

8-16-1996

The Persuasion Effects of Time Pressure and Source Expertise in an Audit Setting: An Elaboration Likelihood Application

Terri Herron
University of Montana

Follow this and additional works at: <http://aisel.aisnet.org/amcis1996>

Recommended Citation

Herron, Terri, "The Persuasion Effects of Time Pressure and Source Expertise in an Audit Setting: An Elaboration Likelihood Application" (1996). *AMCIS 1996 Proceedings*. 292.
<http://aisel.aisnet.org/amcis1996/292>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 1996 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

The Persuasion Effects of Time Pressure and Source Expertise in an Audit Setting: An Elaboration Likelihood Application

Terri Herron
The University of Montana

Introduction

Many of an independent auditor's activities include discussions with the client on various issues. This discussion process presents opportunities for the client to attempt to persuade the auditor. The Elaboration Likelihood Model of persuasion (ELM: Petty and Cacioppo 1986) predicts the results of persuasive attempts, considering factors related to the message, the environment, and the communicator. Time pressure is a contextual reality in an audit environment; its effect on the persuasion of an auditor is relevant. Also, the source of a client's persuasive communication can vary with the audit circumstances. This study examined the effects time pressure and source expertise have on a client's persuasive attempt.

Overview of ELM

The ELM is couched in terms of central and peripheral processing. If one is thinking centrally (i.e. carefully) about a persuasive message, then its persuasive arguments should drive the persuasive results. If one is thinking peripherally about a persuasive message (i.e. exerting little cognitive effort), the quality of the persuasive arguments should not drive persuasive results. Rather, extraneous cues that are not substantively important to the persuasive issue should be the driving force in the persuasive processes. The ELM allows for variables to function in different capacities in different situations (Petty and Cacioppo, 1986). For example, a variable may function as an extraneous cue in one context, but function as a primary cue in another context. A primary cue is one acting as a persuasive argument in addition to the message itself.

Factors that result in increased (decreased) *motivation* to process a persuasive message are more likely to induce central (peripheral) processing. Examples include personal involvement (Petty and Cacioppo 1984) and accountability (Tetlock 1983). Factors that increase (decrease) one's *ability* to process a persuasive message are also more likely to induce central (peripheral) processing. Examples include distraction (Petty, Wells, and Brock 1976), fast presentation (Smith and Shaffer 1991), and message complexity (Ratneshwar and Chaiken 1991). Variables that have functioned as extraneous cues under peripheral processing conditions include expertise of the communicator (Petty, Cacioppo, and Goldman 1981) and likability of the communicator (Chaiken 1980).

Time Pressure and Source Expertise

Psychological studies reveal that time pressure results in consideration of fewer aspects of a decision (Wright 1974), decreased cognitive control and increased variance (Rothstein 1986). Moore, Hausknecht, and Thamodaran (1986) found that only when radio ads were compressed (i.e. sped up) was communicator expertise significant. Note that this is consistent with the ELM predictions, assuming a compressed message induced more peripheral processing. Auditing research has shown time pressure reduces auditor effectiveness (McDaniel 1990).

Psychological research on source expertise has consistently shown that it affects persuasive results when peripheral processing dominates (Benoit 1987; Petty, Cacioppo, and Goldman 1981). However, research on the source expertise is not yet fully developed in the auditing realm. Recent studies show that auditors do give weight to the expertise of the source of evidence (Revele, Heintz, and Briden 1988; Anderson, Koonce, and Marchant 1994). However, audit research on source expertise has not addressed its role in the persuasion process.

Design and Hypotheses

This study was a 2 (argument strength) X 2 (time pressure) X 2 (source expertise), fully-crossed, between subjects factorial design. Upper level accounting students completed the lab experiment for course credit. Primary hypotheses, stated in the alternative form and taken from the ELM predictions were as follows:

H1: The differential persuasive effect of strong arguments over weak arguments will be greater under low time pressure than under high time pressure, regardless of the level of source expertise.

(argument strength/time pressure interaction)

H2: The differential persuasive effects of high source expertise over low expertise will be greater under high time pressure than under low time pressure, regardless of the level of argument strength.

(source expertise/time pressure interaction)

Methodology

One hundred eighty-two subjects completed an audit task that included a persuasive communication from the client. The specific context was a loan review, where an initial evaluation had been performed by another member of the audit team. However, that auditor had not received input from the client on the classification of the loan. The subjects were then provided with a bank representative's memo advocating a more lenient position on the loan (a.k.a. the persuasive message). Subsequently, they made a final evaluation on the loan.

Argument strength was manipulated by including either five strong or five weak arguments in the memo (strength determined by pretests). In both cases, the client was advocating a more lenient position on the loan. Source expertise was manipulated by varying the experience and education of the bank representative who authored the memo. Time pressure was manipulated by either restricting the time to read the memo to 40 seconds or allowing unlimited time to read the memo.

Dependent measures were (1) the recommended loss reserve and (2) percentage of favorable thoughts generated in a post-task thought listing exercise. Manipulation checks were performed via two questions for each independent variable. Additionally, a recall-accuracy measure investigated the assumption that the existence of time pressure elicited more peripheral processing than the absence of time pressure. Finally, subjects rated the importance of the persuasive arguments and source expertise to their decision. The purpose of this measure was to determine if source expertise functioned as an extraneous cue or a persuasive argument itself.

Manipulation Checks

Each manipulation check question was answered using a 9-point scale. The strong memo was perceived as containing stronger/better arguments than the weak memo. Time pressured subjects perceived time to be less adequate and felt more time pressure than non-time pressured subjects. The more expert source was perceived as having more loan analysis expertise and skill than the less expert source. All manipulation checks were significant at $p < .000$.

Recall accuracy was lower for subjects under time pressure than those not under time pressure. Using a scale of 0-15, with 15 being perfect recall accuracy, time pressured subjects' mean score was 6, compared to 7.5 for non-time pressured subjects ($p < .000$). This measure attempted to address the assumption that time pressure induces more peripheral processing. While this spread of only 1.5 on a 15 point scoring scale was statistically significant, it may not be a practical difference. So while we may conclude that time

pressured subjects had poorer recall accuracy, we may not readily conclude that this recall accuracy difference translates into a meaningful central-peripheral processing difference.

Results-Recommended Loss Reserve

Analysis of covariance (ANCOVA) was performed, using need for cognition as a covariate and argument strength, time pressure, and expertise as two-level factors. The ANCOVA results using the final recommended loan loss reserve as the dependent variable are presented in Table 1. Strong memos had more persuasive effects (e.g. less recommended loss reserves) than did the weak memos ($p < .000$). This was expected based on the design of the ELM model, though not specifically hypothesized.

When examining the effects of time pressure on persuasive effects, it was predicted (H1) that the strong/weak difference in persuasion would be greater under low time pressure (when subjects should be more centrally processing) than under high time pressure. Non-time pressured subjects recommended approximately \$9,000 less be reserved when reading the strong memo than when reading the weak memo. Under time pressure, this difference was approximately \$5,000. Though consistent with H1, this argument strength/time pressure interaction was not significant ($p = .24$). Thus H1 was not supported.

If source expertise functions as an extraneous cue, it was predicted (H2) that subjects would consider source expertise only when time pressured. However, the source expertise/time pressure interaction was not significant ($p = .91$). It appears that a more expert source was not more persuasive under neither high nor low time pressure. Thus, H2 was not supported.

Table 1: Analysis of Covariance Results

Source	Prob>F ^a	Prob>F ^b
NFC	.25	.36
Strength	.00	.00
Time Pressure	.58	.08
Expertise	.95	.18
Strength x Time Pressure	.24	.44
Strength x Expertise	.02	.37
Time Pressure x Expertise	.91	.05
Strength x Time Pressure x Expertise	.55	.89

a - dependent variable = recommended loan loss reserve

b - dependent variable = percent favorable thoughts

The only other significant component of the ANCOVA design was the argument strength/expertise interaction ($p = .02$). This result was not predicted. The strong memo only had a more persuasive effect than the weak memo when it came from the high expert source. When the memo was from the low expert, there was little difference in the recommended reserve between the strong and weak memos. This would suggest that the content of the memo was only given consideration when the information source had knowledge and experience in loan analysis.

Finally, several ANCOVA analyses were performed using randomized block designs. Blocking variables included experimenter (two were used), whether subjects had credit analysis or audit experience, and

whether subjects had taken or were enrolled in an auditing course. Blocking factors were not significant, and results were substantively the same as above.

Results-Percentage Favorable Thoughts

The percentage of favorable thoughts was also analyzed using ANCOVA. A thought was characterized as favorable (unfavorable) if it echoed the persuasive communication (original loan evaluation) or was related to being (not being) more lenient on the loan evaluation. All other thoughts were considered neutral. Favorable thoughts as a percentage of combined favorable/unfavorable thoughts was the dependent measure. Consistent with prior ELM research, neutral thoughts were ignored. Results are presented in Table 1.

This dependent variable substantively differed in two ways from the above analysis. First, the argument strength/expert interaction was not significant ($p=.37$). Second, and more importantly, the predicted time pressure/expertise interaction was significant ($p=.05$). Further, the nature of this interaction was as predicted. The difference in favorable thoughts between the high and low expert memos was larger under high time pressure than low time pressure. This supports H2.

Conclusions and Limitations

Several limitations of this study should be considered. First, students were used as subjects. Though this study included thorough training materials on loan analysis, many students were overly conservative in their reserve recommendation. In fact, 24 of the subjects recommended *larger* loss reserves after reading the persuasive message. Auditors may not have exhibited his "boomerang" effect. Second, time pressure was only applied during the reading of the one-page memo. While the manipulation check indicated there was a perceived difference between high and low time pressure, it may not be comparable to the perceived time pressure in an audit situation.

Overall, the results do not support the ELM-based predictions when source expertise acts as an extraneous cue. However, post-hoc analysis reveals that subjects considered source expertise at least as important as the persuasive arguments when making their decision. Further research is needed to determine how this variable operates in an audit context or how other message variables might affect persuasion under time pressure in an audit situation.

References available upon request from author.