

PERCEPTION OF AND REACTIONS TO THE PRESENCE OF URL'S IN PRINT
ADVERTISING OF A NON-TECHNOLOGY BRAND

A Thesis

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by
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Dedicated to the Neter Tchehuti

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ABSTRACT

This thesis, through an experiment of 108 subjects, studies the relationship between the presence of a Uniform Resource Locator (URL or web address) in newspaper advertisements and perception of the product advertised as well as the likelihood to act on the advertisement. The findings reveal URLs do in fact have an effect on perception, although, as it is suggested in the theoretical framework, it does not necessarily induce the subjects to act on the ad. This study also finds there is a stronger inclination for perception change to take place versus the likelihood for consumers to either seek more information or make a purchase of the brand advertised.

The results indicate brands are much less likely to be considered “high-tech” or “cutting edge” when a URL is included in a newspaper advertisement. This is a departure from earlier work that suggested the inclusion of such URLs would have a positive effect on brand value and/or the perception of the company sponsoring the advertisement. The findings also indicate advertisers may have to change the way they present the use of a company’s Web technology. The “magic bullet” of positive associations with technology in the minds of consumers is losing its efficacy from decreased sensitivity to URL saturation in print ads.

Keywords: URL, Internet, Web, advertising, print advertising, newspaper advertising, newspapers, and high-tech.

CHAPTER 1

INTRODUCTION

If a modern oracle pointing to the future exists, it would certainly seem to be the World Wide Web—a world brought together through global communications and push-button technology. Businesses might agree with that characterization, as sales have skyrocketed online.¹ Commercial pages dominate the Web, selling everything from stocks and bonds to groceries.

When this study was first conceived of in 1996, there was only one ad for a “dot com” company during the Super Bowl commercials and URLs in mainstream television and print ads were limited to companies dealing with some form of technology-related industry. Now, even the non-tech companies advertising in the Super Bowl have web addresses in their TV spots.² Some people call the Web the new medium of mass communications, and businesses perhaps feel if they are not part of such a medium, they will not be able to survive.³

Even after the so-called “dot com bust,”⁴ many business seem to face pressure to maintain a Web presence as if their future depended on it, with an added note of desperation in the push to promote those online ventures that remain. The National Retail Federation predicts a recovery in its 2001 retail sales outlook, which will likely translate to growing online sales.⁵

There seems to be little doubt the Web has had tremendous impact upon commercial transaction. Companies such as Yahoo!⁶, Amazon⁷ and eBay⁸ have all capitalized on the new market manifested through the Internet, as well as the “clicks-and-

bricks” companies that have both an online presence and a retail store, who use their Web sites to supplement their normal operations (expected to reach 55 percent of all e-commerce by 2003)⁹. All of these companies advertise and all are looking for ways to revitalize their online industries.

Evidence of this drive to promote can be seen in the preponderance of Web-related advertising in the more traditional channels of communication.¹⁰ Almost all of the big-name businesses seem to have their logos right above their Uniform Resource Locator (URL) addresses in their television commercials, business cards and magazine and newspaper ads. In the headlong rush to make their cyberspace location known to the general populace, few companies seem to go beyond initial market research or widely held beliefs pointing them to the need for every potential customer to have their particular URL bookmarked in their Web browser. Combining the newest mass medium, the Internet, with one of the oldest, the newspaper, this study investigates whether or not companies are justified in including URLs in their newspaper advertisements and how potential consumers react to those URLs.

CHAPTER 2

LITERATURE REVIEW

There are three avenues of literature review for this study: advertising psychology and theory, advertising practices and previous research done in web advertising involving URLs.

Advertising psychology and theory

In any study on advertising, perception and behavior are major factors in persuasion specifically and communication in general. In studying viewer's reaction, it is important to distinguish between perception and attitude, as the former should relate to immediate reaction to stimuli (in this study, an ad with or without a URL) and the latter to pre-existing cognitive factors leading to behavioral responses.

Tan said early definitions of attitude are predispositions towards an object (not necessarily a physical entity, but also encompassing positions, concepts, ideas, etc.), and include cognitive, affective and behavioral components.¹¹ Cognitive is existing knowledge about an attitude object, affective is how one feels towards the object and behavioral is how one will act towards the object. All these components except for affective are debatable according to Tan, because sometimes the way a person feels about an object is inconsistent with a person's behavior or what he/she knows to be true about an object.¹² He also adds a final characteristic to the definition of attitude:

Attitudes are learned. Predispositions to respond in consistently favorable or unfavorable ways toward the attitude object are based on previous knowledge about that object. This knowledge may be the result of direct experience communication from another person or group about the object. Most researchers are in agreement that

attitudes are learned and that they are not genetically inherited by offspring from parents.¹³

Attitude is a key ingredient in persuasion and as that is the goal of advertising, some examination must be made here, particularly as it relates to behavior. By contrast, perception is the simple act of cognitively relating to objects in our environment, and often represents the first impressions we have of such stimuli.¹⁴ Tan elaborates on this:

The main perceptual process is the assignment of the stimulus to a cognitive category with which we, through previous experience, may already be familiar. By placing the stimulus in a previously defined category, we are assigning it some “meaning.”¹⁵

Petty and Cacioppo who proposed the Elaboration Likelihood Model of persuasion studied advertising effectiveness extensively. Central and peripheral routes to attitude change were a key concept of this model.¹⁶ In the central route, the message recipient is actively making attitudinal changes towards the message, whereas the peripheral route entails more subtle cues, shifting attitude involuntarily. Cognition plays a large part in the former, with attitude more likely to make lasting change as more information is presented. Another important concept in this model is high/low involvement, which is the degree to which the message presented is relevant to the self, affecting the effectiveness of persuasion.¹⁷

Another relevant model for attitude and perception change is McGuire’s Persuasion Model. In this model, McGuire identifies four variables of the communication process (source, message, channel and receiver), broken down into five steps of persuasion (message, comprehension, yielding, retention and action).¹⁸ According to Tan, McGuire’s model was a response in part to laboratory experiments that assumed when attitude change took place, action on the object would necessarily follow.¹⁹ Instead, the Persuasion Model breaks the steps to action out and McGuire

writes that those wishing to encourage attitude change and ignore the effects of the above variables do so at the risk of having contradictory effects to the original intent. By way of example, an appealing realtor may provide convincing messages in a high-gloss magazine targeted towards first-time buyers that a particular subdivision is the place to buy into. However, if there is no means given as to how these young couples are to afford such houses, the message may be ineffective as these prospective clients assume that they cannot afford to live in such an area.

Cognitive effects also are studied by Beerli and Santana who in trying to come up with a new measurement system for advertising effectiveness, look into the copy of a print ad and what factors will be the most effective in persuasion.²⁰ The researchers chose newspapers:

because of the limited amount of research into advertising effectiveness which has been carried out using this medium and also because it is easy to discriminate between different advertisements in the press because of a more active audience participation, the individual being able to choose freely whether or not to read a particular advertisement as well as the place and time in which s/he chooses to do so.²¹

Curlo and Ducoffe also study attitude effects combining research in perception to multiple stimuli and attitude-towards-the-ad models in a single persuasion model, which looks at ad-evoked goals as a factor in measuring consumer attitude.²²

Advertising practices: Online commerce, advertising and ad factors

In a 1999 study done by the United States Department of Commerce, electronic commerce constituted only one percent of the retail portion of the economy, from \$7 billion to \$15 billion. However, in the same report, the Department acknowledged online sales had far outstripped all expectations and was projected to continue to grow, pushing into the \$40 to \$80 billion range by 2002.²³

In 2000, a study by the Economics and Statistics Administration's Office of Policy Development found online sales to be \$5.3 billion in the fourth quarter of 1999 alone.²⁴ The upward trend in sales is matched by an upward trend in number of web sites (unique IP addresses closing in on 110 million in January 2001²⁵) and number of households online (407.1 million worldwide²⁶). In the meantime, many companies with online ventures are scrambling in the wake of failure in web-based businesses and fallen stock prices. The "dot com bust," a general receding of online industries has some on Wall Street fearful even the federal government can do nothing.²⁷

Pegasus Research International showed as the bust took hold, Internet advertising was the first to suffer, followed by the tangentially-related industries in consulting, ISPs and finally, e-commerce sites.²⁸ However, their opinion, like many, is that the recent downward trend is part of growth in "transitioning from the hyper-growth stage to the rapid growth stage of a typical industry life cycle."²⁹ In other words, the names might change, but the industry as a whole will survive. Esrock and Leitchy took a sample of Fortune 500 companies, finding 90 percent had websites and of those, 97 percent had some form of retail section.³⁰ The original study's intent was to determine the way corporate pages were oriented to news organizations, but the findings are relevant here in that they indicate an e-commerce value to these sites overriding all other considerations, including investor relations and public relations functions.³¹

During all of this online growth, a number of studies investigating the best means to advertise online have been established, more so than web advertising in printed media. Specifically, the contents of each ad have been seen to play a role in consumer decision making, although perception and attitude are still overriding concerns.

Heo and Sundar's study on physiological responses to banner ads found significant consumer responses to animation, position on a page and size of the ads.³² Li and Bukovac found large and animated banner ads provoked not only greater reaction than smaller and static ads, but recall of the information was generally higher.³³ The study also found no significant difference in the user modes (whether the subject was looking for specific information or surfing for fun) on information recall³⁴, suggesting either a weakness in the experiment design or perhaps the power of an ad to capture the attention of potential consumers.

Tricky advertisement has been studied, as Thompson and Wassmuth looked into the effectiveness of fake pull down menus, text boxes and host of other technical "tricks" in banner ads, finding them in substantial numbers in online newspapers.³⁵ Though the pilot study only defines the category of trick banners, it speculates that if avoidance behavior becomes prevalent for banner ads (in the same way other fake ads are avoided) it could have an impact on "genuine" banner ads and consumer behavior.

Cho³⁶ did a 1998 study to investigate the role of Petty and Cacioppo's³⁷ elaboration-likelihood model in Web advertising. Cho examined the role of user involvement towards the brands advertised, and found similar results to both Li and Bukovac's and Heo and Sundar's studies in the area of ad size and animation as it relates to consumer response (in this case, clicking on the banner ad). However, Cho went further in depth in consumer information processing and hypothesized that attitude had a role in the likelihood of a consumer even noticing an ad and whether or not they would click on it. Her study supported this hypothesis, finding consumer attitude plays a part in a consumer's decision to pursue product information, perhaps more so than any single

characteristic of that ad.³⁸ Geske studied the effect of type size and font in banner ads, finding some difference in recall for larger font sizes, but little difference between serif and sans serif type.³⁹

Web Addresses in Print Advertising: Maddox and Procopio

Of all the current literature available, perhaps the most germane to the present research is a 1997 survey by Maddox, et al., “The Role and Effect of Web Addresses in Advertising,”⁴⁰ and a 1998 study by Deborah Procopio, “Does It Pay to Have a Web Site? Assessing the Value of URLs in Print Advertising for Non-Technology Products.”⁴¹ Both studies assess the value of URLs in ads and whether or not they are effective in changing consumer perception and behavior.

Maddox et al., conducted three focus groups and a national telephone survey to gather information about whether or not URLs were getting noticed in the media.⁴² The researchers did not limit themselves to any one medium, but did find:

television was mentioned the most by 60 percent of the respondents. Magazines (20 percent), newspapers (17 percent), and radio (16 percent) were the next three media in which respondents noticed advertising with URLs.⁴³

Additionally, one in eight surveyed actually visited the web site they saw, but 75 percent of respondents said they would likely visit a Web site based on a very informative ad and 72 percent said they would visit based on a very creative ad, which could be predictive in measuring behavior towards URLs.⁴⁴

The image of Web advertisers was also measured, finding not only the image of the company was enhanced (over half indicating the company more responsive, 60 percent saying the ads were more informative, 71 percent saying the company was more

“sophisticated” and 91 percent seeing the company as more “high-tech”⁴⁵), but 4 in 5 predicted those companies without Web addresses would have one within six months.⁴⁶

The researchers also investigated recall, asking whether or not URLs aided in memory. Survey respondents did not think the URLs helped while the focus groups thought the URLs did aid in memory retention.⁴⁷ Another statistic shown was the perception the advertisers themselves are seen as geared towards a younger market when using URL-laden ads (76 percent of respondents strongly agreed or agreed).⁴⁸

In examining whether or not a company with a URL-laden ad was more personable or reliable, the results were split: 39 percent did not find the advertiser any more personable, while 38 percent did. As to advertiser reliability, again a split occurred with 36 percent not finding a company to be any more reliable while 33 percent did.⁴⁹

Discussing the findings, the authors found conclusive evidence that those surveyed noticed URLs in all sort of advertisements and the presence of a URL generally had a positive effect on the image of advertisers.⁵⁰ A whole host of perceptions (sophistication, being “high-tech,” youth-oriented, informative and responsive) were raised by respondents just by thinking about a URL in an ad, including predictions on whether or not a company would stay in business.⁵¹ What seems to be needed here is further research on whether URLs will always evoke these perceptions in viewers.

Essentially an extension of the research done by Maddox, et al., Procopio conducts an experiment to test whether or not the survey findings from Maddox et al., are externally valid. In doing so, she examines whether or not brand value increases if a company places their URL in a newspaper ad. Brand value here holds two components—content and amount—where brand value content is measured in attitudes

towards the brand and brand value amount is a formula for the comparative price of an item compared to a similar item by a competitor.⁵² She outlines the role technology plays in brand value by first analyzing what Maddox et al. found, citing the fact that most of the advertisements noted by respondents were from computer companies.⁵³

Procopio takes note of this for her experiment, as she wishes to leave out any extraneous variables associated with bias towards computers, instead opting for more brands with more involvement value to the subjects in the test, as well as non-computer related products for the reasons mentioned above.⁵⁴ Brand value is the dependent variable in this study (split into brand value content and brand value amount) and the presence of a URL is the independent variable. Procopio did not find a significant relationship between these two variables, although she did find some evidence to support the idea of increased brand value with the presence of a URL in an ad.⁵⁵

Even though Maddox et al. found a split in personability and reliability, there is still enough evidence from the other factors (sophistication, “high tech,” etc.) to justify an expected change in perception when viewers were exposed to ads containing URLs. Procopio used these factors in her questionnaire, asking subjects to rate their responses later measured in a Likert-scale format. For brand types, she used Excedrin headache medicine and Rayban sunglasses, with the former as the high-involvement product and the latter as low-involvement. Independent sample *t*-tests revealed no significant evidence to support the hypothesis that URLs had an affect on brand value, be it high or low involvement.⁵⁶

A two-way ANOVA test revealed some relationship between the two brand groups, but this was attributed to involvement, rather than the presence of a URL. In

discussing the findings, Procopio noted the limitations of the study were the classroom setting and measuring the effects of a URL in a direct manner.⁵⁷ The first flaw may not be as fatal as Procopio sees—clearly, the study by Maddox et al. noticed the youth orientation to these types of advertisements, so a university setting seems an ideal place to measure how attuned youth are to these types of ads. The second flaw could have real weight, as the study did not measure the effects of repeated URL messages to the subjects, or any of the other possible peripheral routes (for example the simple presence of a URL uncovered a host of associations in the Maddox et al. focus groups that weren't presented as part of the ad. Rather, these were somehow peripherally inferred through the cognitive processes occurring when subjects were exposed to the URLs⁵⁸). Further, it isn't clear that the investigation of the central or peripheral routes of persuasion were fully explored in this study, as brand loyalty may be the result of additional means of peripheral route persuasion, such as information presented on a Web site and the perception change evinced from a cursory examination of, or casual contact with, a URL-laden ad.

In reviewing the literature, Procopio plays down the aspect of the e-commerce purpose of business-related websites:

But electronic commerce, or “e-commerce,” is still under construction for many businesses, and for other businesses, it is simply not useful.⁵⁹

Perhaps this is due to the date of the study, or an oversight on the part of the author, but Esrock and Leitchy clearly found evidence the primary purpose of business Web sites was for e-commerce function.⁶⁰ This seems to be significant in trying to determine behavioristic effects, in terms of why people go to a Web site. Maddox et al. explored

this somewhat in gathering information about how likely respondents were to visit such Web sites.⁶¹

In summary, a review of the literature establishes a theoretical framework for persuasion that involves a central and peripheral route of persuasion, as well as a gradual process showing the shift in viewer perception and behavior from initial exposure to an argument to action. In the Elaboration Likelihood Model, the route of persuasion show how certain persuasive arguments can influence individuals through either a direct argument or over time through indirect means, such as repeated exposure. McGuire's Model of Persuasion illustrates how even though an individual may be persuaded by an argument, the next step to act on that argument may not be as certain. This model suggests a number of factors that could complicate the route to action, but allows for a powerful argument and the right circumstances to facilitate the course of action to which the individual is being persuaded.

Internet studies reviewed here seem to indicate growing online activity, from email address to e-commerce. Of particular relevance to this study is the growth in online sales and advertising of online companies or companies with Web sites. A number of studies have already been done to look into how advertising on the Internet most affects consumer behavior. One study by Cho found that a positive perception of a company can persuade an individual to explore the brand advertised further, and possibly buy the product advertised.⁶² The technology involved also facilitates this, with interactive web advertising having the potential to bring a wealth of information about a brand with just a single click of a mouse button. This technology eliminates or

minimizes many of the barriers between an individual being persuaded McGuire pointed to in his model because of the medium in which it is presented.

Maddox, et al. and Procopio both study the role of Web advertising in other media and in particular, the print media. The Maddox survey showed an inclination by respondents to be positively aligned towards ads containing technology elements in them, such as URLs. Many associated terms with the ads such as “high-tech” and “sophisticated” and many of the respondents associated these same terms not only with the ad content, but also with the company that was advertising to begin with. Procopio’s study takes the survey one step further into an experiment to find out whether or not a URL within an ad increases brand value for a non-technology brand. Non-tech products are not used, as Procopio feels that any computer company or computer-related brand without a Web address would be automatically viewed more negatively.⁶³ Procopio’s study did not find that URLs generated had an effect on perception of the brand, or on brand value as a whole. The primary differences between this study and the Procopio study are 1) this study looks at the effect URLs have on perception of the brand value sans any value derived from price of the brand or other elements beyond the content of the ad itself and 2) taking the idea of the Cho study, measures brand value from the perspective of how likely the viewer is to act on the product, either through exploration for more information or to actually purchase the product itself.

CHAPTER 3

HYPOTHESES

Based on the previous research and the theoretical framework, the following hypotheses were proposed and will be tested:

H1. URLs in print advertisements will affect viewer's perceptions towards the brand advertised.

The URL should be able to have an effect directly on perception in and of itself. It is expected this perception will be positive, relative to the brand advertised. However, only that the effect on perception will occur is hypothesized here, to allow any changes that may have occurred over time towards perceptions of URLs since the survey by Maddox, et al.

H2A. Advertisements with URLs are more likely to prompt viewers to further explore the brand advertised.

H2B. Advertisements with URLs are more likely to prompt viewers to buy the brand advertised.

Given that the purpose of advertising is to persuade the viewer of the ad into a course of action and the purpose of a URL within an ad is to get viewers to visit the company's online Web site, this study will determine to what extent a URL has on the likelihood of the subjects to visit the Web site advertised for either more information or to purchase the brand. A behavioral component to this study should help determine to what extent a URL has the power to influence viewers.

H3A. The effect of URLs in an advertisement is stronger on viewer perception of the brand advertised than on the viewer taking action to explore the brand.

H3B. The effect of URLs in an advertisement is stronger on viewer perceptions of a brand advertised than on the viewer taking action to buy the brand.

In McGuire's model, there are steps from persuasion to action and it would seem those same steps would apply in this situation where the viewer must take between seeing the URL and acting on it. Based on the research, it seems clear the URL will have greater effect on the viewer's perception than it will to either explore the brand further online or purchase the brand.

CHAPTER 4

METHOD

Key variables

The focus of this study, like Procopio's is the presence of a URL and its effects under several conditions.⁶⁴ However, in her study, she measures brand value is measured on whether or not a consumer is likely to purchase the brand.⁶⁵ The hypotheses in this thesis indicate brand value increases *regardless* of whether the consumer explores or purchases the product further, due simply to the presence of a URL. The presence of URLs in ads will be the independent variable here, affecting three dependent variables: perception of the brand, likelihood to explore or gather more information about the brand on the Web and likelihood to purchase the brand advertised, and the degree to which a viewer perceives a brand versus the degree they are likely to explore or purchase the brand.

Measurement

In keeping with a posttest-only design, the subjects were given a questionnaire to measure the key variables. The questionnaire looked into some of the same questions as Procopio's and Maddox et al.'s studies, such as how "high tech" a company is perceived to be, based on the appearance of a URL in the company's ad.⁶⁶ In addition, questions to measure subject's inclination act on the URL's advertised was also included, such as whether or not a person was likely to explore sites before purchasing a brand associated with the product advertised and then how likely they were to purchase such products/brands.

Each item on the questionnaire was posed in a Likert-scale format to measure the subject's responses and a five-point scale was used. This Likert format facilitates data collection and provides a way to compare degrees of differences in the between perception and the likelihood to explore the brand or purchase the brand--clear results were needed for H3 in order to show distinct relationship and/or difference (if there is any) between a subject being affected positively or negatively by URLs in an ad and the subjects likelihood to explore further/purchase the brand advertised.

Most of the items were stated as "Based on this ad, this brand's company can be seen as 'high-tech'" or "I would like to visit the brand's web site." The five points on the scale were *strongly agree, agree, neutral/don't know, disagree, strongly disagree*.

Since the questionnaire is designed to measure both perceptions and likelihood of action of the subjects, each point on the scale allowed for more subjective room in answering, as many subjects will have their own ideas about what "high-tech" might be. Additionally, subjective room is needed to help subjects categorize their own future actions, i.e. a subject who will immediately visit the website will mark agree in response to the item "I would visit the brand's web site," whereas a subject who will only go surfing for information when getting ready to shop for the particular item might mark "agree" or "neutral/don't know."

Each score represents a point on the Likert scale, coded in descending order and corresponding to the responses of strongly agree (5), agree (4), neutral/don't know (3), disagree (2) and strongly disagree (1).⁶⁷ Mean scores were calculated from the results of the Likert scale points, based on the pertinent questions in the questionnaire for each key variable (perception, likelihood to explore the brand further and likelihood to purchase

the brand), then divided by the number of relevant items that formed the measure of the variable. The median score for all the means on the Likert scale used in this study is 3.00, which represents an answer of neutral/don't know. Above the median means a more positive perception of the ad and below it means a more negative perception of the ad, in the case of the first hypothesis. For H2A, a score above the median means a positive or increased likelihood of a subject exploring the brand due to the URL and vice versa for below the median. For H2B, above the median means a positive or increased likelihood of a subject buying the brand advertised and vice versa for below the median.

The mean score for perception was calculated as a composite score from items 1, 2, 3, and 6 on the questionnaire,⁶⁸ and then divided by 4. For likelihood to explore the product further, the mean score was calculated using items 8, 9 and 10 from the questionnaire, then divided by 3. For likelihood to purchase the product, mean was calculated using item 11 from the questionnaire, asking subjects if they would buy the brand advertised were it available on the Internet. For H3A, the mean difference was compared between H1 and H2A and for H3B the same between H1 and H2B. An analysis of variance was used to measure what, if any, effects several other independent variables would have on perception, including the subjects' sex, age, major and Internet usage frequency. Additionally, one *t*-test was conducted to measure the peripheral effect a URL might have on perception of the company advertising the jeans (Levi Strauss) using the means calculated from a composite score from questionnaire items 4 and 7 and dividing by 2. All tests were measured at the .05 level significance level, as it is standard practice for statistical measurement in studies of this type. Finally, a factor analysis and Cronbach's alpha reliability test were conducted to confirm the original

measurement. Because the items are used to measure three variables, the factor analysis was computed using three forced factors.

The factor analysis found most of the items matching the variables, except for quality of the brand which has cross-loading. This item is retained in calculating the score for perception of the brand, but will have to be re-examined in future research using this questionnaire. In addition, the intent to purchase item was forced into a separate factor by itself, as it more closely resembled the original design, which accounts for its low eigenvalue. Overall, as seen in Table 7, the factor loading was high for each item, confirming the original design of the measurement. In future studies, additional items could be used to measure the likelihood of a viewer to buy the brand, to see where if the factors separate out clearly.

Procedures

Based on the work of Procopio and Maddox, et al., the method chosen for this study was an experiment. A posttest only design was chosen, where the control group was shown an ad without URLs and an experiment group shown the same ad with a URL for the product/brand advertised. Ads using non-technology related brands were used to prevent bias (such as the obvious questions raised if a computer company did not have a Web site). In this case, the ads will advertise denim products from Levi's, one with a URL and one without. The ads were displayed on plain, 8 ½" x 11" sheets of paper.

The experiment was conducted with one researcher and two assistants to hand out the experiment ads and subsequent questionnaires. A class of approximately 250 introductory students was divided and junior and senior students were asked to wait outside. The remaining 109 students were further divided into two roughly equal groups,

with 53 in the control group and 55 in the experiment group. Each assistant was assigned one of the groups to pass out the experiment material to. To avoid confusion, questionnaires with green staples were used for the experiment group and silver staples for the control group.

As the classroom was auditorium-style, the control group was seated on the right side of the room and the treatment group on the left, with a dividing space between them. As in the Procopio study, college students were used as subjects, preferably from introductory level journalism or advertising/marketing classes at the Manship School of Mass Communications. This is because journalism/advertising students should be both numerous and a bit more sensitive to component parts of an ad than others to give valid responses during the experiment.⁶⁹ In addition, use of these students facilitated the timetable of this study. One class of entry-level journalism students yielded 109 subjects, who were then randomly broken up into two groups. This was done to minimize both skewness and disruption by cutting down on members of the same class being in the same group. An auditorium classroom on the LSU campus was used as the testing site.

As for an experimental treatment, the ad used was selected with the following criteria: 1) advertising a non-computer-related brand, 2) containing URLs, 3) having approximately the same placement, size, color and emphasis in each ad of the URL and 4) having a placement of the ad to best facilitate removal when showing the control group. This is the same method as Procopio's use of ads for Rayban sunglasses and Excedrin headache medicine.⁷⁰ In this study, as in hers, this is designed to ward off a skewed result from the obvious question of why a computer-related brand would advertise without inclusion of a Web site.

Data analysis

Data from the questionnaires were compiled and analyzed using the Statistical Procedures for Social Scientists Program (SPSS) program. A t-test was used to determine if there was a valid difference between the control and experimental groups for H1 and H2A and B. Where necessary, scores were standardized by matching the items relevant for each dependent variable, adding up their scores and dividing by the number of items. In analyzing the data collected, the SPSS was used, both versions 9 and 10 (due to a switch from the LSU library's version to the one in the Journalism Building's computer labs). Data collected from the experiment was laid out first on an Excel spreadsheet and then imported into SPSS. Once the data was compiled, it was found that one subject did not fully complete the questionnaire, so that subject's data was thrown out, leaving an *N* of 108.

CHAPTER 5

RESULTS

Demographics

Of 108 subjects, 69.7 percent were female and 30.3 percent were male. Freshmen constituted 75.2 percent and sophomores 22.9 percent, with one missing answer. Mass communication majors, including journalism, public relations and advertising, constituted 71.6 percent and other majors totaled 27.5 percent.

All subjects reported they had access to the Internet, with 88.1 percent reporting daily use, 10.1 percent citing weekly use and only .9 percent reporting seldom use. When asked whether they would look for an ad about a product they potentially wished to buy, 29.4 percent said they would and 69.7 percent said they would not. Subjects who often garnered information about products they wanted to buy on the Internet totaled 23.9 percent, sometimes 56 percent, seldom 4.6 percent and never 14.7 percent. In using a primary media to find news, 70.6 percent used television, 11.9 percent used newspapers, 2.8 percent used radio, 1.8 percent used the Internet and 1.8 percent selected “other” as their medium of choice.

Finally, in describing their computer skill, 25.7 percent chose excellent, 50.5 percent described their skill as good, 19.3 percent reported medium, 28 percent said they had some problems, and .9 percent described their skill as poor.

Hypothesis testing results

Hypothesis 1, URLs in print advertisements will affect viewer's perceptions towards the brand is supported. Levene's test for Equality of Variance revealed $F=.013$ and a significance of $.649$, so equal variances were not assumed, meaning the results for no equal variance was used to determine significance, which is what is recorded in Table 1.

Table 1
H1: Effect of URL on Viewer Perception
 $N=108$

Group	<i>N</i>	Mean	Mean Difference	<i>t</i>	Significance
URL	55	2.98	.35	3.03	.003
No URL	53	3.33			

As shown by Figure 1, mean for the control group was 3.33 and mean for the experiment group was 2.98. The mean difference was $.35$, $df=105.67$ and the t value was 3.03, which is significant at the $.01$ level.

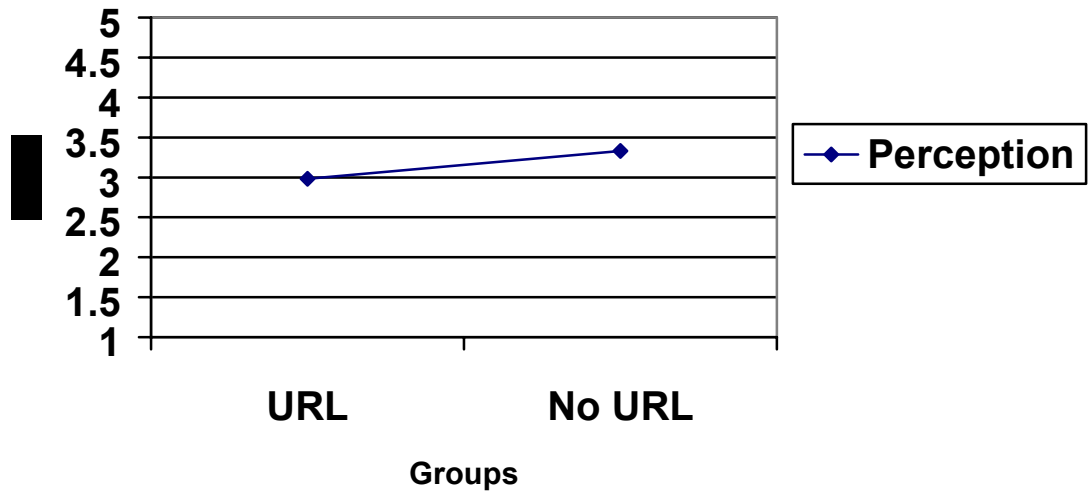


Figure 1
Effect of URLs on Viewer Perception

Hypothesis 2A, advertisements with URLs are more likely to prompt viewers to further explore the product, is not supported. Levene’s Test for Equality of Variances revealed an $F=.152$ with a significance of $.697$, meaning equal variances were not assumed, meaning the result of no equal variance was used to determine significance, which is recorded in Table 2.

Table 2
 H2A: Effect of URL on Viewer Desire for More Product Information
 $N=108$

Groups	<i>N</i>	Mean	Mean Difference	<i>t</i>	Sig.
URL	55	2.41	0.04	.287	.775
No URL	53	2.45			

As shown by Figure 2, mean for the control group was 2.45 and mean for the experiment group was 2.41. The mean difference was .04 (4.677E-02), $df=105.72$ and the t value was .287 which is not significant at the .05 level.

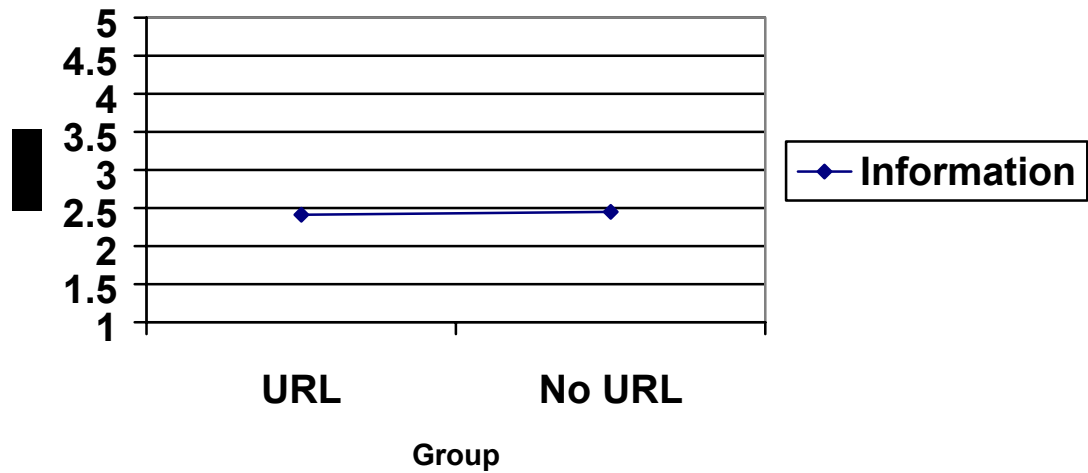


Figure 2
Effect of URLs on Information Gathering

Hypothesis 2B, advertisements with URLs are more likely to prompt viewers to buy the product, is not supported. Levene's Test for Equality of Variances yielded a result of $F=1.33$ and a significance of $-.821$, meaning equal variances were not assumed, meaning the result of no equal variance was used to determine significance, which is recorded in Table 3.

Table 3
H2B: Effect of URL on Viewer Desire to Purchase Brand
N=108

Groups	<i>N</i>	Mean	Mean Difference	<i>t</i>	Sig.
URL	55	2.46	0.13	-8.21	.414
No URL	53	2.33			

As shown by Figure 3, mean for the control group was 2.33 and mean for the experiment group was 2.46. The mean difference was .13, *df*=103.401 and the *t* value was -8.21, which is not significant at the .05 level.

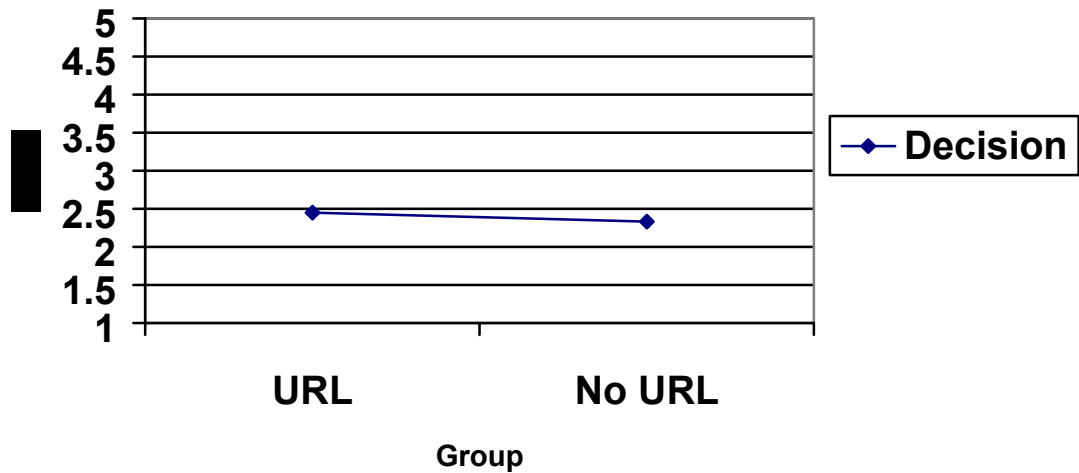


Figure 3
Effect of URLs on Brand Purchasing Decision

Hypothesis 3A, the effect of URLs in an advertisement is stronger on viewer perception of products than on the viewer taking action to explore the brand and Hypothesis 3B, the effect of URLs in an advertisement is stronger on viewer perceptions of a product than on the viewer taking action to buy the brand were both supported.

Table 4
H3: Comparing Effects of URL on Perception vs. Information Gathering and Purchasing
N=108

Variable	Mean difference	<i>t</i>	Sig.
Perception	0.35	3.03	.004
Information gathering	0.04	.287	.775
Desire to Purchase	0.13	-8.21	.414

The mean difference score for perception was .35, as compared to the mean difference for likelihood to explore the brand further, which was .04, a difference of .31, which supports H3A. With a mean difference for perception of .35, as compared with the mean difference for likelihood to purchase the product of .13, yields a difference between the two of .22, which supports H3B. Figure 4 shows the level differences between each variable used.

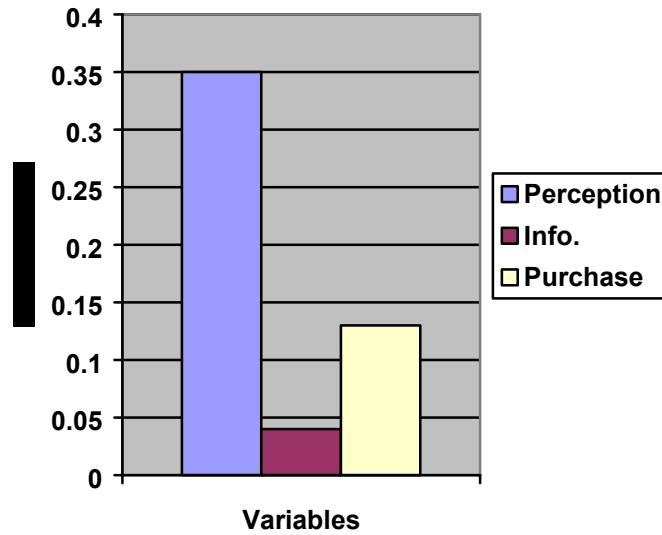


Figure 4
Effect of URLs on Perception vs.
Gathering Info and Purchasing

Other tests

An ANOVA test was conducted to measure the effects several independent variables had on perception. This included the presence of the URL in an ad, plus sex, age, what major the subjects were in and how often they used the Internet. None of the findings in the ANOVA indicated a statistically significant result.

Table 5
ANOVA Results for Multiple Independent Variables on Perception
Perception=Dependent Variable

Ind. Variable	Sum of Squares	<i>Df</i>	Mean Square	F	Sig.
URL	.442	1	.442	1.344	.250
Sex	.003	1	.003	.089	.766
Age	2.040	5	.408	1.241	.298
Major	.326	1	.326	.991	.322
Net Usage	.008	2	.008	.127	.881
Residuals	25.976	79	.329	--	--
Total	1114.75	108	--	--	--

An additional *t*-test to measure whether or not the presence of a URL in an ad had any effect on the perception of the company advertising the product (Levi Strauss Co.) was conducted. Table 6 shows the results from Levene's Test for Equality of Variances yielded a result of $F=1.183$ and a significance of .279, meaning equal variances were not assumed, meaning the result of no equal variance was used to determine significance, which is what is recorded in Table 6. Mean for the control group was 2.60 and mean for the experiment group was 2.69. Mean difference between the two groups was .009 (8.902E-02), $df=97.623$ and the *t* value equaled .634, which was not significant at the .05 level.

Table 6
Effect of URL on Perception of Company
N=108

Group	<i>N</i>	Mean	Mean Difference	<i>t</i>	Significance
URL	55	2.69	.09	.634	.527
No URL	53	2.60			

Finally, a factor analysis was conducted for the eight items measuring the dependent variables of perception of brands after viewing ads with URLs, likelihood of seeking more information about the brand and likelihood to purchase the brand. Principal component analysis yielded three factors, corresponding to each of these variables respectively. The first had an eigenvalue of 2.88, with 36 % variance explained. The second factor had an eigenvalue of 1.82, with 23 variance percent explained. The third had an eigenvalue of .88, with 2.3% variance explained. All items loaded higher than .61, except for quality of the brand, which was .46 due to cross-factor loading. A reliability test of the items using Cronbach's alpha yielded a standard item alpha score of .66 for the first factor and .81 for the second. The alpha score for the third factor, having only one item, was not applicable.

Table 7
Factor Analysis of Questionnaire Items

Items	Factor loading	Factor loading	Factor loading	Communality
How “high-tech” the company is perceived to be		.616		.74
How “cutting-edge” the brand is perceived to be		.699		.68
Quality of the brand		.459		.78
Appeal of the brand		.632		.64
Effect of an appealing web site on decision to purchase brand	.653			.60
Likelihood of looking for more information on brand	.834			.78
Likelihood of visiting brand’s web site	.856			.80
Likelihood of purchasing brand			.680	.59
Eigenvalue	2.88	1.82	.88	
Variance explained	36%	23%	12%	
Cronbach’s alpha	.66	.81	n/a	

CHAPTER 6

DISCUSSION

The purpose of this study was to examine the current role URLs play in the minds of target audiences companies advertising in newspapers wish to reach. In general, the results indicate the URLs are having an effect on the perception of the brand advertised when a URL is present. Behavior-wise, the results are inconclusive as to whether a URL makes viewers more likely to either explore or purchase the brand advertised. The results show the URLs did have a more pronounced effect upon perception than either likelihood to explore or purchase the brands advertised.

For the first hypothesis, a significant difference in perception of the ad existed between the control and experiment groups. The control group mean was 3.33, which means there was a slightly positive perception of the ad without the URL. The experiment group, which was below the median at 2.98, had a slightly negative perception of the ad. However, the difference between the groups was statistically significant, which means the ad was perceived differently solely on the basis of the presence of the URL alone. This difference contradicts the previous studies by Maddox et al and Procopio, whose research suggested there would be positive association with the brand anytime an ad included a URL. The implication here is either something has changed in the intervening time between those studies and the present one, or some other unknown factor in this experiment produced a different result.

There are a number of factors that could account for the negative result. The first is the intervening time that has passed since Maddox's study in 1997 and the present has

made for a proliferation of URL-laden ads having saturated the newspaper environment. A related reason may be the already abundant URLs on the Internet itself. All of the subjects had Internet access and the majority used the Internet weekly, if not daily. This ties in with the former reason in terms of repeated exposure saturating the environment and accounting for a more blasé attitude towards URL due to decreasing sensitivity. Sawyer termed this the “wear-out effect” where constant message repetition (in this case, the over use of URLs in general advertisement, particularly in non-technology advertisements) leads to diminished effectiveness.⁷¹ Pre-existing perceptions towards the brand may have shifted perception negatively, although this would not account for the control group’s positive perception of the brand. If a generally negative opinion of Levi’s jeans existed, it is reasonable to assume the control group perception would have been below median, as well as the experimental group.

With the control group’s mean of 3.33, the exact brand here did not have perception attached to it that could account for the negative perception of the brand when the presence of a URL was introduced. However, the introduction of the URL may be perceived negatively because of a reaction against the idea that jeans would necessitate a Web site. Because apparel such as jeans are not commonly associated with the content-driven Web sites, the results here may not preclude the effectiveness other types of non-technology brands from using URLs to advertise products which have more relevant online content. If a brand was complex enough to devote a great deal of content to (such as appliances or automobiles), or if the brand had a high involvement for the viewer, the URL might shift perception towards the positive as those seeking information might appreciate a site they could go to for more information.

In the second hypothesis, the URL had no effect on either the likelihood to explore the brand further, nor the likelihood to purchase the brand. For H2A, this means that the URL did not have an effect on whether or not subjects were likely to pursue more information, however, since mean scores for both groups were below 3.00, the implication is there is a negative inclination to explore the product further as a whole.

The implication here is some factor was involved in the control group being disinclined from looking for more information, such as the positive perception was not strong enough warrant interest beyond a cursory examination of the brand in the ad. It can be expected that since the experiment group did not have a positive perception of the ad to begin with, they would not be inclined to seek further information. Again, there may be other, more complex factors here, including how strongly the subjects are inclined to find out more information about any similar brand. Even further, as evinced by the lack of significance in the result, the URL might not be able to carry the weight alone of influencing the subject to explore further and more elements may be necessary to for viewers to pursue such an investigation.

The result for H2B was that the presence of a URL did not affect the likelihood to purchase the brand. With mean scores below the median of 3.00, it can be determined neither group would be inclined to purchase the brand based shown in the ad. As the McGuire Persuasion Model was built to account for factors leading from initial perception to action and in the retention step of the model, the viewer may be persuaded (or dissuaded) from a course of action, but may not be able to act.⁷² This may explain the discrepancy between the positive perception of the brand by the control group, but the negative likelihood to explore or purchase the brand. Also here, the reluctance to

purchase the brand may result from the phrasing of the item on the questionnaire—it was not asked outright if the subjects were inclined to buy the brand, no matter what avenue they preferred to obtain such products. Subjects do use the Internet to gain information about products they wish to buy in general, but with Internet-related purchases accounting for less than 10 percent of retail sales nationally⁷³, this may not be a reluctance to buy the product in general, but a reluctance to purchase on the Internet.

The results for H3A and B found the difference in perception between the control and the experimental group was greater than the likelihood to explore the brand or purchase the brand for those same groups. As is evident in Table 4, the difference in means between perception of the brand (labeled perception) and both the likelihood to explore for more information and the likelihood to purchase the brand. There is a .22 difference in means between perception and the likelihood to purchase the brand, which indicates the relative ease in which one element may sway perception versus its ability to influence behavior. Again, both the ELM and McGuire's Model of Persuasion could account for this in establishing that perception is easier to change than behavior, due to complex and intermingling factors. However, it is important to keep in mind that since the results for H2A and B were not significant, the difference could be much greater.

The ANOVA test to determine if any of the other factors such as age, sex, collegiate major and Internet usage contribute to the difference between the experiment and control groups failed to yield significant results in terms of any of these additional factors playing a role in the efficacy of URLs. This test did overturn one premise of this study in the form of the failure to find any difference between mass communication majors and others in their perception of the advertisement. However, since none of these

other factors had significant influence on perception, the study may have greater external validity as the effects were the same for male and female, journalist and non-journalist alike. Originally, the author wished to use mass communication majors exclusively, due to the idea they would be more sensitive to individual elements in the ad, specifically the URL, due to their preliminary introduction to elements in a newspaper.

The *t*-test to determine if there were effects of the URL on company perception was found not to be significant. Means in both groups again fell below the median, meaning there was a generally negative perception of the company. This seems to indicate URLs are effective when used in a direct manner in advertising, but that effectiveness is diminished when trying to transfer brand value to company value. The negative perception cannot be attributed to pre-existing perception, as there is little content in the ad dealing with Levi Strauss Co. Perception here could also be due to an idea on the part of the subjects that the ad shown to them was part of the saturation of the market with similar kinds of ads and that the company was in some way responsible for this saturation.

In general, based on the more negative perception the subjects had towards the ad with the URL, this study could be charting a new phase in the evolution of the Internet as a medium. That is, a backlash against the saturation of any and all things Web-related as a failsafe staple of advertising. Perhaps this falls in with the recent “dot com bust,” which is to say that as technology stocks plummeted, so too did the “magic bullet” of something associated with technology to be automatically seen as something positive.

Perhaps this backlash against ad saturation is due to an evening out of the Internet as a form of mass communication. In other words, no longer does it have that sense of

newness that conveys that positive perception in and of itself, as has been seen with the evolution of other forms of media, such as radio and television in their respective early years. This study did find cause for confirmation of the traditional theories on persuasion and attitude change (of which perception and behavior were parts of), such as the Elaboration Likelihood Method⁷⁴ and McGuire's Persuasion Model.⁷⁵ In the theoretical framework for this study, Petty and Cacioppo's Elaboration Likelihood Model shows there are a series of steps necessary for an audience to undergo in order for persuasion to take place.

Two of the most important factors involved in and influencing these steps are message repetition and personal relevance.⁷⁶ In the experiment for this study, the message was only repeated one time, but message repetition plays a part because of all the unaccounted for repetitions of URLs subjects may encounter in the course of day-to-day viewing of advertisements.

To an extent, personal relevance was accounted for in the youth-oriented content of the ad and the brand advertised being a popular apparel choice among the age demographic represented. A press release from Levi's confirms young adults as one of the target audiences, as they tout their "singing belly button" low-cut denim ad campaign as promising even in the face of profit losses.⁷⁷

Ironically, it was the youth whom this ad was supposedly targeting that rejected the ideas of high-tech and sophistication from the ad found in Maddox, et al.'s survey. Still, it is difficult to say whether or not the ad used in this study signified high or low involvement to the subjects. Even though the results for perception and likelihood to act were negative towards the ad, that may not mean jeans have low involvement to the

college-age subjects. In fact, denim may have high involvement, but some factor in the manner in which it was portrayed accounts for the results.

Also germane to the ELM in this study is the central route of persuasion seemed to be effective in eliciting a response, based solely on the presence of a URL. In the case of McGuire's model, it relates to this study in the description of the complexities of bridging the gap between perception change and action on that perception. Subjects viewed the URL laden ad negatively, but when it came to likelihood of action, the results were more obscure. Although all of the behavior scores indicated negative likelihood to explore or purchase the brand advertised, the scores were not statistically significant, and thus other factors played a role in preventing action from being taken. While this does not vindicate the URL as an effect means to elicit behavior responses, URLs are not solely to blame for failure to incite action either.

CHAPTER 7

CONCLUSION

The key findings for this thesis indicate 1) the appearance of a URL does have an effect on consumer perception when they appear in print advertisements and when compared to ads without URLs, the perception is somewhat negative; 2) URLs by themselves do not have an effect on the likelihood of someone viewing the ad either exploring for more information or purchasing the brand and 3) the appearance of a URL has more of an effect on perception than on either the likelihood to explore the brand further or to purchase the brand.

The key finding for this study is the effect the URL alone had on perception. A single element within an ad had the power to alter what the subjects in the control group otherwise thought was a fairly positive ad. Despite the fact the result was negative, the author maintains that given the right brand or ad content, the URL would have shifted perception the opposite way. However, this is qualified by the idea that advertisers wishing to use URLs should perhaps use them selectively, as a seemingly innocuous element like a URL can turn around perception of an ad entirely.

A further avenue of research beyond this study would be to first find ways in which a URL can have a positive effect on perception. The ELM⁷⁸ and later Procopio⁷⁹ both deal with factors of high and low involvement, meaning how personally relevant the topic at hand is to the observer, which this study did not delve too deeply into. If the ad has a URL for something important, life changing or meaningful to the observer, having the recourse of a Web address handy in the advertisement may bring about a more

positive outlook to the ad itself, if the ELM is to be followed. Further, the URL in context with other elements relating to the Web may generate more positive perception. One of the simplest examples of this is offers for free merchandise or discounts associated with visiting the Web site, particularly if these incentives were to be had only online. Surely undergraduates zealously after new nightlife establishments would have a more positive opinion about a bar after seeing free drink offers only by visiting their web site first.

Further avenues of research building on this study include a deeper look into why the perception of the ad with the URL was more negative, what specific mitigating factors are involved when URL is present in an ad and what specific factors will lead subjects to go online after they've viewed an ad with a URL. In the first instance, if it is an over-saturation of URLs in advertisements this will have to be studied specifically. If not, it may be due to complex sociological and cultural reasons, such as a jaded view of material commercial or corporate activity in college-age subjects, or a tension brought about by the flaunting of material goods the subjects desire but cannot afford on small budgets traditionally associated with college students.

In the second instance, it might be worthwhile to look into how a URL is placed in an ad and what effect that might have on consumer reaction. Cho⁸⁰, Geske⁸¹ and Thompson and Wassmuth⁸² have all looked into various aspects of online advertising and parts of ads on the Internet to determine the effect on consumers, not to mention the numerous studies done on fonts, type size, graphics, etc.

Third, a field study may be called for to observe consumers in front of online terminals with other media present to see how they react to URL-laden stimuli. A way

could be devised to observe subjects at home, which would probably be very valuable as they are much more likely to have the time to devote to consumer-related activity. As in the first two avenues of research, close attention will have to be paid to additional factors that may intercede with the manner in which consumers access the Internet for these types of pursuits. In this case, the auditorium in which the subjects were placed did not have Internet terminals at each desk, making it difficult to study whether or not the subjects would go online in pursuit of either information or perhaps to buy the product itself. Perhaps a future research could involve a field study at a “cyber-café,” where subjects would be exposed to a number of URL-laden ads in different media (if the café had and whether or not they reacted to those ads by going online in pursuit of the brand they offered. Since only one item in the questionnaire was used, perhaps more items could be added to the questionnaire to get a better feel of the likelihood of the viewers purchasing the brand.

A potential limitation of this study is that it only examined advertisement of a commercial good with low potential for online content, in terms of more involvement context beyond simple apparel and its meaning to college students. Perhaps a high-involvement service that requires more lengthy information than what any ad could offer would pique more interest in exploring the URL. Also, the product in this study was intentionally designed to have a broad-based appeal to a wide audience. URL in print ads may have effective results in specialty magazines or for specialty goods or services to an audience interested in that same specialty. Using the earlier example, there are numerous ads for bars and nightclubs, in local magazines with URLs. These are targeted to younger crowds looking for information on bands playing, hours of operation, drink

specials, etc., which is information easily obtained and presented on a Web site versus having to either call the establishment or rely on word of mouth or some other such means to find out.

Another limitation of this study could be the elements in the ad have reduced involvement based on an inability to relate to the images seen in the ad. Five people of similar age to the subjects were depicted in the ad in a cold-climate environment. The subjects are predominately African- and Asian-American. Differences in geography and racial makeup would play across both the control and experiment groups; however, if these were factors in involvement for the subjects, then the elimination of these potential barriers by way of making the ad content similar to what the subjects were familiar with may have raised said involvement. The ELM spells out the fact that high-involvement ads with personal relevance to the viewer are more likely to engender attention and perception change toward the positive.⁸³ A potential solution for both the problem of the specific brand used and the ethnic makeup of the ad would be the use of multiple ads, with a variety of figures and brands advertised. In this manner, any bias due to pre-existing attitudes towards the aforementioned problems could be taken into account by the researcher.

In looking over the questionnaire used, a number of items could be improved. The first and most important of these is to rephrase the third item positing “this brand is a quality product,” as the factor analysis revealed it to have cross-factor loading and far weaker than the rest of the items measuring perception of the brand. Perhaps a different adjective than quality could be used, or the item could be eliminated altogether in future studies. Two items have inconsistent scales, going from daily/weekly to seldom and

never. The final question offers the choices of excellent, good, medium, some problems and poor in answer to the query of the subject's computer skill. The choice of "some problems" presents some problems in its vagueness in comparison with "poor." Some subjects may also be disinclined to rate themselves good or excellent if they've encountered any difficulty using the computer no matter how advanced.

This study relies heavily on the Elaboration Likelihood Model for its theoretical background and as such, explores both the central and peripheral routes for influence of the URL on the subjects. However, in retrospect, the study focuses heavily on the central route and less on the peripheral. The aspect of the peripheral route explored is the effect URLs have on the image of the company advertised, Levi Strauss, in a side independent sample *t*-test. If this were made into a hypothesis, it would have been done as part B to H1 (with part A being the existing H1). However, the author wished to give full attention in the studying the direct effect the URL had on perception of the brand advertised. Procopio's study did not find conclusive results, so it was thought that effects from the central route of persuasion would be hard to come by, much less peripheral ones. However, it does seem that as the Internet continues to establish itself as a unique medium of mass communication, peripheral effects will come to the fore, so to speak. Perhaps because the Internet involves all of the other media within it, it is rife for complex factors that will surely yield definite evidence of both central and peripheral effects upon all observers—effects of which the traditional media will surely be an element.

NOTES

¹ Taken from the United States Department Of Commerce report “The Emerging Digital Economy,” 1999. <http://www.ecommerce.gov/ede>

² Greg Hassell, “Ads not so super for dot-com firms,” Houston Chronicle, Buisness Section, p. 1, January 24, 2001.

³ Deborah A. Procopio, “Does It Pay to Have a Web Site? Assessing the Value of URLs in Print Advertisements for Non-Technology Products,” AEJMC Conference Papers, p. 2, December 1998.

⁴ John P. Hernandez, “Dot-com boom turns into dot-com bust,” South Florida Local Business.com, November 24, 2000.
http://www.localbusiness.com/Story/0%2C1118%2CSOFLA_520560%2C00.html

⁵ Scott Krugman and Sarah Scheuer, “NRF’s Summer 2001 *Retail Sales Outlook* Sees Economic Rebound Just Over the Horizon,” July 23, 2001.
<http://www.nrf.com/content/default.asp?folder=press&file=RSOjuly01.htm>.

⁶ <http://www.yahoo.com>

⁷ <http://www.amazon.com>

⁸ <http://www.ebay.com>

⁹ ActivMedia Research, “Traditional retailers selling more online,” July, 2001.
<http://www.activmedia.com> and also
http://www.nua.com/surveys/index.cgi?f=VS&art_id=905356886&rel=true

¹⁰ Lynda M. Maddox, Darshan P. Mehta and Hugh G. Daubek, “The Role and Effect of Web Addresses in Advertising,” *Journal of Advertising Research*, Vol. 37, No. 2, pp. 47-53.

¹¹ Alexis S. Tan, Mass Communication Theories and Research, second edition, Toronto: John Wiley & Sons, 1985, p. 90.

¹² Tan, p. 91.

¹³ Tan. Emphasis by author.

¹⁴ E.E. Jones and H.B. Gerard, Foundations of Social Psychology, New York: Wiley, 1967, p. 131.

¹⁵ Tan, p. 182.

¹⁶ Richard E. Petty and John T. Cacioppo, Attitudes and Persuasion: Classic and Contemporary Approaches, Dubuque: William C. Brown. 1981.

¹⁷ Petty and Cacioppo.

¹⁸ William McGuire, "The Nature of Attitudes and Attitude Change," in G. Lindzey and E. Asronson, *The Handbook of Social Psychology*, 2nd ed., New York: McGraw Hill, Vol. 3 1969, pp. 136-314.

¹⁹ Tan, p. 92.

²⁰ Asucion Beerli and Josefa D. Martin Santana, "Design and Validation of an Instrument for Measuring Advertising Effectiveness in the Printed Media," *Journal of Current Issues and Research in Advertising*, Vol. 21, No. 2, Fall 1999.

²¹ Beerli and Santana, p. 16.

²² Elenora Curlo and Robert Ducoffe, "Product Use Goals and Attitudinal Responses to Ads," *Journal of Current Issues and Research in Advertising*. Vol. 20, No. 1, p. 19, Spring, 1998.

²³ Taken from the United States Department Of Commerce report "The Emerging Digital Economy," 1999. <http://www.ecommerce.gov/ede>

²⁴ Taken from the United States Department Of Commerce report "The Emerging Digital Economy," 2000. <http://www.esa.doc.gov/de2k2.htm>

²⁵ Taken from the Internet Domain Survey, January 2001, Internet Software Consortium. Actual Jan. 2001 figure was 109,574,429.

²⁶ NUA Survey "How Many Online," November, 2000. <http://www.nua.ie>

²⁷ Vishesh Kumar, "Greenspan is Cold Comfort," *The Industry Standard*, July 24, 2001. <http://www.thestandard.com/article/0,1902,28197,00.html?partner=isyndicate5>.

²⁸ Pegasus Research International, LLC, "The Internet is Dead, Long Live the Internet," December, 2000. <http://www.pegasusresearch.net/commentary/macroview.htm>.

²⁹ Pegasus Research.

³⁰ Stuart L. Esrock and Greg B. Leichty, "Corporate World Wide Web Pages: Serving the News Media and Other Publics," *Journalism and Mass Communication Quarterly*, Vol. 76, No. 3, Autumn 1999, p. 460.

³¹ Esrock and Leichty, pp. 460-461.

³² N. Heo and S. Shyam Sundar, "Emotional Responses to Web Advertising: The Effects of Animation, Position and Product Involvement on Physiological Arousal," AEJMC Conference Papers, January 2001.

³³ Hairong Li and Janis Bukovac, "Cognitive Impact of Banner Ad Characteristics: An Experimental Study," *Journalism and Mass Communication Quarterly*, Vol. 76, No. 2, pp. 348-349.

³⁴ Li and Bukovac, pp. 349-350.

³⁵ David Thompson and Birgit Wassmuth, "Do They Need a 'Trick' to Make Us Click? A Pilot Study That Examines a New Technique Used to Boost Click-Through," AEJMC Conference Papers, September, 1999.

³⁶ Chang-Hoan Cho, "Information Processing of Web Advertising: Modified Elaboration Likelihood Model," AEJMC Conference Papers, December, 1998.

³⁷ Richard E. Petty and John T. Cacioppo, "Central and Peripheral Routes to Persuasion: Applications to Advertising," in L. Percy and A. G. Woodside (eds.). *Advertising and Consumer Psychology*, Lexington, MA: Lexington Books, pp. 3-24, 1981.

See also

Richard E. Petty and John T. Cacioppo, "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," *Journal of Consumer Research*, 19, pp. 135-146, September, 1983.

³⁸ Cho, 1998.

³⁹ J. Geske, "Readability of Body Text in Computer-Mediated Communication," AEJMC Conference Papers, September, 1997.

⁴⁰ Maddox, et al., pp. 47-53.

⁴¹ Deborah A. Procopio, "Does It Pay To Have a Web Site? Assessing the Value of URLs in Print Advertising for Non-Technology Products," AEJMC Conference Papers, December, 1998. NOTE: All page reference henceforth to Procopio's study begin from the first page of the report, i.e. p. 1 refers to the title page of "Does It Pay," not to the first page of the week 2 conference papers in December. The article may be found on the AEJMC web site at <http://list.msu.edu/cgi-bin/wa?S1=aejmc>.

- ⁴² Maddox, et al., pp. 48-49.
- ⁴³ Maddox, et al., p. 49.
- ⁴⁴ Maddox, et al., pp. 49, 51.
- ⁴⁵ Maddox, et al., pp.50-51.
- ⁴⁶ Maddox, et al., pp. 49, 52.
- ⁴⁷ Maddox, et al., p. 52.
- ⁴⁸ Maddox, et al.
- ⁴⁹ Maddox, et al., p. 51.
- ⁵⁰ Maddox, et al., p. 53.
- ⁵¹ Maddox, et al.
- ⁵² Procopio, p. 4.
- ⁵³ Procopio, p. 5.
- ⁵⁴ Procopio.
- ⁵⁵ Procopio, p. 7.
- ⁵⁶ Procopio, p. 6.
- ⁵⁷ Procopio, p. 8.
- ⁵⁸ Maddox, et al. p. 53
- ⁵⁹ Procopio, p. 2.
- ⁶⁰ Esrock and Leitchy, p. 460.
- ⁶¹ Maddox et al., p. 52.
- ⁶² Cho, 1998.
- ⁶³ Procopio, 1999.
- ⁶⁴ Procopio, p. 5.

- ⁶⁵ Procopio, p. 6.
- ⁶⁶ Procopio, p. 6.
- ⁶⁷ See Appendix III for further detail on coding.
- ⁶⁸ See Appendix II.
- ⁶⁹ Maddox, et al., p. 52
- ⁷⁰ Procopio, p. 5.
- ⁷¹ A.G. Sawyer, "Repetition, cognitive responses and persuasion." In R.E. Petty, T.M. Ostrom and T.C. Brock, eds, *Cognitive Responses in Persuasion*, 1981, pp. 237-261).
- ⁷² McGuire, 1969.
- ⁷³ See <http://www.esa.doc.gov/de2k2.htm>.
- ⁷⁴ Petty and Caccioppo, 1981
- ⁷⁵ Mc Guire, 1969.
- ⁷⁶ J. Bryant and Dolf Zillman, eds., *Media Effects: Advances in Theory and Research*, 1994, pp. 102-104.
- ⁷⁷ See the press release for 9/19/01 at <http://www.levistrauss.com/news/pressrelease>
- ⁷⁸ Petty and Cacioppo, 1985.
- ⁷⁹ Procopio, p. 3.
- ⁸⁰ Cho, 1998.
- ⁸¹ Geske, 1997.
- ⁸² Thompson and Wassmuth, 1999.
- ⁸³ Petty and Cacioppo, "Issue-involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses." *Journal of Personality and Social Psychology*, 37, 1979, pp. 1915-1926.

REFERENCES

- ActivMedia Research, "Traditional retailers selling more online," July, 2001.
<http://www.activmedia.com> and also http://www.nua.com/surveys/index.cgi?f=VS&art_id=905356886&rel=true
- Asucion Beerli and Josefa D. Martin Santana, "Design and Validation of an Instrument for Measuring Advertising Effectiveness in the Printed Media," *Journal of Current Issues and Research in Advertising*, Vol. 21, No. 2, Fall 1999.
- J Bryant and Dolf Zillman, eds., *Media Effects: Advances in Theory and Research*, 1994, pp. 102-104.
- Chang-Hoan Cho, "Information Processing of Web Advertising: Modified Elaboration Likelihood Model," AEJMC Conference Papers, December, 1998.
- Elenora Curlo and Robert Ducoffe, "Product Use Goals and Attitudinal Responses to Ads," *Journal of Current Issues and Research in Advertising*. Vol. 20, No. 1, p. 19, Spring, 1998.
- Stuart L. Esrock and Greg B. Leichty, "Corporate World Wide Web Pages: Serving the News Media and Other Publics," *Journalism and Mass Communication Quarterly*, Vol. 76, No. 3, Autumn 1999, p. 460.
- J. Geske, "Readability of Body Text in Computer-Mediated Communication," AEJMC Conference Papers, September, 1997.
- N. Heo and S. Shyam Sundar, "Emotional Responses to Web Advertising: The Effects of Animation, Position and Product Involvement on Physiological Arousal," AEJMC Conference Papers, January 2001.
- John P. Hernandez, "Dot-com boom turns into dot-com bust," South Florida Local Business.com, November 24, 2000.
http://www.localbusiness.com/Story/0%2C1118%2CSOFLA_520560%2C00.html
- Internet Domain Survey, January 2001, Internet Software Consortium. Actual Jan. 2001 figure was 109,574,429.
- E E. Jones and H.B. Gerard, Foundations of Social Psychology, New York: Wiley, 1967.
- Scott Krugman and Sarah Scheuer, "NRF's Summer 2001 *Retail Sales Outlook* Sees Economic Rebound Just Over the Horizon," July 23, 2001.
<http://www.nrf.com/content/default.asp?folder=press&file=RSOjuly01.htm>

Vishesh Kumar, "Greenspan is Cold Comfort," *The Industry Standard*, July 24, 2001. <http://www.thestandard.com/article/0,1902,28197,00.html?partner=isyndicate5>.

Hairong Li and Janis Bukovac, "Cognitive Impact of Banner Ad Characteristics: An Experimental Study," *Journalism and Mass Communication Quarterly*, Vol. 76, No. 2, pp. 348-349.

Lynda M. Maddox, Darshan P. Mehta and Hugh G. Daubek, "The Role and Effect of Web Addresses in Advertising," *Journal of Advertising Research*, Vol. 37, No. 2, pp. 47-53.

William McGuire, "The Nature of Attitudes and Attitude Change," in G. Lindzey and E. Asronson, *The Handbook of Social Psychology*, 2nd ed., New York: McGraw Hill, Vol. 3 1969, pp. 136-314.

NUA Survey "How Many Online," November, 2000. <http://www.nua.ie>

Pegasus Research International, LLC, "The Internet is Dead, Long Live the Internet," December, 2000. <http://www.pegasusresearch.net/commentary/macrovew.htm>.

Richard E. Petty and John T. Cacioppo, *Attitudes and Persuasion: Classic and Contemporary Approaches*, Dubuque: William C. Brown. 1981.

Richard E. Petty and John T. Cacioppo, "Issue-involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses." *Journal of Personality and Social Psychology*, 37, 1979, pp. 1915-1926.

Richard E. Petty and John T. Cacioppo, "Central and Peripheral Routes to Persuasion: Applications to Advertising," in L. Percy and A. G. Woodside (eds.). *Advertising and Consumer Psychology*, Lexington, MA: Lexington Books, pp. 3-24, 1981.

Richard E. Petty and John T. Cacioppo, "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," *Journal of Consumer Research*, 19, pp. 135-146, September, 1983.

Deborah A. Procopio, "Does It Pay to Have a Web Site? Assessing the Value of URLs in Print Advertisements for Non-Technology Products," AEJMC Conference Papers, p. 2, December 1998.

A G. Sawyer, "Repetition, cognitive responses and persuasion." In R.E. Petty, T.M. Ostrom and T.C. Brock, eds, *Cognitive Responses in Persuasion*, 1981, pp. 237-261.

Alexis S. Tan, *Mass Communication Theories and Research*, second edition, Toronto: John Wiley & Sons, 1985, p. 90.

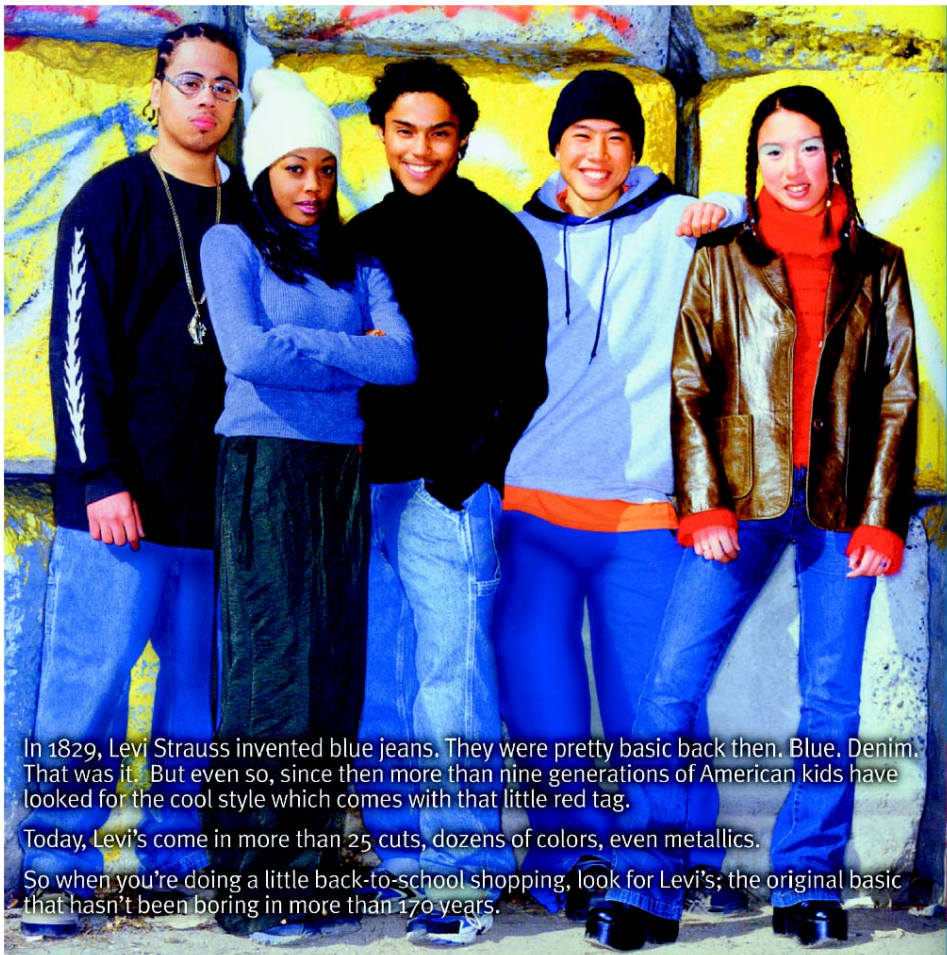
David Thompson and Birgit Wassmuth, "Do They Need a 'Trick' to Make Us Click? A Pilot Study That Examines a New Technique Used to Boost Click-Through," AEJMC Conference Papers, September, 1999.

United States Department of Commerce report "The Emerging Digital Economy," 1999.
<http://www.ecommerce.gov/ede>

United States Department of Commerce report "The Emerging Digital Economy," 2000.
<http://www.esa.doc.gov/de2k2.htm>

APPENDIX 1A

EXPERIMENTAL TREATMENT, CONTROL GROUP




levi's.
a
long way
from your
great,
great,
great,
great,
great,
great,
great,
great,
great
grandpa's
jeans.

In 1829, Levi Strauss invented blue jeans. They were pretty basic back then. Blue. Denim. That was it. But even so, since then more than nine generations of American kids have looked for the cool style which comes with that little red tag.


Today, Levi's come in more than 25 cuts, dozens of colors, even metallics.

So when you're doing a little back-to-school shopping, look for Levi's; the original basic that hasn't been boring in more than 170 years.



APPENDIX 1B

EXPERIMENTAL TREATMENT, EXPERIMENT GROUP




www.levistrauss.com

levi's.
a long way from your great, great, great, great, great, great, great grandpa's jeans.

In 1829, Levi Strauss invented blue jeans. They were pretty basic back then. Blue. Denim. That was it. But even so, since then more than nine generations of American kids have looked for the cool style which comes with that little red tag.

Today, Levi's come in more than 25 cuts, dozens of colors, even metallics.

So when you're doing a little back-to-school shopping, look for Levi's; the original basic that hasn't been boring in more than 170 years.



APPENDIX 2

QUESTIONNAIRE

Below is a list of statements corresponding to the ad you have just viewed. On the scale **below** each statement, mark your response based on how much you agree or disagree with the statement.

- 1) The company promoting this brand is high tech.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree
- 2) This brand is a cutting edge product.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree
- 3) This brand is a quality product.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree
- 4) The company manufacturing this brand is cutting edge.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree
- 5) I consider this advertisement to be appealing.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree
- 6) I consider the brand advertised appealing.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree
- 7) I have a more positive opinion about the company advertising this brand because of this advertisement.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree
- 8) If the company who owned this brand had an appealing and informative web site, I would think more about buying this brand.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree
- 9) I would look for information pertaining to this brand on the Internet.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree
- 10) I would visit the brand's web site.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree
- 11) I would consider purchasing this brand if it were available on the Internet.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree
- 12) I consider computers to be an indispensable part of my personal life.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree

13) I consider the Internet an indispensable part of my life.
Strongly Agree Agree Neutral/Don't Know Disagree Strongly Disagree

Please complete the following information:

I am male female
I am _____ years old
I am a freshman sophomore junior senior
My current major is _____

Do you have Internet access? Yes no

Do you use the Internet
daily weekly seldom never

Do you use the Internet to get information about the product you want to buy
Quite often sometimes seldom never

What is your major source of news information?
Newspaper Television Radio Internet Other

When you plan to buy something, you will look for ad first. Yes no

If yes, will you look for an ad from the:
newspaper television magazine Internet

How will you rate your computer skill?
Excellent good medium some problems poor

APPENDIX 3

CODING SHEET

For items 1-13, each is coded in the following manner:

Strongly Agree=5
Agree=4
Neutral/don't know=3
Disagree=2
Strongly Disagree=1

This is done to give positive values higher numbers, i.e. a 4.4 is a more positive perception or behavior (relative to the company or brand) than 3.3. Non-answers are coded as 3 so as not to skew the results.

The following values for other items on the questionnaire are use either numbers or string values as shown.

Sex: Male (m) or Female (f)

Age: Same value as age (eg. 18 for 18 year-olds)

Year: Freshman (F) or Sophomore (S)

Major: Mass Communications (MC) or other (O)

Access: Yes (1) or No (2)

Use: Frequency of Internet Usage
Daily, Weekly, Seldom, or Never

Info: Use of the Internet to obtain information on products
Quite Often, Sometimes, Seldom, or Never

Source of news information:
Newspaper, (N) Television (TV) Radio (R) Internet (Net) or Other (O)

Ad 1: Look for ad first before buying
Yes (1) or No (2)

Ad 2: Ad source
Newspaper (N) Television (TV) Magazine (M) or Internet (Net)

Skill: Computer proficiency
Excellent (E) Good (G) Medium (M) Some problems (SP) Poor (P)

VITA

Neil Melançon was born on October 15, 1973, in Metairie, Louisiana. In 1991, he entered Louisiana Tech University in Ruston, Louisiana, and received his Bachelor of Arts degree in journalism in 1995.

He began his graduate work in 1995 at the Manship School of Mass Communication at Louisiana State University. While a graduate student, he had the opportunity to become an intern in the Public Relations Department at the Louisiana Farm Bureau Federation, which eventually became a full-time job as Director of Multimedia Services, encompassing Webmaster, co-producer of a television show, radio and writing duties.

After a brief hiatus, he re-entered the graduate program in 2001 and is currently a candidate for the degree of Master of Mass Communication, which will be awarded in Spring, 2002.