing. The study focuses extensively on the Elaboration Likelihood Model and its effectiveness in fundraising campaigns. I have studied the Elaboration Likelihood Model over the past year, and I realized that its principles might become inconsistent when transplanted from interpersonal interaction to electronic communication. The research involved the creation of a self-promoted fundraising campaign aimed to target local employees and business owners of the University of North Alabama community. In order to ensure motivation and cognitive involvement from the message recipients, the campaign focused on funding a scholarship for a University of North Alabama Honors Program student. Business owners/employees received one of four messages varying in "argument strength" and "typos present." Two hypotheses were developed concerning the predictions drawn from the Elaboration Likelihood Model's about business owner/employee response.

Originally, two messages were composed based on persuasive strength: one quantifiably weak message and one quantifiably strong message. These messages were then altered to include three typing errors per message, however the original messages were saved before alteration. Thus, in totality four messages were composed:

1) Strong message with three typos

2) Strong message with zero typos

3) Weak message with three typos

4) Weak message with zero typos

Motivation for Study

Throughout study of the ELM, individuals might have noticed that many ELM studies and principles focus specifically on interpersonal interaction and not electronic interaction. There have been studies dealing with technology and the ELM before, but the researcher felt the need of a study to test the validity of the ELM in a strictly electronic medium. This is important as electronic communication continues to gain prominence in persuasion (email, online advertising, etc.). One of the longest standing theories in persuasion, the ELM continues to be taught in classrooms and implemented by corporations for business strategy. In this new electronic age, businesses must be aware of the validity/invalidity of the ELM when transferred to an electronic medium. The theory is specifically applied to electronic fundraising efforts. Fundraising plays an integral role in many organizations' success, from political campaigns to non-profit groups. The results could drastically change marketing strategies for businesses.

The study addresses: 1) the theory and hypotheses for this experiment 2) the research steps taken for the study itself 3) an analysis of results and the conclusions drawn from these results 4) recommendations for future studies on this topic.

The purpose of this study is to test the ELM and its relationship with fundraising. This study wanted to determine:

Q1: Do motivated individuals ignore visual presentation in favor of argument strength in an electronic medium?

Q2: Do individuals unmotivated to elaborate on the message react differently based on visual errors in the electronic medium?

Q3: Do the basic tenants of the Elaboration Likelihood Model transfer from interpersonal persuasion to an electronic medium?

Theory

The Elaboration Likelihood Model, originally created by Richard Petty and John Caccioppo (1986a, 1986b), remains one of the most commonly studied models of persuasion. This model presents two separate paths to persuasion that operate in conjunction. The first route is known as *central processing*. Central processing involves *cognitive elaboration*, or an intellectual focus on and digestion of the content of the persuasive message. Individuals engaging in cognitive elaboration focus on argument strength, relevancy of evidence & reasoning and pay lesser amounts of attention to presentation format. The primary focus of this path of elaboration is the content of the message itself. Richard Perloff summarizes the central route by writing, "central route processing is characterized by cognitive elaboration. Under this route, individuals engage in a great deal of thinking about the message, and they ultimately incorporate these thoughts into their attitudinal schema (1993)." The second route of persuasion is the *peripheral route*. Individuals engaging in this route pay little attention to message content and focus on elements unrelated to the subject matter: visual cues, delivery style, attractiveness of source, etc. The cues are unrelated to content.

The routes are determined by the amount of elaboration, or issue-related thinking, the receiver partakes in. High levels of elaboration are associated with the central route of persuasion, while low levels or elaboration are associated with the peripheral route of persuasion. Elaboration is mainly affected by the motivation and ability to elaborate by the receiver (Perloff, 1993). For this study, motivation and ability to elaborate were broken down into four sub-factors based on the works of Daniel J. O'Keefe (2002): 1) Ability: Distraction 2) Ability: Prior Knowledge 3) Motivation: Personal Relevance 4) Motivation: Need for Cognition.

The two sub-categories affecting one's *ability* to elaborate are *distraction* and *prior knowledge*. O'Keefe considers distraction any external stimuli that directly interfere with the message elaboration in the receiver. Obviously, if a receiver faces a distraction, the receiver is unable to fully elaborate and cognitively focus on the argument. If the receiver is unable to cognitively elaborate on an issue, the individual tends to take the peripheral route of processing. The other factor affecting ability to elaborate is *prior knowledge*. Previous studies have shown that prior knowledge

of the subject matter directly increases issue-relevant thinking, improves influence of argument strength and decreases effectiveness of peripheral cues (O'Keefe, 2002; Laczniak, Muehling, & Carlson, 1991).

The two factors affecting *motivation* are *personal relevance* and *need for cognition*. Personal relevance causes increased elaboration amongst the receiver base. Studies have shown that as the receiver finds more personal relevance in the message content, the cognitive thinking of the receiver rises to encourage a more central route of processing (Petty, Cacioppo, & Goldman, 1981). The second *motivation* factor is *need for cognition*, or "the tendency of an individual to engage in and enjoy thinking" (Cacioppo & Petty, 1982). Typically, this is a personal disposition regarding an individual's enjoyment in cognitive thinking. An increased need for cognition has been found to be associated with an increased likelihood of central route processing.

Addressing these four factors became a primary concern in the study to ensure individuals would not be swayed to either central or peripheral processing by anything other than the visual error of "typos" inserted into the message. In order to address the receiver's *ability to elaborate* based on *distraction*, the message was simplified and direct. The message was decidedly short, able to be read in less than sixty seconds, and contained no words over three syllables to ensure fluid reading. The study could not however account for distractions taking place in the habitat of the receiver when reading the message though. The study also focused on local Shoals businesses, as these businesses would have a guaranteed *prior knowledge* of the subject matter: the University of North Alabama and scholarships for its students.

Personal relevance was addressed by relying on the economic relationship between the University of North Alabama and businesses in the local economy. According to the 2012 Economic Impact Survey, conducted by the University of North Alabama Department of Economics, the University of North Alabama is directly responsible for 4,433 jobs and $279,935,300 in total spending in the local Shoals economy (http://www.una.edu/impactstudy). This obviously generates large amounts of business for those businesses in the Shoals area. From this, the team made the following assumption:

Assumption1: Business owners in the Shoals community would have a positive attitude towards the University of North Alabama.

As *need for cognition* remains a personal trait, varying from individual to individual, the study was unable to influence this variable.

Research Model

The experiment was designed to ensure all factors of the message were formatted to encourage people to engage in central processing. According to the ELM, if individuals engage in central processing, visual factors will have little influence over the reception of the message. Thus, individuals would be more inclined to overlook the typos placed within the messages. Also, due to the simplification of messages and the identity of the message sender being a college student, a lack of credibility exists. Petty and Cacioppo (1986a) write that credibility exists as a peripheral cue. When individuals lack expertise in the topic, sources rely on the credibility of the sender to validate the argument (Benoit, 1987). This can be attributed to the restrictions of email as the medium. Based on previous research and prior knowledge of the ELM, the following hypotheses were developed.

Hypothesis 1: Local business owners/employees will take the central processing route and cater to content of the message, ignoring the typos (visual imperfections) in the messages when typos are present.

Hypothesis 2: Regardless of message strength and typos, businesses will remain unwilling to donate money to the project based on lack of credibility allowed by the selected electronic medium.

Hypothesis 3: Argument strength will be disregarded when typos are present but will have positive impact when typos are not present.
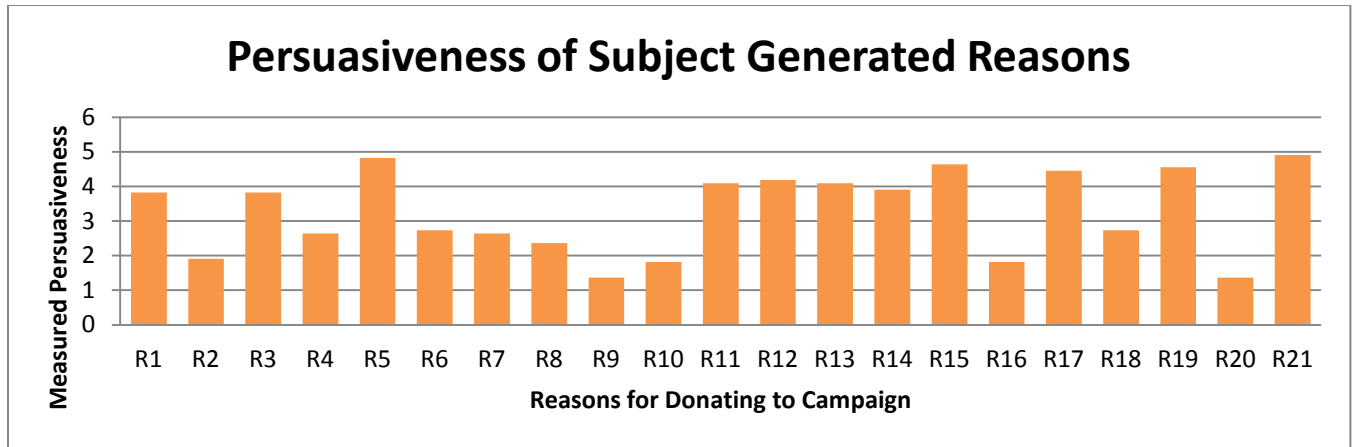
Research Method

Process 1: Intended to develop unbiased reasons as to why businesses would donate funds to the fundraising project. Individuals were asked to list their "3 Best and Worst Reasons" in order to provide material for strong and weak messages.

- 7 individuals were first given a detailed description of the fundraising campaign and the incentives provided for monetary sponsors. These individuals then ranked their "3 Best Reasons" and "3 Worst Reasons" to donate to the campaign.

Process 2: After generating 21 reasons as to why businesses should donate, a separate group of individuals were asked to scale these 21 reasons from low persuasiveness to high persuasiveness on a 1-6 scale. This was intended to quantify the most and least persuasive reasons for construction of a "weak" and "strong" message.

- These "Reasons" were then compiled into one cumulative list. A separate group of 31 individuals were emailed the list and asked to score the "Reasons" based on "Persuasiveness, low to high"; 1-6 scale. 11 individuals responded. The results are compiled into a chart below.

Persuasiveness of Subject Generated Reasons

Measured Persuasiveness (y-axis, scale 0 to 6)

Reasons for Donating to Campaign (x-axis: R1 through R21)

Process 3: These results were recorded, and the top three (R5, R19, R21) and bottom three (R9, R16, R20) reasons on the scale were used to compose two separate messages. The messages were identical barring the "reasons to donate." The top three reasons were placed into a message intended to be the "strong message." The bottom three reasons were inserted to create a "weak message." The messages need to be scaled again to assure a measurable persuasive difference between the two.

- Messages were distributed to a new group of subjects. These individuals were asked to read the messages and rate the persuasive strength of the each message from 1-7. Results showed that the "strong message" was quantifiably more persuasive than the "weak message." 13 individuals

Process 4: The two messages were then divided into four separate messages. 1) Strong message with three typos 2) Strong message with zero typos 3) Weak message with three typos 4) Weak message with zero typos. Three typos were inserted into the designated messages. It needed to be established that the typos were visible and would not be overlooked by the message receivers.

- Five individuals surveyed messages and sought typos to ensure the typos were visible and would not be overlooked. Individuals found all three typos in the messages. This ensured the typos would not be overlooked.

Process 5: After ensuring the messages were quantifiably different as "strong" and "weak" variants, and establishing the visibility of the typos in designated messages, businesses were ready to be contacted.
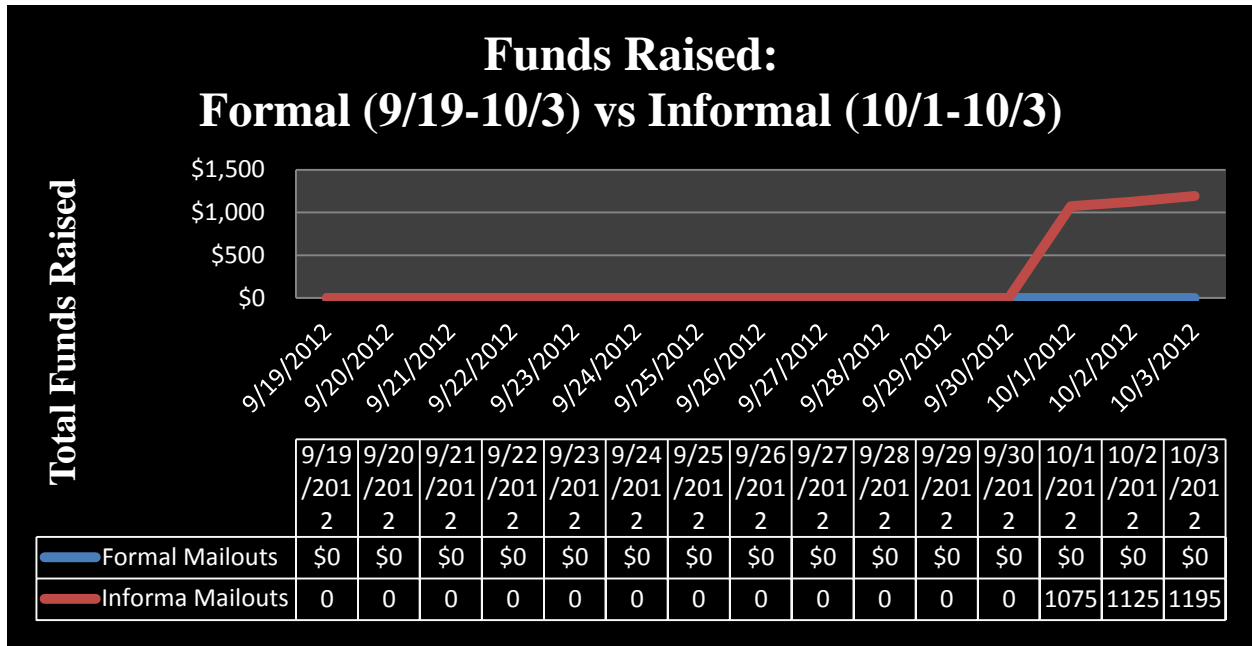
- Four message variations (listed below) were then mailed out to 52 local businesses with an e-attachment for donating to the fundraising campaign. 13 businesses were designated by random assignment to each of the four messages.

Results and Hypotheses Analysis

Businesses were given a fourteen day window to respond (DATES). At the end of the fourteen day window, zero of the businesses had responded with any type of message or monetary pledge. During the last three days of this fourteen day window, an informal push for fundraising completely unrelated to this study was launched. This launch involved a major push on social media, word of mouth, and the launching of a website. $1195 was raised in three days of social media campaigning; all posts contained links to the official fundraising campaign website. 60 mail-outs were sent to University of North Alabama Professors, 150 to Florence businesses, and 43 to personal friends. $600 raised within two weeks based on results from the informal mail-outs. $1795 total raised from informal mail-outs and social media marketing in a similar fourteen day window.

The following chart shows the lack of funds raised during formal mailings and the funds generated during the first three days of informal mailings/PR.

Funds Raised:
Formal (9/19-10/3) vs Informal (10/1-10/3)

	9/19/2012	9/20/2012	9/21/2012	9/22/2012	9/23/2012	9/24/2012	9/25/2012	9/26/2012	9/27/2012	9/28/2012	9/29/2012	9/30/2012	10/1/2012	10/2/2012	10/3/2012
Formal Mailouts	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Informa Mailouts	0	0	0	0	0	0	0	0	0	0	0	0	1075	1125	1195

These results spurred the following conclusions to be drawn based on each hypothesis.

Hypothesis 1: Local business owners/employees will take the central processing route and cater to content of the message, ignoring the typos (visual imperfections) in the messages when typos are present.

Analysis: Due to lack of results, this hypothesis was unable to be assessed as empirically valid or invalid. However, when considering informal results, it would appear that individuals were more likely to respond when given visual cues leading to source credibility (ex. project website). Individuals also donated more often and donated greater amounts based upon a personal relationship with the researcher. These two factors directly affect source credibility, an element of the peripheral route. This would indicate many individuals were more likely to take the peripheral route in message elaboration.

Hypothesis 2: Regardless of message strength and typos, businesses will remain unwilling to donate money to the project based on lack of credibility allowed by the selected electronic medium.

Analysis: This hypothesis was proven accurate. Out of fifty two businesses emailed, zero responded. When comparing these results to informal marketing results, one can infer that the hypothesis was accurate as individuals were more likely to donate when presented with higher source credibility.

Hypothesis 3: Argument strength will be disregarded when typos are present but will have positive impact when typos are not present.

Analysis: Again, a lack of evidence prevents an empirical analysis .

Research Conclusion

- Businesses were either unaffected by message strength and visual presentation or were affected but not motivated enough to take action and donate money to the fundraising campaign.

- Regardless of the message strength, businesses did not find the source credible enough to invest in the fundraising campaign.

- One can infer from lack of response from "formal mail-outs" and overwhelming response from "informal mail-outs with website link" that there simply was not enough credibility to invoke response from business owners/employees.

- Due to lack of response from formal messaging, the Elaboration Likelihood Model still needs thorough testing in the fundraising field as this study was inconclusive.

While the original messages were ill-received and garnered zero response, the follow-up informal mail-outs were met with great success. I would informally correlate this with the launch of the official project website. Out of the $1195 raised on Day 1, four donors were unfamiliar to me and donated based solely on content read on the project website. The website, and all info within, increased credibility enough to persuade individual to donate to the fundraising campaign.

Recommendations for Future Study

As only 37/178 original businesses contacted used email as a means of external communication, I would recommend the study be transferred to a different electronic medium (e.g.. Facebook, Twitter, etc.) This would allow a larger audience to be reached. The sample size should also be greatly increased. Unfortunately, this project was limited by lack of email usage by local business, severely restricting the pool of test subjects. Individuals should also focus on providing added levels of credibility to all message types as businesses will be unwilling to part with their money otherwise.

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