

TESTING FOR A SYNERGISTIC EFFECT BETWEEN ONLINE PUBLICITY AND  
ADVERTISING IN AN INTEGRATED MARKETING COMMUNICATIONS  
CONTEXT

---

A Dissertation  
presented to  
the Faculty of the Graduate School  
University of Missouri-Columbia

---

In Partial Fulfillment  
Of the Requirements for the Degree

Doctor of Philosophy

---

by  
ANCA CRISTINA MICU

Dr. Esther Thorson, Dissertation Supervisor

MAY 2005



The undersigned, appointed by the Dean of the Graduate School,  
have examined the dissertation entitled.

TESTING FOR A SYNERGISTIC EFFECT BETWEEN ONLINE PUBLICITY AND  
ADVERTISING IN AN INTEGRATED MARKETING COMMUNICATIONS  
CONTEXT

Presented by Anca Cristina Micu

A candidate for the degree of Doctor of Philosophy

And hereby certify that in their opinion it is worthy of acceptance.

*Esther Johnson*

---

*Pete Bluh*

---

*Stacy Stata*

---

*Colin M. Brantly*

---

*Alex T. Cameron*

---

## ACKNOWLEDGEMENTS

I would like to express my great appreciation for Dr. Esther Thorson. She has been a very skilled dissertation supervisor and academic advisor. Dr. Thorson has supported and encouraged me since my first day of doctoral studies. She has taught me how to be a scholar and also implanted what a scholar should be in my mind. I will always be curious and excited about research projects because of her.

I am also grateful to Dr. Clyde Bentley who has been my close friend and mentor throughout the three years of the doctoral program. Dr. Bentley has taught me to always try to do my best in the classroom and put my heart into teaching students. I will always remember his care for his students as well as his open mind. The lunches we had together discussing the different aspects of various cultures around the world provided me with much more than classes could ever give.

I would like to thank Dr. Glen Cameron and Dr. Wayne Wanta for always taking their time to read the manuscripts that I have sent them. Thank you for all your feedback and advice, it helped me have the broad perspective that I have today, when I am completing my dissertation.

Dr. Peter Bloch has also been a great help to me with his views coming from a different yet related field of study. I would like to thank him for his guidance and support.

This dissertation is dedicated to my husband, Daniel, who has been very patient with me while I was writing it.

# TESTING FOR A SYNERGISTIC EFFECT BETWEEN ONLINE PUBLICITY AND ADVERTISING IN AN INTEGRATED MARKETING COMMUNICATIONS CONTEXT

Anca Cristina Micu

Dr. Esther Thorson, Dissertation Supervisor

## ABSTRACT

This dissertation examined the relationship among four exposure conditions in marketing communications (pure advertising, advertising priming, publicity priming, and pure publicity) that include either advertising or publicity or both. Also, the indirect relationship between brand communication exposure condition and purchase intent was modeled via path analysis. 634 students participated in an online experiment. Repeated measures MANCOVA analysis results indicate that the two synergistic conditions, which included an ad-article or article-ad combination, were more effective in terms of brand communications impact than the pure advertising condition. The pure publicity condition was found to be more effective than any of the other three. Hence, brand communications managers are encouraged to include publicity in their strategic communication campaigns.

## LIST OF FIGURES AND TABLES

### Figures

Figure 1-1. Exposure Conditions in Order of Brand Communication Effectiveness According to IMC and Third-Party Endorsement .....	5
Figure 1-2. Path Model of the Impact of Exposure Condition on Purchase Intent.....	6
Figure 2-1. Exposure Conditions in Order of Brand Communication Effectiveness According to the IMC Framework.....	19
Figure 2-2. Factors Classifying Marketing Communications Synergies .....	22
Figure 2-3. Effect of Context-Ad Congruency on Advertising Effectiveness.....	26
Figure 2-4. Exposure Conditions in Order of Brand Communication Effectiveness According to the Synergy Concept.....	35
Figure 2-5. Priming Impact from Previous Literature .....	43
Figure 2-6. Exposure Conditions in Order of Brand Communication Effectiveness According to the Third-Party Endorsement Concept.....	48
Figure 2-7. Exposure Conditions in Order of Brand Communication Effectiveness According to IMC and Third-Party Endorsement .....	49
Figure 2-8. Path Model of the Impact of Exposure Condition on Purchase Intent.....	50
Figure 5-1. Group Means for Attitude Toward the Brand .....	74
Figure 5-4. Path Model of the Impact of Exposure Condition on Purchase Intent for the Sonex MP3 Player Brand.....	80
Figure 5-5. Path Model of the Impact of Exposure Condition on Purchase Intent for the Sweeteez Candy Brand .....	81
Figure 5-6. Path Model of the Impact of Exposure Condition on Purchase Intent for the RoVision DVD Player Brand.....	81
Figure 5-7. Path Model of the Impact of Exposure Condition on Purchase Intent for the Talpa Sports Shoes Brand.....	82
Figure 5-2. Group Means for Attitude Toward the Technical Brand .....	108
Figure 5-3. Group Means for Attitude Toward the Non-Technical Brand.....	108

## Tables

Table 2-1. A Typology of Synergies in Marketing Communications .....	36
Table 3-1. Experiment Design .....	53
Table 4-1. Factor Analysis Loadings and Reliability for Attitude Toward the Brand Variables .....	66
Table 4-2. Factor Analysis Loadings and Reliability for Ad Credibility Variables .....	67
Table 4-3. Factor Analysis Loadings and Reliability for Attitude Toward the Ad Variables .....	68
Table 5-2. Group Means for Attitude Toward the Brand .....	72
Table 5-3. Group Comparisons for Attitude Toward the Brand .....	73
Table 5-4. Group Means for Attitude Toward the Brand .....	75
Table 5-5. Group Comparisons for Attitude Toward the Brand .....	75
Table 5-6. Group Means for Attitude Toward the Ad .....	77
Table 5-7. Group Comparisons for Attitude Toward the Ad .....	77
Table 5-8. Group Means for Intention to Purchase .....	79
Table 5-9. Group Comparisons for Intention to Purchase .....	79
Table 5-1. Self-Reported Attitude Toward the Brand by Gender and Brand .....	107

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	i
ABSTRACT.....	ii
LIST OF FIGURES AND TABLES.....	iii
INTRODUCTION .....	1
LITERATURE REVIEW .....	8
Online Marketing Communications.....	8
Traditional advertising effectiveness measures used for online advertising.....	11
Integrated Marketing Communications .....	15
Synergy - Building a Typology of Synergies .....	20
Context and advertisement synergies.....	22
Cross-media synergies .....	28
Cross-tactics synergies.....	31
Priming.....	36
Third Party Endorsement.....	44
Hypotheses and Proposed Path Model.....	48
METHOD .....	52
Experiment Design .....	52
Questionnaire .....	55
Operational Definitions of Variables .....	55
Setting up the online experiment .....	58
Sample and Data Collection .....	63
DATA ANALYSIS.....	64
Data Clean Up.....	64
Dependent Variables Obtained Via Factor Analysis .....	65
Hypotheses Testing.....	68
Path Analysis .....	70
RESULTS .....	71
Attitude Toward the Brand Across Conditions.....	71
Attitude Toward the Ad Across Conditions .....	76
Purchase Intent Across Conditions .....	78
Path Models .....	80
SUMMARY AND DISCUSSION.....	83

Summary of Findings.....	83
Discussion.....	85
Limitations.....	90
APPENDICES .....	92
Appendix 1. Questionnaire .....	92
Appendix 2. Recruitment E-mail.....	99
Appendix 3. Login Page and General Instructions Page .....	100
Appendix 4. Ad and Article Treatments Instructions Pages.....	101
Appendix 5. Sample Advertising Treatment Pages .....	102
Appendix 6. Sample Article Treatment Pages.....	103
Appendix 7. Sample Fillers .....	104
Appendix 8. Sample Questionnaire Page with Warning Message .....	105
Appendix 9. Thank You Page.....	106
Appendix 10. Additional Table with Gender Means for Non-Technical Brands.....	1
Appendix 11. Additional Graphical Representations of Attitude Toward the Brand.	107
REFERENCES .....	109
VITA.....	119

# CHAPTER 1

## INTRODUCTION

Meet John and Mary. John read a news article on his homepage about environment protection that mentioned hybrid car producer Toyota. He is now in the market for buying a car and is browsing Edmunds.com for more information about different cars. Various online advertisements jump at him, including ads for the Toyota hybrid car. Is he more likely to have a positive attitude toward Toyota hybrid cars? Is he more likely to purchase a hybrid Toyota?

Mary wants to buy a present for her mom and started searching for a good face cream on Dillard's.com. She found at least two that seem to have the beneficial effect she is looking for and both feature ads linking in to the brands' respective web sites. When she had opened her browser, Mary had read a piece of news about anti-aging face creams mentioning one of the two brands. Is she more likely to remember the advertised brand about which she had read when she decides to purchase?

Recognized as an information medium, the Internet provides users with details about products and services. More and more are marketers using the World Wide Web to promote their brands. US online advertising spending is expected to reach over \$13 billion in 2006 (eMarketer 2004a). The new medium outpaced all other traditional media in terms of the increase in advertising spending (Center for Media Research 2004a).

The questions about a combined effect of publicity and advertising on John and Mary are some that proponents of integrated marketing communications (IMC) would like answered. An integrated campaign means that all its pieces work together and,

following the definition of synergy, the “whole is greater than the sum of its parts” (Wells, Burnett, and Moriarty 2003, p.552; Belch and Belch 1998). According to Wells and his colleagues, an IMC plan includes more than traditional advertising, it includes public relations and sales promotions as well. The current study is looking at the combined effect of publicity and advertising for the online environment.

This dissertation contributes to the theoretical development of both the integrated marketing communications framework and the more general area relating to the fundamentals of online information processing.

First, results from testing for a synergistic effect between online publicity and advertising would offer a basis for the argument of using different communications tactics together in the online environment. Schultz, Tannenbaum and Lauterborn (1993) argue for the integration of the marketing communications efforts at a strategic level. The confirmation of the added value from combining the tactics would lay the foundation and strengthen the argument for the strategic integration. Several studies have looked at synergistic effects between media, such as radio and television or television and the Internet (Edell and Keller 1989; Edell and Keller 1999; Chang and Thorson 2004), however, few have researched a combined effect of the different marketing communications tactics, such as advertising and publicity (Jin 2003).

Second, the study would shed more light on how users process online information, specifically providing more insight into at least two areas.

The first area can be called publicity priming in the online environment. The study would answer whether publicity can prime Internet users to be more receptive of online advertising. According to Chang (2005), Internet audiences are rarely noticing

advertisements and seldom click on them for more information. The current study proposes to look at whether publicity could smooth out the way for online ads. Would there be a more positive attitude toward the ad when the target audience is exposed to publicity in addition to advertising?

The second area covers the actual mechanism and dependent variables that would account for the synergistic effect on prospects' evaluations of the ad or the brand. Would there be a more positive attitude toward the brand? Would there be an increased intention to purchase in the synergistic condition? What would mediate a relationship between publicity priming and any of the effectiveness measures mentioned above?

The IMC framework argues for use of multiple communication tactics. Why pick publicity to combine with advertising? Why would inclusion of publicity with advertising generate more effective brand communication? The third-party endorsement concept (Cameron 1994; Hallahan 1999; Linning 2004) states that publicity outperforms advertising because of the credibility associated to publicity.

Within the third-party endorsement framework, publicity embraces the format of news and therefore borrows the credibility from which news stories benefit. Intuitively, considering the third-party endorsement reasoning, an IMC campaign that would combine both publicity and advertising would generate more positive brand attitudes than a pure advertising campaign and this relationship between message format and attitude toward ad or brand would be mediated by the credibility of the message. On the other hand, considering the third-party endorsement concept, a pure publicity campaign that includes several articles in different media would generate more positive attitudes toward the brand than any campaign that includes advertising.

An experiment was implemented to assess the differences in terms of marketing communication effectiveness among publicity, advertising, and the publicity-advertising combination. Repeated measures multivariate analysis of covariance was used to analyze the data in a mixed four by four full factorial design. The between-subjects factor was experiment condition (publicity, advertising, publicity-advertising combination, and advertising-publicity combination). The within-subjects factor was the product category (MP3 player, candy, DVD player, sports shoes). Testing the hypotheses for a variety of products was important so that the findings would be applicable for a broader range of product categories. Hypotheses in this dissertation were set as follows and summarized in Figure 1-1 below.

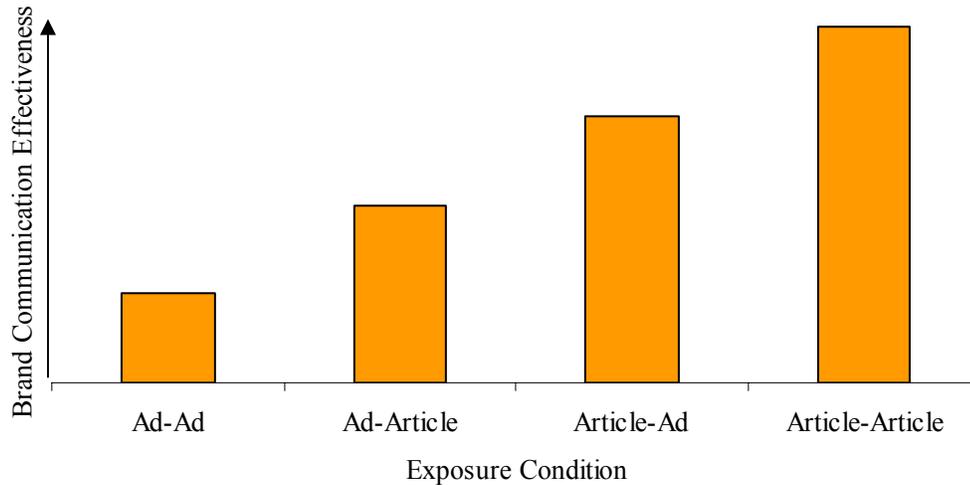
H1: The Ad-Ad (pure advertising) condition is the least effective in terms of brand communication effectiveness from the four possible conditions.

H2: The Ad-Article (advertising priming) condition is more effective than the Ad-Ad condition but less effective than the Article-Ad and Article-Article conditions in terms of brand communication effectiveness.

H3: The Article-Ad (publicity priming) condition is more effective than both the Ad-Ad and Ad-Article conditions but less effective than the Article-Article condition in terms of brand communication effectiveness.

H4: The Article-Article (pure publicity) condition is the most effective in terms of brand communication effectiveness from the four possible conditions.

**Figure 1-1. Exposure Conditions in Order of Brand Communication Effectiveness According to IMC and Third-Party Endorsement**



Apart from testing these hypotheses, the mediating role of credibility between condition and brand communication effectiveness was modeled via path analysis.

The dependent variables used to measure brand communication effectiveness were attitude toward the ad, attitude toward the brand, and purchase intent.

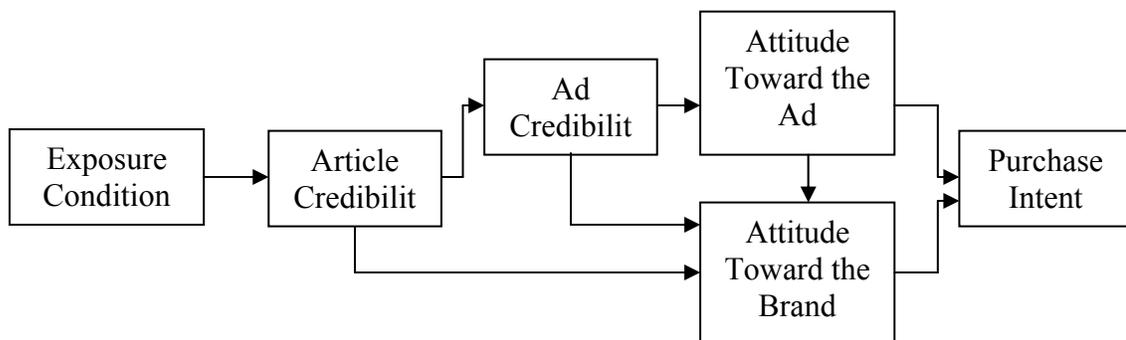
*Attitude toward the ad* ( $A_{AD}$ ) has been shown to be an important mediating variable that can influence assessments about brands featured in ads (Lutz 1985; Batra and Ray 1986; Mackenzie and Lutz 1989; Mackenzie, Lutz, and Belch 1986; Mitchell and Olson 1981). According to Mackenzie, Lutz, and Belch (1986), attitude toward the ad directly affects attitude toward the brand. *Attitude toward the brand* ( $A_B$ ) is a construct used by marketing researchers in assessments of the products (Heath and Gaeth 1994), representing a measure of cognitive and affective response to the message. *Purchase intent* is a case of behavioral intention (Ajzen and Fishbein 1975; Sheppard, Hartwick,

and Warshaw 1988) and represents a self-reported probability statement that a particular behavior (e.g., product purchase) will be undertaken. Because these three measures are often highly correlated, their combined effects are often treated as single attitudinal measure of message effectiveness or persuasiveness (Hallahan 1999).

Mackenzie and Lutz (1989) examined the antecedents of attitude toward the ad and included advertising credibility. In the framework proposed in this dissertation, publicity is generating credibility via third-party endorsement. Hence, when used in combination, ad credibility and article credibility should be related and be antecedents of attitude toward the ad and attitude toward the brand. Credibility should also influence attitude toward the brand. Both attitude toward the ad and attitude toward the brand are documented antecedents of purchase intent (Mackenzie, Lutz, and Belch 1986; Kim and Pysarchik 2000).

The path model started with the exposure condition (from ad-ad to article-article), included ad and article credibility and attitude toward the ad and attitude toward the brand as mediators and concluded with purchase intent.

**Figure 1-2. Path Model of the Impact of Exposure Condition on Purchase Intent**



The path model in Figure 1-2 summarizes the avenues experienced from exposure condition to intention to purchase in terms of brand communication effects.

The next chapter covers the literature review related to the theoretical foundations of this study and includes:

- An introduction to online marketing communications
- A presentation of the integrated marketing communications framework
- A typology of synergies in marketing communications
- An introduction to priming as it relates to this dissertation
- The third-party endorsement concept

The experiment designed to test the hypotheses of this dissertation are grounded in this review of literature. The specifics of the research design and data analysis are presented in the Methodology chapter.

## **CHAPTER 2**

### **LITERATURE REVIEW**

In this chapter, this author reviewed a variety of theoretical issues relating to this dissertation's topic. The chapter is divided into five parts.

The first part introduces the online medium as a channel for marketing communications. The Internet is compared to the television and print media in terms of promotional information processing. The second part presents the integrated marketing communications framework as the theoretical foundation for combining two promotional tactics (i.e., publicity and advertising). The third part builds a typology of empirically examined synergies in marketing communications. The publicity-advertising synergy is placed within the typology. The fourth part deals with the concept of priming.

Considering this dissertation proposes two exposures to promotional messages, it is important to address priming as the theoretical framework dealing with the impact of the first exposure to subsequent ones. This part will also include effects of exposure on dependent variables such as attitude toward the ad, attitude toward the brand, and purchase intent. The fifth part details the third-party endorsement theoretical concept. This part builds the foundation for predicting a more effective communication strategy by adding publicity to advertising. This fifth part will also introduce the concept of credibility as it relates to publicity and advertising.

#### **Online Marketing Communications**

Internet marketing communications, whether corporate communications or advertising, have reached a superior level during the past years. Most companies have

web sites, some conduct e-commerce, and many promote themselves online. A recent study of the retail industry stresses that online advertising is the fastest growing segment of the overall advertising market (eMarketer 2004b).

It is widely recognized that the Internet is a medium used for information as opposed to television which is categorized as an entertainment medium (Online Publishers Association 2004; Stafford and Stafford 2004). Sixty five percent of respondents in a survey implemented by media research company Frank N. Magid Associates said the Internet provides them with useful information about products and services (Center for Media Research 2004b). Online product research is now driving nearly 15% of total U.S. retail spending, according to *The American Interactive Consumer Survey* conducted by The Dieringer Research Group. The survey found online product research by consumers in 2004 was responsible for driving \$180.7 billion in offline spending (Center for Media Research 2004b).

Considering the amount of decision-making that is taking place online regarding product or service purchasing, the estimated \$13.5 billion for US online advertising spending for year 2006, an increase of almost \$5 billion from 2004 is understandable (eMarketer 2004a).

It is therefore important for advertisers to understand the impact of online promotion in an environment where consumers are exposed to a wealth of information. Marketers do not have control over product reviews written by other consumers, however they do have some control over news stories about their brands or companies that appear online as a result of their public relations efforts or as a result of their own efforts (i.e., company web sites). No previous study that the author is aware of looked at the added

effect of using a combination of different types of online marketing communications.

This study does not address news content sponsorship. It argues for public relations departments to pitch brand-related stories to online outlets with the scope of obtaining publicity for their brands. The online outlets targeted to carry the stories would have to be the ones that are likely to be visited by the brand's prospects. The procedure would be similar to targeting principles followed when online advertisements are placed on the web sites of interest.

Getting prospects exposed to news stories about the brand in addition to advertising can also have a benefic effect in terms of more users noticing a brand's ads after reading about the specific brand. Such publicity priming would break down some of the barriers faced by online advertisements. Citing Norris and Colman (1992), de Pelsmacker, Geuens, and Anckaert (2002) argue that ads can be skipped more easily in the print environment than on radio or television because "the appreciation of the context leads to less ad processing." The same issue surfaces for the online environment, where users do not attend to more than fifty percent of banners (Dreze and Hussherr 2003).

In his study on the combined effect of publicity and advertising, Jin (2003) explains that previous researchers have operationalized involvement as interest (e.g., Salmon 1986). Interest plays an important role in information processing by activating greater cognitive activity (Salmon 1986) and information-search strategies (Bucholz and Smith 1991; Burnkrant and Sawyer 1983). According to Jin (2003), "when people have an interest in ads, they are likely to pay attention to the ads and gain more information about them" (Jin 2003, p. 32). The current study examines, among other things, the effects of priming a brand's ads with news stories about the brand. Following the

rationale about increased interest, it can be hypothesized that Internet users would be more likely to attend to ads for brands they had already read about. This is also consistent with theory on cognitive priming, which states that attributes made accessible through priming will more likely be used in interpreting information in a given advertisement (Yi 1990a). The specific theoretical background related to priming is detailed later.

Thus, the current study will look at a synergistic effect between publicity and advertising in the online environment. The theoretical background builds on the ideas of publicity priming (Jin 2003) and third-party endorsement (Cameron 1994). Adding publicity to online advertising would generate an increased impact of an integrated communications campaign as opposed to a pure advertising campaign.

#### Traditional advertising effectiveness measures used for online advertising

The dependent variables used in this dissertation to measure brand communication effectiveness were attitude toward the ad, attitude toward the brand, and purchase intent.

*Attitude toward the ad* ( $A_{AD}$ ) has been shown to be an important mediating variable that can influence assessments about brands featured in ads (Lutz 1985; Batra and Ray 1986; Mackenzie and Lutz 1989; Mackenzie, Lutz, and Belch 1986; Mitchell and Olson 1981). According to Mackenzie, Lutz, and Belch (1986), attitude toward the ad directly affects attitude toward the brand.

*Attitude toward the brand* ( $A_B$ ) is a construct used by marketing researchers in assessments of the products (Heath and Gaeth 1994), representing a measure of cognitive and affective response to the message.

*Purchase intent* (PI) is a case of behavioral intention (Ajzen and Fishbein 1977; Sheppard, Hartwick, and Warshaw 1988) and represents a self-reported probability statement that a particular behavior (e.g., product purchase) will be undertaken.

Because these three measures are often highly correlated, their combined effects are often treated as single attitudinal measure of message effectiveness or persuasiveness (Hallahan 1999).

Several academic studies on advertising in digital environments (see studies by Dreze and Hussherr 2003; Dahlen 2001; Cho, Lee, and Tharp 2001; Gallagher, Foster, and Parsons 2001) have focused on measuring changes in ad and brand attitudes and purchase intentions as a function of exposure. Several empirical studies focused specifically on banner-ad exposure effectiveness (Briggs 1996, 1997; Briggs and Hollis 1997) and what affects clickthrough (Chatterjee et al. 1988; Hofacker and Murphy 1998).

Conducting an experiment about the effectiveness of online advertising versus print, Gallagher, Foster, and Parsons (2001) measured attitude toward the ad by asking how interested participants were in what the advertisement was telling them (very interested/somewhat interested/not interested) and how much of the advertisement they had read (none of it/less than half/more than half/all of it). Gallagher and her colleagues also measured attitude toward the brand by asking how the advertisement made participants feel about the advertiser (good/okay/bad/not sure). Recall of specific copy points was measured by asking participants to write down everything else they could remember about the business sponsoring the advertisement. Purchase intent was assessed by asking participants which brand of coffee they would take home.

Attitude toward the brand was a measure of advertising effectiveness in a study by Cho, Lee, and Tharp (2001). These researchers explored the effects of different levels of forced exposure to banner ads on advertising responses. The dependent variables used in this study were: advertising perception, clicking of banner ads, banner attitude, brand attitude, and purchase intention. Cho and his colleagues found that the banner ads presented in the format of the highest forced-exposure level yielded the most desirable advertising effects (i.e., favorable attitude toward the banner ad, favorable attitude toward the brand, and high purchase intention). Similar to this dissertation, researchers developed a web site to expose participants to online advertisements and answer the questionnaire. After finishing each part of the questionnaire, subjects were moved to the next part by clicking the "continue" button. Subjects saw four banner ads and were asked whether they remembered each banner ad or not. Then, to measure the clickthrough rate of each banner ad and reasons for clicking, subjects were asked if they clicked each banner ad or not, and then why they clicked the banner ad if they did. In the third part of the online questionnaire, subjects were asked to answer questions concerning their attitudes toward each of the four banner ads. A battery of eight Likert-scale items was used to measure the attitude toward each banner ad. In the next part, brand attitude and purchase intentions were measured by again using a battery of four Likert-scale items.

Level of involvement has also been a very important variable in audience processing of both traditional advertising (Krugman 1965; Ray et al. 1973; Houston and Rothschild 1978; Petty and Cacioppo 1996) and web advertising (Raman and Leckenby 1998; Cho 1999). Hence, interest in the product category (involvement) was added as a covariate in this dissertation.

Dahlen et al. (2000) examined differences between high- and low-involvement products, while Dahlen (2001) compared high- and low-familiarity brands (Tellis 1988; 1997). Two measures were used to assess the familiarity of the brand. Brand awareness was measured as aided recall (Briggs and Hollis 1997). Experience with the brand was measured with a scale where respondents were asked to indicate how many times they had been in contact with the brand (Alba and Hutchinson 1987). The scale was tailored to each product class.

In Dahlen's study about the impact of brand familiarity in click-through, brand attitude was measured with the question "What do you think about this brand compared to other brands in the same product category?"; this was answered on a 7-point scale (1 = brand is the best brand in the category, 7 = brand is the worst brand in the category). For each product, the specific brand and product category were substituted in the questions. The measure was based on the recommendations of Gardner (1985) and Rossiter and Percy (1997). In this dissertation, there was only one brand for each product category. Hence, attitude toward the brand was measured following Chang and Thorson (2004). Chang and Thorson (2004) examined a synergistic effect between Internet and television advertising.

The current study looked at a synergistic effect between publicity and advertising in the online environment. The theoretical background builds on the ideas of integrated marketing communications (Schultz, Tannenbaum, and Lauterborn 1993), publicity priming (Jin 2003) and third-party endorsement (Cameron 1994). Adding publicity on the Internet to online advertising would generate an increased impact of an integrated

communications campaign as opposed to a pure advertising campaign, while a pure publicity campaign would outperform any campaign that includes advertising.

### **Integrated Marketing Communications**

The idea of “integration” was already present among practitioners at the end of the 80’s show the results of a survey of national advertisers conducted by Caywood, Schultz and Wang (1991).

Ever since Don Schultz and his colleagues coined the term integrated marketing communications, there have been several interpretations of what to integrate: strategies, tactics or communications channels (for a review see Schultz 2004). According to Schultz and Kitchen (1997), IMC scholars should keep away from interpreting IMC as a mere tactical integration of communication tools that would lead to “one voice”. They encouraged researchers to look past tactics and dig deeper to understand corporate strategies and how they can be molded so that an integrated communications perspective is welcomed.

Most IMC studies surveyed communication practitioners and found that even though the subjects saw the value of an integrated marketing communications strategy, there were slim chances for such a strategy to be implemented. It was not that the idea was bad, because it would have made corporate communication more consistent, rather there were turf battles to be fought between the different departments in charge of communications (Moriarty 1996).

Still, the IMC theoretical framework proposed that the different types of communications such as advertising and publicity would have a greater impact if used in combination rather than separately. Schultz and his colleagues actually proposed that the

combined effect would be greater than the simple addition of the separate individual advertising messages – resulting in a synergistic effect.

The market conditions that led to the birth of the IMC concept are not only still existing, they have accentuated over the years since the term was coined in the late 80's (Kitchen, Brignell, Li, and Spickett-Jones 2004). The seminal IMC textbook from Schultz, Tannenbaum, and Lauterborn presents a list of causes to the development of IMC that looks similar to the one presented by Duncan and (1996) in their book chapter covering the same topic: (1) media fragmentation determined by an increase in the number of media vehicles (for details, Sissors and Bumba 1995); (2) audience fragmentation – the audience started developing loyalties towards specific programs and shows, the days of the reigning three TV networks were gone; (3) technology rapidly entering the marketing realm due to the decreasing costs of computational resources as well as to the easier access to databases; (4) increase in competition due to the abundance of “me-too” products (Duncan and Caywood 1996); (5) increasing retailer power due to the information on consumers that retailers possessed; (6) a developing sense of globalization and need to market globally; and (7) an increasing pressure for the bottom-line and for higher return-on-investment.

According to Schultz, Tannenbaum and Lauterborn (1993) the changes resulting from these marketplace developments affected profoundly the way marketing and marketing communications are practiced. The impact of IMC on practice stems from the crux of the idea, which is integration. The entire reasoning of an integrated strategy relied on the assumption of synergy among the different communications components, meaning

that the different tactics would yield better results when used in combination as opposed to the simple sum of their individual effects.

According to Jin (2003), over time, scholars and practitioners appear to have developed their own interpretations of IMC (for details, see Duncan and Caywood 1996). However, academicians seem to have agreed that IMC is "strategic coordination of multiple communication voices" and "pursuing synergy by integration" (Schultz, Tannenbaum, and Lauterborn 1993; Thorson and Moore 1996).

Similar to Jin's (2003) study that looked at the combined effect of publicity and advertising, the current study is relevant in light of the mounting interest in IMC as it seeks to better understand and use the complete range of tools in the promotional mix (Schultz, Tannenbaum, and Lauterborn 1993; Thorson and Moore 1996).

Scrutinizing the IMC context, Thorson and Moore (1996) and Lutz (1996) proposed a general research agenda relating to the question of how do cross-media and/or cross-promotional tools work together (Jin 2003). A number of studies examined the cross-media hypothesis (Edell and Keller 1989, 1999; Bucy 2003; Chang and Thorson 2004), looking at television and radio, television and print, and television and web synergistic effects. The full range of studies focusing on synergistic effects is presented later in this study. The current study looks to build a typology of synergies in marketing communication and then test for publicity and advertising synergies. As Thorson and Moore (1996) pointed out, there have been few studies of the combination of different promotional tools that keep the IMC framework in mind. Jin (2003) found that subjects who have been exposed to both publicity about an advertising message and the advertising message itself had better recall of the ad. Other studies that looked at the

combined effect of different tools are from the sales area. Lemon and Nowlis (2002) found a synergistic effect among different in-store promotions for not-so-well-known brands and Gopalakrishna and Chatterjee (1992) assessed the joint impact of personal selling and advertising in order to better plan communications budget allocation. The author is not aware of any study that specifically examined the combined effect of publicity and advertising in traditional media or otherwise.

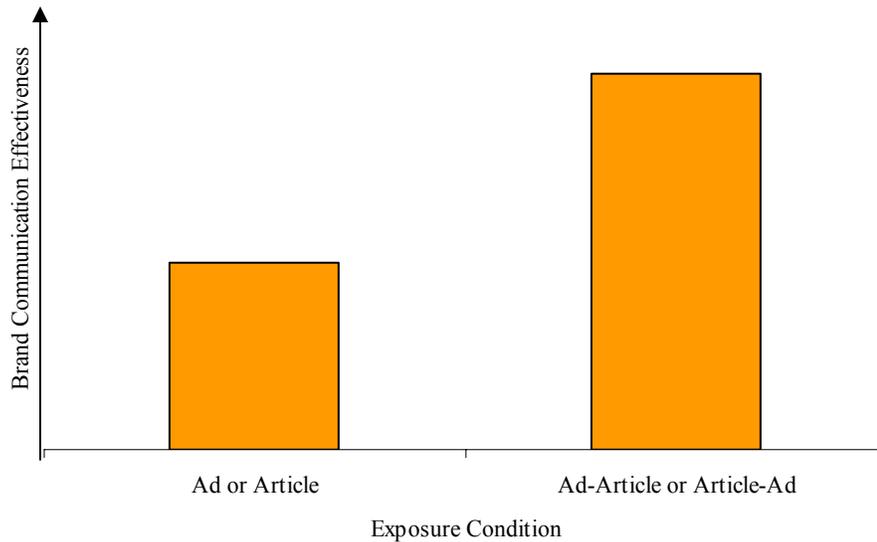
A recent theoretical article on the development of IMC finds it to be in stages 1 or 2 and rarely in stages 3 or 4 (Kitchen, Brignell, Li and Spickett-Jones 2004). The four stages of IMC are: (1) coordination of marketing communications; (2) customer-driven marketing communications where marketers collect customer and consumer data, then develop campaigns; (3) integration of information technology with intense usage of databases that changes “data” into “information”; and (4) strategical and financial integration. Kitchen and his colleagues stress the importance of integrated marketing to move from a tactical improvement to a strategical change.

Repeated successful results from tactical integration would however support the strategical integration that IMC proponents emphasize. According to Jin (2003), “it is reasonable to believe that the IMC perspective can provide advertising researchers with a more integrated way of thinking rather than breaking down fields or functions into increasingly narrow, specialized pockets.” It has to be argued here that a tactical integration between publicity and advertising is more likely to occur for the online medium as opposed to traditional media. Companies are increasingly devoting an “online department” to deal with their online presence. The online team is likely to be in charge of using specialized tools or companies to place brand messages online, no matter the

type of message. Using the same team to place both ads and brand news online would help overcome the classical IMC barrier – the turf battles between public relations and advertising departments (Moriarty 1996). A level 4 strategic integration would still be required so that the materials received by the online team for placement are consistent in their content and style.

So, the present study uses traditional advertising effectiveness measures to investigate a possible tactical integration between publicity and advertising as promotional tools in the online environment. Such integration would make sense provided for there is a synergistic effect when the tools are used in combination.

**Figure 2-1. Exposure Conditions in Order of Brand Communication Effectiveness According to the IMC Framework**



## **Synergy - Building a Typology of Synergies**

The subject of the added marketing communications impact resulting from a successful combination of components was present in studies that looked at the effect of advertising in association with: the context in which it is presented, the media that carry it, the sales promotions it is connected to, and finally, publicity about it. Researchers focused on: (1) the effect of congruency between an ad and the context in which the ad appears (Soldow and Principe 1981; Yi 1990a; Sharma 2000; de Pelsmacker, Geuens, and Anckaert 2002; Moorman, Neijens, and Smit 2002); (2) the impact of using different media to convey the marketing communications message (Edell and Keller 1989; Confer and McGlathery 1991; Edell and Keller 1999; Naik and Raman 2003; Bucy 2003; Chang and Thorson 2004); (3) the synergies between marketing communications tactics such as sales promotions and retail advertising (Lemon and Nowlis 2002), personal selling and advertising (Gopalakrishna and Chatterjee 1992), and publicity and advertising (Jin 2003).

According to a dictionary definition, synergy is the interaction of two or more agents or forces so that their combined effect is greater than the sum of their individual effects. Even though only the more recent studies specifically examined a synergistic effect, it can be argued that all of the studies mentioned above have findings that either established such an effect or concluded that testing for such an effect is the natural next step.

Synergies in marketing communication can be categorized into three types (similar to Moriarty 1996): (1) context-ad synergies; (2) cross-media synergies; and (3) cross-tactics synergies. Intuitively, type 2 and type 3 synergies have been separated because the first looks at marketing communications channels while the second focuses

on communications tactics such as publicity and advertising. There are at least two reasons why context-advertising synergies are treated as a separate type and are not included in the type 3, cross-tactics category.

The first reason relates to marketer or advertiser control. While in the case of communication channels or tools, the advertiser has full control over which to use to convey the promotional message, it is not the same with the context. A media buyer negotiates for a specific place in a preferred magazine for a print advertisement or an ideal program during which to run a commercial however, this does not give the marketer full control over the content of the magazine or TV show. The issue of marketer control is important for sketching the managerial implications of the findings.

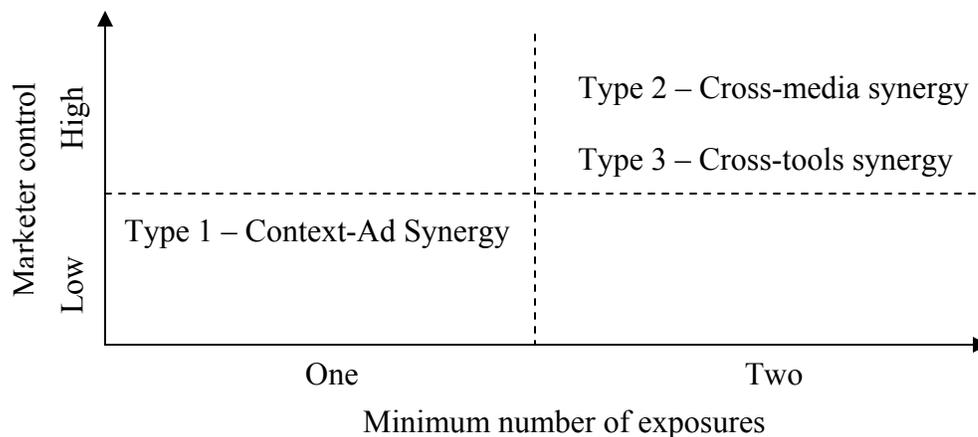
The second reason relates to the minimum number of exposures for the synergistic effect to occur. What sets apart context-advertising synergies is exposed at the same time to both components generating the synergistic effect. In the case of type one synergy, prospects are viewing the magazine and the ad (Moorman, Neijens, and Smit 2002) or the program and the commercial (Sharma 2000; de Pelsmacker, Geuens, and Anckaert 2002) in one sitting. The other two types, cross-media and cross-tools synergies, include a time factor as well. Therefore, testing for such synergies would have to consider at least two exposure times, one for each channel or tool respectively. Stewart and Kamins (2002) stress that the effects of marketing communications build over time and “thus, a single exposure to a communication may be insufficient to have a detectable effect on consumers” (Stewart and Kamins 2002, p. 292).

Hence, the type 2 and 3 synergies have already better chances of success because they involve an increased number of exposures or repetition of the message. In addition,

researchers found that varying the message or the source has a benefic effect beyond the one resulting from simple repetition of the same message via the same source (Unnava and Burnkrant 1991; Jin 2003; Chang and Thorson 2004).

Figure 2-2 places the three types of synergies as they relate to both the level of marketer control and the minimum number of exposures needed for the synergistic effect to take place.

**Figure 2-2. Factors Classifying Marketing Communications Synergies**



Context and advertisement synergies

The impact of context on advertising effectiveness was assessed for television (Soldow and Principe 1981; Schumann and Thorson 1990; Murry, Lastovicka, and Singh 1992; Lord and Burnkrant 1993; Aylesworth and MacKenzie 1998; Sharma 2000), print (MacInnis and Jaworski 1989; Yi 1990a; Moorman, Neijens, and Smit 2002), both television and print (de Pelsmacker, Geuens, and Anckaert 2002), and even for the World Wide Web (Shamdasani, Stanaland, and Tan 2001).

No matter the medium, several theoretical concepts were used by researchers to explain the psychological processing of both context and advertisements when testing for

advertising effectiveness. These include: involvement (e.g., de Pelsmacker, Geuens, and Anckaert 2002), liking (e.g., Murry, Lastovicka, and Singh 1992), feelings (e.g., Goldberg and Gorn 1987), and mood (e.g., Aylesworth and MacKenzie 1998) (for a detailed literature review, Moorman, Naijens, and Smit 2002). According to Moorman and her colleagues, involvement is set apart because of its lack of valence. The other concepts, such as liking, affect, feeling, mood, benefit from an either positive or negative valence and their effects were tested taking into account the either positive or negative psychological influence. The influence of context on ad evaluations was examined in relation with concepts such as: involvement (high or low), psychological response valence (cognitive or affective), and priming (as the mechanism through which context impacts ad evaluation.) These three concepts are discussed below in the light of previous advertising context research.

### *Involvement*

In his study on the program/commercial congruency effects, Sharma (2000) considered involvement has been inconsistently conceptualized in terms of intensity of information processing (Krugman 1966), need for closure (Kennedy 1971), and suspensefulness (Soldow and Principe 1981). According to Sharma (2000), these conceptualizations focus on either high or low involvement generating a difference in outcome. Instead of settling for the high--low distinction Sharma conceptualized involvement as cognitive or affective.

Focusing on the cognitive or affective congruency between program and commercial, Sharma (2000) found free recall and cued recall to be significantly higher for the cognitively involving commercial in the cognitively involving program context

than in the affectively involving program context. He also found free recall and cued recall to be significantly higher for the affectively involving commercial in the affectively involving program context than in the cognitively involving program context. Going back to the idea of synergy, Sharma's findings imply a synergistic effect of context and commercial when the two elicit a similar type of involvement, either cognitive or affective. The question then rises whether the cognitive-congruent situation would generate better results than the affective-congruent one?

#### *Valenced Psychological Responses*

While looking at involvement provided insight into differences between cognitive and affective responses, using a valenced theoretical concept had the advantage of detailing the findings relating to the affective impact. Scholars who employed measures such as liking, feeling or mood, tested independently for either positive or negative generated affect.

Looking at the attitude toward the ad as an influencer of brand attitude, Aylesworth and MacKenzie's (1998) results indicate that ads placed in programs that induce negative moods are processed less systematically than ones placed in programs that put viewers in positive moods. Hence, the researchers found mood to influence attitudes toward the advertisements both by affecting the number of cognitions the audience generates about the ads in the case of positive program-induced mood and by modifying the effect of those cognitions on the attitude toward the ad. Negative-mood-inducing shows were found to decrease central processing of the ads embedded in them and increase peripheral processing. Consequently, viewers of negative-mood-inducing

programs were more likely to continue central processing of the program and attend to the commercial only through the peripheral route.

For the print environment, Moorman, Neijens, and Smit (2002) looked at the effect of a thematic congruence between magazines and the advertisements featured in them. The relationships between psychological responses and attitude toward the ad found in this study are in accordance with most previous (television) studies (e.g., Aylesworth and MacKenzie 1998; Goldberg and Gorn 1987; Murry, Lastovicka, and Singh 1992) and suggest that the positive responses induced by the magazine spill over to the ads included in that magazine.

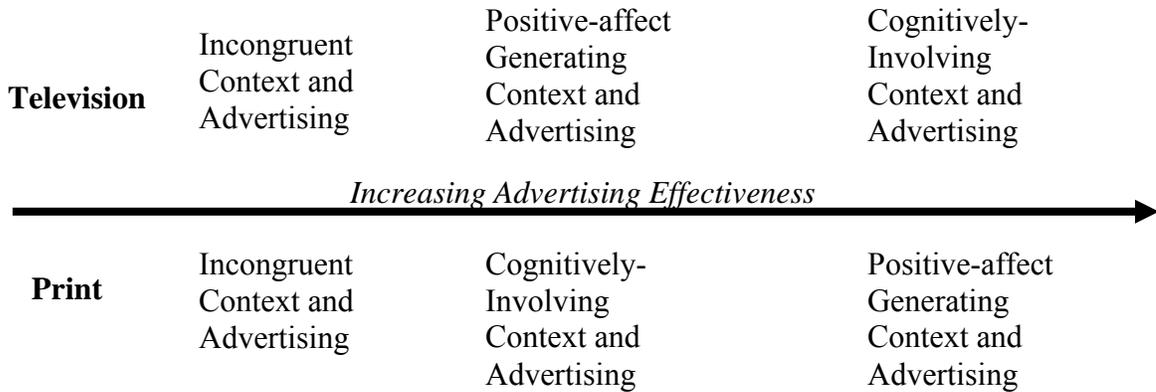
Following the presented affect-related findings, while we cannot talk about a synergistic effect in the case of negative-mood-inducing television programs and commercials embedded in them, examination of a synergistic effect of a positive-mood-inducing programs and advertising is in order.

To sum up, context studies centered around the concept of involvement found that context-advertisement cognitive or affective congruency generates higher advertising effectiveness. The studies employing valenced psychological measures provided insight into how the valence of the program/context in which the commercial/advertisement is embedded influences the ad's effectiveness. So, congruent programs and commercials that both generate either cognitive or positive affective responses produce increased advertising effectiveness.

De Pelsmacker, Geuens, and Anckaert (2002) looked at context/ad congruency for both cognitive- (rational) and affective- (warm or humorous) response generating situations. The study also compared television to print in terms of how context/ad

congruency enhances advertising effectiveness. Findings showed congruent contexts and ads lead to better brand recall in a print environment. Figure 2-2 is an intuitive summary of how context/ad congruency positively influences advertising effectiveness.

**Figure 2-3. Effect of Context-Ad Congruency on Advertising Effectiveness**



*Priming*

Adding to the amount of conflicting results in the context/ad effects area and contrary to their expectations, De Pelsmacker and his colleagues found that the context/ad similarity did “not lead to a significantly more positive or negative attitude or more or less recall” (De Pelsmacker, Geuens, and Anckaert 2002, p. 55). The level of involvement with the product had the significant effect on attitudes and recall. The researchers concluded that in low involvement situations, a congruent media context could serve as a peripheral cue, activating knowledge structures and facilitating message elaboration (priming effect). Priming the relevant associative structures in high involvement situations may not be as important, De Pelsmacker, Geuens, and Anckaert conclude.

A study that looked at the added effect of priming in the print environment is the one conducted by Yi (1990a). Yi’s (1990a) theoretical foundation drew from both

priming-related literature and from affect transfer research (Lutz 1985). Yi wrote that social cognition research shows that a temporary increase in construct accessibility from recent activation (e.g., reading the article about an attribute) can affect people's judgment of an object.

Yi investigated the effects of the two aspects of the advertising environment: 1) the cognitive context that increases the salience of product attributes and 2) the affective context that induces feelings. Yi termed the two types of priming cognitive priming and affective priming. The study examined the way in which the advertising context influenced measures of advertising effectiveness such as attitudes and purchase intentions. Two different themes were selected with the purpose of priming one of the two attributes (fuel economy or safety) that are associated with the size of the automobile.

The findings of Yi's study support the hypothesis that priming a certain attribute increases the likelihood that the attribute will subsequently be used to interpret the ad information, and thus will affect advertising effectiveness. After exposure to an ad emphasizing the large size of a car, subjects' attitude toward the brand and purchase intent were different, depending upon the attribute activated by the priming ad's context. Specifically, the two measures were higher when the attribute of safety was made salient in the article preceding the ad, as opposed to when fuel economy was made salient. Thus, the impact of cognitive priming was confirmed.

Affective priming of the ad context (tone of the article) was also found to significantly influence advertising effectiveness. Subjects' attitude toward the ad and

purchase intent were higher when the affective tone of the article was positive, as opposed to when it was negative.

As with context/ad congruency effects, the added effects of advertising when readers were primed for one of the ad's attributes may be a synergistic effect and would be tested accordingly by comparing the effectiveness results with a situation in which viewers are exposed to the same ad twice as opposed to a priming material and then to an ad. Yi's study lays the foundation for the current study since Yi used a magazine article, which can be the result of a public relations effort, to generate affective priming.

Even though it refers to "the context for print advertisements," Yi's study should be singled-out in the context/ad effects category because Yi provided the context to his subjects prior to supplying the ads. As mentioned above, studies examining type 2 (cross-media) and type 3 (cross-tactics) synergies had to expose their subjects to the two components at separate times. Hence, Yi's priming-related considerations apply.

Before detailing on the few studies that focused on the combined effect of different marketing communications tools or what can be termed cross-tactics synergy, it is important to note that most of the studies centering on the concept of synergy looked at cross-media synergies.

#### Cross-media synergies

Scholars who have previously looked at synergistic effects among media include: Edell and Keller studying TV and radio, Naik and Raman (2003) looking at TV and print, and Bucy (2003) and Chang and Thorson (2004) who looked at TV in combination with the Internet. A very early study that looked at the joint advertising effects of radio and print stressed it is recommended to test for micro-level effects (awareness) and macro-

level effects (sales) separately “because they are not unit-free” (Jagpal 1981, p. 67). Most studies looking at cross-media synergies used the information processing theoretical foundation to test for psychological effects. The exception is the study conducted by Naik and Raman, who modeled the effect of cross-media synergy at the macro level.

Edell and Keller (1989) conceptualized a model of media interaction to provide an information-processing perspective on a coordinated media campaign that employed both television and radio. Building on theoretical aspects related to ad encoding and subsequent retrieval-effects, they applied the concept of "curiosity" by presenting the audio track of a television ad on the radio followed by the full ad on television. They reasoned that "people who have heard the radio ad first may be more curious about what the accompanying video looks like than people who view the TV ad without having heard the radio ad. This curiosity may motivate greater processing of the video during TV ad exposure" (p. 151).

After seeing their hypotheses confirmed for the television-radio combination, Edell and Keller (1999) tested information processing of television and print advertisements in a laboratory setting. They found that a print reinforcement strategy that explicitly links a print ad to an already-seen television ad can improve the prospects of that print ad being read, by increasing consumer evaluation of the print ad. Similarly, they reasoned that a print teaser strategy that includes key visual elements of a subsequently viewed television ad can enhance processing and comprehension of the TV ad. Both combinations (television-print and print-television) improve campaign effectiveness over a campaign using a single medium, concluded Edell and Keller.

Edell and Keller's (1999) study examined and found cross-media synergistic effects at a micro level, offering insight into individual's information processing of television and print advertising. Naik and Raman (2003) looked at the television-print combination as well. However, they modeled a macro-level effect having sales as the dependent variable. Though not related to the information processing perspective of the current study, Naik and Raman's findings are important because of their focus on "the theoretical and empirical effects of synergy" in the context of IMC. Their estimation methodology "can be applied to brand-specific data to estimate and infer the effectiveness of multimedia communications and synergy among them" (Naik and Raman 2003, p. 385). The macro-level model focusing on sales is relevant to practitioners because it allows for putting numbers on the effect. The researchers draw on Mantrala's (2002) discussion on allocating marketing resources. Being able to calculate the effect of using a communications mix would allow for better allocation of the marketing budget. While the goal of better allocating marketing resources is the ultimate managerial implication of any study that looks at synergy, Naik and Raman's research stands out as all other studies examining cross-media synergies looked at understanding the psychological mechanism that makes the synergistic effect possible and not at the actual effect in terms of generated sales. The current study will look at the psychological mechanism that facilitates online information processing of both public relations and advertising.

Stepping away from traditional media, Chang and Thorson (2004) write that the Web "has the quality of print media, but is not identical with it" (Chang and Thorson 2004, p.76). Hence, they test for a synergistic effect between television and Web

separating cognitive responses and positive attitude as did the previously presented studies that looked at context-ad congruency effects. The researchers follow McLuhan's reasoning that using multiple sources may result in greater perceived message diversity and credibility. Chang and Thorson argue that increased credibility may lead to both increased cognitive processing and a more positive attitude through the greater number of positive thoughts (for details, Chang and Thorson 2004). Another study that focused on media credibility found initial evidence for the existence of television-web synergies in the case of news (Bucy 2003). Chang and Thorson (2004, p.76) argue that people exposed to a television-web campaign "form and change their attitudes through the central processing route," because they would be more motivated to attend to a message coming from different sources rather than a repetitive message from a single source. This argument is relevant for the current study considering the Internet is an information medium with its messages more likely to be processed via the central route.

To sum up, studies that examined cross-media synergies looked at either cognitive or positive affective responses similar to the context/ad congruency studies. Responses can be interpreted as an effect of either priming (Yi 1990a) or reinforcement (Edell and Keller 1999). In addition, credibility-related arguments support the idea of cognitive processing of messages coming from different sources as opposed to peripheral processing focused on source credibility of a repetitive message (Petty and Cacioppo 1996).

#### Cross-tactics synergies

Research in the area of cross-tactics synergies is very scarce. While the IMC framework intuitively suggests such research, scholars focused more on integrating tools

(media) of the same tactic (advertising). Establishing the existence of a synergistic effect among marketing communications tactics would pave the way for the strategic integration that IMC proponents support (Kitchen et al. 2004).

Most studies surfaced in the sales marketing discipline assessing synergistic effects on macro variables such as price-deal elasticity or number of purchases. Lemon and Nowlis (2002) assessed the synergistic effect between sales promotion and retail brand strategy (feature advertising and display advertising). They found a synergistic effect for lower-tier brands and a counter-productive effect for well-known brands when the different promotional components were used in combination. The addition of the brand tiers component follows previous studies that focused on synergies among promotions and had conflicting results (e.g., Bemmaor and Mouchoux 1991). So, a combination of promotions appears to be a valid strategy for not-so-well-known brands, which would benefit from a synergistic effect.

Still in the sales area, Gopalakrishna and Chatterjee (1992) examined the joint effect of personal selling and advertising. Similar to Naik and Raman's (2003) modeling of cross-media synergies, Gopalakrishna and Chatterjee modeled the joint impact at a macro level from the perspective of optimal resource allocation. Both studies modeling communications interactions resulting in sales increase follow a recommendation by Gatignon and Hanssens (1987) for modeling interactions as a basis for making inferences about marketing mix resource allocation.

As mentioned previously, the current study will examine the psychological effects of publicity and advertising synergies at a micro level. Previous literature comparing repetitive versus varied advertising supports the idea of exposure to two different

messages about the same brand (as it would be with an article and an ad) should lead to more positive brand attitudes than exposure to two identical ad messages.

Unnava and Burnkrant (1991) compared repetitive versus varied advertising executions and found that exposure to two different executions of an ad generated higher aided and unaided brand recall to the condition where participants saw the exact same ad twice. Understandably, the superiority of the varied execution condition over the repetitive condition was not supported in the case of ad message recall. Based on the encoding variability hypothesis, Unnava and Burnkrant found that the superiority of the varied execution condition over the repetitive condition is due to the different memory traces generated by the two executions and not to the increased attention the two executions would attract. The results were significant even after controlling for attention.

In a review of the literature on advertising repetition, Pechmann and Stewart (1989) show that part of the variation in repetition results can be traced to differences in conditions of exposure. Because conditions of exposure across media are different by definition, it is natural to presume that different media should give rise to different results and, hence, to different lagged effects. As Pechmann and Stewart report, research into advertising media frequency and repetition has found that, in general, wearout probably will not occur until after three massed exposures. (Wearout means that the ad message no longer has any significant effect on its audience; wearin determines what level of repetition is necessary for a message to have a significant positive effect on the audience.) In spite of this commonly recognized rule of three, Pechmann and Stewart also make the point that in order to maximize carryover effects, it may be advantageous to expose consumers to a purportedly "worn out" ad again and again. The exposures beyond

the "significant effect" level may not increase recall or understanding, however, it may prolong recall, and that, of course, is how carryover impact is maximized (Moriarty 1996). When this second stage begins with approximately the fourth exposure, message recipients become bored. As a result, message recipients generate negative repetition-related thoughts, undermining the persuasive impact of the ad.

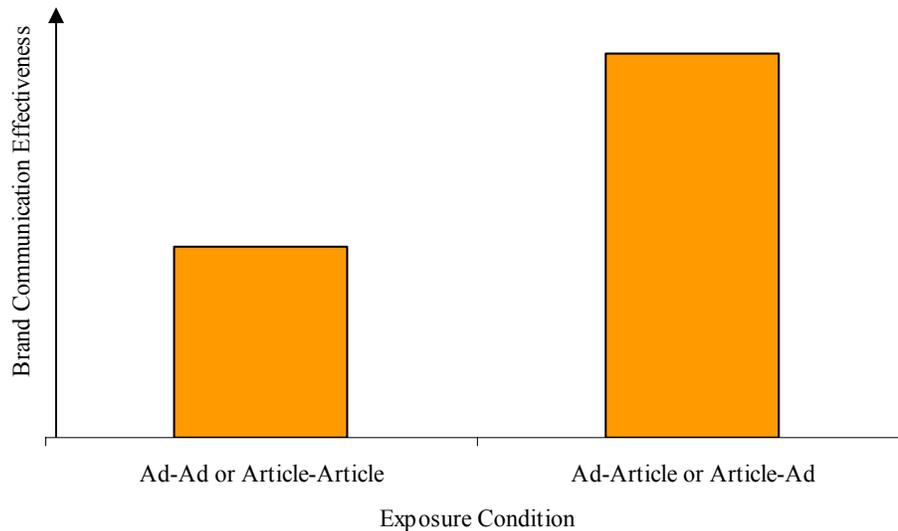
Following Pechmann and Stewart (1989) and Unnava and Burnjkrant (1991), in this dissertation participants were exposed to different conditions, two of which featured varied messages (ads and articles).

The author found only one previous study that used information processing theories to test for a cross-tactics synergistic effect (Jin 2003). Jin assessed the combined effect of publicity about Super Bowl ads with the one of the ads themselves. Effects were examined with a dual processing model: reading news stories about ads affects the subsequent ad memory through (1) a motivational process and (2) a repetition process (Jin 2003, p.36). The motivational process posits that news about incoming advertising campaigns increases subsequent ad memory through active involvement in the advertising event (Edell and Keller 1989), while the repetitive exposure generates peripheral processing of the advertising message (Chang and Thorson 2004). The results of Jin's study show positive causal relationships in ad memory through the motivational process: ad interest impacting attention to the ad, which in turn impacted subsequent memory of the ads. Also, those who both read the news story and watched the ads had the best brand ad recall (Jin 2003, p. 37).

Table 2-1 summarizes existing research that looked at interaction effects and presents the types of synergies examined in marketing communications research. Starred studies are those that specifically found and labeled a synergistic effect.

Grounded within the IMC framework, the current study focuses on a type 3 synergy, testing for a cross-tactics synergistic effect between publicity and advertising. Following the concept of synergy, Figure 2-4 presents the order of exposure conditions in terms of brand communication effectiveness. According to the synergy hypothesis, the combination or synergistic conditions (ad-article and article-ad) would outperform the repetitive conditions (ad-ad and article-article).

**Figure 2-4. Exposure Conditions in Order of Brand Communication Effectiveness According to the Synergy Concept**



As shown in Figure 2-4, the relationships between exposure conditions are similar to the ones resulting from the IMC theoretical background, the difference being that, the combination conditions are compared to repetitive conditions of either ads or publicity.

Table 2-1

## A Typology of Synergies in Marketing Communications

Type of Synergy	Study	Theoretical Context
<b>1. Context and Advertisement Synergies</b>		
Context and print advertisement	MacInnis and Jaworski 1989 Yi 1990a Moorman, Neijens, and Smit 2002 de Pelsmacker, Geuens, and Anckaert 2002	ELM (Cognitive vs. emotional responses to context) Priming Thematic-congruence/Priming Involvement
Program and commercial	Goldberg and Gorn 1987 Murry, Lastovicka, and Singh 1992 Aylesworth and MacKenzie 1998 Sharma 2000 de Pelsmacker, Geuens, and Anckaert 2002	Program-elicited feeling Program liking/Involvement Program-Induced Mood Cognitive vs. Affective Involvement Involvement
Web page content and online ad	Shamdasani, Stanaland, and Tan 2001	ELM
<b>2. Cross-Media Synergies</b>		
Radio and print	Jagpal 1981	Hierarchy-of-effects
Radio and television	Edell and Keller 1989	Coordinated campaigns/Retrieval effects
Television and print	Confer and McGlathery 1991 Edell and Keller 1999 Naik and Raman 2003* Bucy 2003* Chang and Thorson 2004*	Implementation not reported Coordinated campaigns IMC/Effect on Sales News Credibility ELM/Credibility
Television and the Internet		
<b>3. Cross-Tactics Synergies</b>		
Different in-store promotions	Bemmar and Mouchoux 1991 Lemon and Nowlis 2002*	Promotion and retail advertising/Price-deal elasticity Promotions and brand strategy synergy/Purchases
Personal Selling and Advertising Publicity and Advertising	Gopalakrishna and Chatterjee 1992 Jin 2003*	Optimal communications plan/Sales IMC/Involvement

## **Priming**

Grounded within the IMC framework, the current study focuses on a type 3 synergy, testing for a cross-tactics synergistic effect between publicity and advertising.

The present study investigates one way in which publicity can influence consumers' processing of advertising information. It proposes that previous exposure to news about the brand may affect the persuasive impact of those ads by priming certain cognitive or affective elements. Specifically, this study examines how exposure to information in an online news story can influence processing of information in an online advertisement.

The theoretical underpinning is that of priming. An extensive body of cognitive psychology research in the last two decades has shown that recent experiences can affect performance even when subjects are not instructed to remember these earlier experiences and even when subjects are not aware of these experiences (Zeelenberg, Pecher, and Raaijmakers 2003). Named implicit memory phenomena, such experiences are usually demonstrated by the repetition priming effect. Repetition priming refers to the finding that responses are faster and more accurate to stimuli that have been encountered recently than to stimuli that have not been encountered recently. For example, in a perceptual word identification task (Jacoby and Dallas 1981) subjects can more often correctly identify the briefly flashed target word if they have recently studied the target than if they have not studied the target. Comparable effects have been obtained in tasks such as picture identification, word stem completion, and lexical decision (for a review of literature, Zeelenberg, Pecher, and Raaijmakers 2003).

Zeelenberg, Pecher, and Raaijmakers write that the large majority of studies in the domain of implicit memory have concentrated on the effect of repeating stimuli in isolation. Making reference to the subfield of associative priming, they propose that a response to a target stimulus might be facilitated if the target is preceded by a stimulus pair with which it has been studied recently. The researchers argue that a priming effect due to the repetition of a stimulus pair as associative repetition priming can be used to answer some fundamental questions concerning the representation of knowledge in memory and the retrieval of knowledge from memory. In the case of the current study, a more complex stimulus such as a short article will be used instead of using a stimulus pair made up of only two items. Considering the complexity of the stimulus, which requires more effortful processing than reading a word pair, information may be stored in the explicit memory. Hence, while associative repetition priming was found to impact task performance because of information retrieval from implicit memory, the current study will have to identify whether an additional impact is caused by retrieval from explicit memory. A synergistic effect would be established when the increased advertising effectiveness is due to more than simple repetition. A simple repetition effect can be obtained by featuring two advertisements rather than combining a public relations effort with an ad.

Memory research rests heavily on the distinction between explicit and implicit memory (Schacter 1987; Squire, Knowlton, and Musen 1993; Tulving 2001). Explicit (declarative) memory supports the ability to consciously retrieve and declare past facts and events. Implicit (nondeclarative) memory supports improved performance in a

variety of perceptual and motor tasks, although observers cannot recall or articulate the learned information (Chun and Jiang 2003).

This taxonomy is based on a rich body of empirical and theoretical cognitive psychology work. The two types of memory have different characteristics and are mediated by different memory systems in the brain (Tulving and Schacter 1990; Tulving 2001). According to Chun and Jiang (2003), explicit memory is consciously accessible in a fast, flexible manner, and it resides in the medial temporal lobe system. Implicit memory influences behavior in a less flexible but more durable manner without reaching awareness. Most forms of implicit memory do not rely on the medial temporal lobe system. Research on explicit versus implicit memory necessarily revolves around how to define whether a task is implicit or not (Frensch 1998; Stadler and Roediger 1998).

In their study about contextual learning, Chun and Jiang (1998) found that during visual search, spatial visual context information is encoded when it is predictive of the target location. The researchers concluded that such contextual learning forms memory traces that facilitate search, a process they called contextual cuing. Chun worked with other cognitive psychology colleagues and found that this contextual cuing effect is driven by implicit memory representations (Chun 2000; Chun and Jiang 1998; Chun and Phelps 1999). In the more recent study (Chun and Jiang 2003), participants performed at chance levels at discriminating novel displays from displays that were repeated throughout the experimental session. In addition, participants rarely reported an intention to memorize the repeated displays, suggesting that contextual information was learned incidentally. The study provided new evidence that reinforces the claim that spatial

contextual memory is implicit in the contextual cuing paradigm and it represents an implicit learning task that produces memory representations that are also implicit.

Based on a contextual cueing effect, repeating the same brand name will generate storage in the implicit memory. Considering the researchers tested the memory for displays, such implicit memory of the brand name is caused via perceptual priming or priming for the actual appearance of the brand name and not necessarily its meaning (Lee 2002).

Lee (2002) introduced the notions of conceptual and perceptual priming to the marketing communications field. Perceptual priming of a brand relates to the brand's appearance only – either its name or its logo. Conceptual priming is argued to work better when the brand is presented within a context, while perceptual priming works better when the brand appears isolated. Being all about appearance, perceptual priming works through the peripheral route (Petty and Cacioppo 1996). Hence, if eliciting positive affect, perceptual priming will influence attitude toward the ad and subsequently ad recall and purchase intent. In case it generates negative affect, perceptual priming will impact attitude toward the ad and subsequently ad recall and purchase intent (Lee 2002; Yi 1990b).

The perceptual priming effect should be the same whether the brand name is repeated in two ads or an article and an ad. What would generate the synergistic effect is the meaning or the message. This would be stored in the secondary memory which, according to Tulving (2001), can be either episodic or semantic.

Proponent of a multiple-memory system, Tulving (2001) argues that secondary or long-term memory (as opposed to primary or short-term memory) was divided by

researchers into episodic and semantic (Tulving 1972; Schacter and Tulving 1994). This study focuses on the cognitive phenomenon of long-term priming (Cofer 1967).

According to most usages, this term refers to a facilitation in processing a stimulus due to recent processing of that stimulus or a highly similar one (for a review, Tulving and Schacter 1990). For example, the recent experience of naming an object has the effect of priming subsequent naming of that particular object.

In the advertising realm, Tulving's theoretical underpinning of the existence of both episodic and semantic memory was used by Friestad and Thorson (1993) in their study based on the encoding specificity principle. The principle states that retrieval from memory is more successful when conditions at encoding match those at retrieval. The cue should refer to something related to the memory traces generated at encoding. Friestad and Thorson deemed information processing to be either evaluative or experiential, depending on whether the processing was goal-directed or not. In the case of online information processing, it can be argued that most is goal-oriented or evaluative since browsing the Internet is mostly done for information retrieval. According to Friestad and Thorson, goal-oriented processing generates episodic and semantic knowledge structures. Semantic knowledge structures contain "task-relevant" information. Episodic memory is memory for "personally experienced events" or "remembering what happened where and when" (Tulving 2001, p. 1506).

Tulving argues that the recent focus of memory researchers on the distinction between storage and retrieval of information in memory helps separate episodic from semantic memory. The explanation is that, while it has been difficult to differentiate between encoding and storage processes in episodic and semantic memory, it has been

easy to differentiate the retrieval processes in functional neuroanatomy (Tulving 2001, p. 1507).

Zeelenberg, Pecher, and Raaijmakers (2003) write that the most important difference between episodic and semantic memory is that episodic memories depend on the overlap in contextual information between study and test. Semantic memories on the other hand are assumed to be abstract and therefore contain no contextual information from the study episodes.

Hence, since in this study the context in which a brand name appears differs from an article to an advertisement, it can be argued that the added value of the information processing rests in the semantic memory of the first exposure. This is in concordance with the rationale that people purposefully search for information online and thus semantic or “task-relevant” knowledge structures are created (Friestad and Thorson 1993). Such structures would generate conceptual priming (Yi 1990b), which can be either cognitive or affective depending on the message of the stimulus.

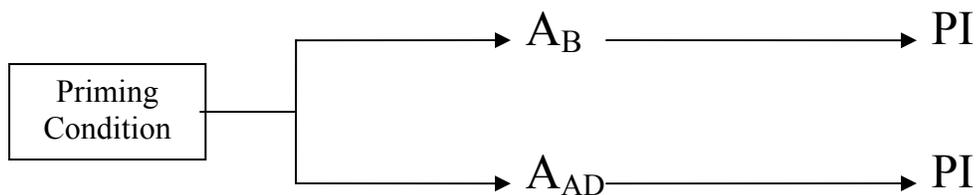
In his study about car print advertisements primed with stories about cars, Yi (1990b) concluded that ads can be primed with stories featuring certain attributes of the advertisement. The information about car attributes with either cognitive or affective meaning was stored in the semantic and episodic memories. While the episodic memory retained that the person read a story about a certain attribute of a certain car, the semantic memory retained the meaning or implications of that story. The specific attribute was primed and influenced judgment on the subsequent processing of the car print ad. Such attribute elicitation influenced the attitude toward the brand and purchase intent in subsequent processing of the advertisement. In his other study on priming, Yi (1990a)

categorized priming into cognitive priming and affective priming. He found advertisements cognitively primed to elicit more positive attitude toward the brand and purchase intent. Affectively primed advertisements were found to have significant impact on attitude toward the ad and consequently on purchase intent (Yi 1990a).

Similar results were obtained by Jin (2003). In his study looking at the effect of publicity on Super Bowl advertising effectiveness, Jin had three conditions: cognitive priming, affective priming and no priming. He found that publicity constituting cognitive priming had an influence on the subjects' attitude toward the brand, which in turn affected brand recall and ultimately purchase intent. Publicity constituting affective priming impacted participants' attitude toward the ad and subsequently ad recall and purchase intent.

In conclusion, priming (either perceptual, cognitive or affective) has an impact on evaluation of advertising messages. The relationships between priming and advertising effectiveness measures are summarized in Figure 2-6 below.

**Figure 2-5. Priming Impact from Previous Literature**



The current study will look at the psychological responses to a mix combining publicity and advertising in the online environment. Considering the reduced attention paid to online advertising by Internet users, the focus will be on publicity priming rather

than advertising reinforcement. The effect of advertising priming on publicity will be tested as well, to control for order effects and to test for the IMC framework hypothesis, which does not specify the order in which messages of different marketing communication tactics should be shown to target audiences.

### **Third Party Endorsement**

Grounded within the IMC framework, the current study focuses on a type 3 synergy, testing for a cross-tactics synergistic effect between publicity and advertising.

Claims about the superiority of news over advertising are a keystone of public relations practice. Do people process information differently when it is presented in the form of news versus advertising? Public relations practitioners traditionally have promoted the superiority of publicity over other forms of promotion, particularly advertising. Claims generally center around the greater attention paid to news as well as the greater credibility of news. Practitioners frequently attribute this superiority to the third-party endorsement accorded by news workers who devote coverage to a product, service, or cause (Hallahan 1999).

“Who started it we will never know. But from the birth of newspapers, advertisers realized that the third party endorsement of apparently independent editorial reporting delivered their message more cheaply - and arguably more credibly - than paid advertising. Thus in the 17th century the publicist was born to service ‘the fellow who cannot lye sufficiently himself [who] gets one of these to do't for him’. Any history of public relations is a running commentary on the techniques used to deliver third party endorsement as the media has evolved: from Ivy Lee's simple packaging of information approach, through Bernays' 'engineering consent', to today's use of bloggers on the web or the more sophisticated journo lobbying', it is a record of how practitioners deliver public relations' unique selling proposition, the plausible deniability which is third party endorsement” (Linning 2004, p.65).

The notion that news is superior to advertising is corroborated in opinions expressed throughout the communication literature (Hallahan 1996; McGuire 1973; Reeves, Chaffee, and Tims 1982; Schudson 1984). The scarce empirical research conducted to date suggests that news leads to enhanced learning and recall (Cameron 1994), more positive attitudes (Salmon, Reid, Pokrywczski, and Willett 1985; Straughan, Bleske, and Zhao 1994), and increased behavioral intent (Straughan, Bleske, and Zhao 1994). Other research, however, found no effect on behavioral intent but suggested that assessments of credibility are moderated by factors such as involvement and familiarity (Chew, Slater, and Kelly 1995).

Separately, researchers have observed that individuals readily distinguish between news and advertising (Levitt 1969) and process the two differently (McLeod, Pan, and Rucinski 1988).

In a study published in 1999, Hallahan defined the difference between news and advertising in terms of *content class*, a contextual variable that served as a cue during cognitive processing of mediated messages. The study reported results of an experimental study that sought to examine claims about the cognitive processing of news and advertising by presenting participants the same information in both formats using stimuli material that followed conventions commonly found in media today, rather than a simple labeling procedure. This study extended previous research by conceptualizing the difference between news and advertising in terms of content class, a hitherto unexplicated communication variable. However, Hallahan's results provided only qualified support for claims about the superiority of news over advertising and consequently the researcher

suggested public relations practitioners be cautious when promoting advantages of publicity.

Based on the credibility granted by third-party endorsement to advertorials, an entire stream of empirical research was conducted by Ju-Pak and Cameron (Ju-Pak, Kim, and Cameron 1995; Cameron, Ju-Pak, and Kim 1996; Cameron and Ju-Pak 2000). According to Cameron and Ju-Pak, editors tend to view advertorials as borrowing from the third-party endorsement conferred to editorial copy by journalistic standards of objectivity. The belief that an editorial format can be more effective than traditional advertising formats is evidenced by trends toward increased advertorial use and by the views expressed among advertisers/media planners in studies (Stout, Wilcox, and Greer 1985). Salmon et al. (1985) concisely described the borrowing of editorial credibility: "With the appearance of 'news,' an advocacy message is legitimized by third-party credibility - the implicit approval of the medium in which the information is presented."

Supporting this view, Cameron (1994) found experimental evidence for greater credibility and impact when stories were presented as editorial copy than when the identical story was presented as advertising.

Specifically addressing the online environment, Gallagher, Foster, and Parsons (2001) conducted an experiment about the effectiveness of online advertising versus print. Building on the idea that people are suspicious about truth, distortion, and exaggeration in advertising (Laczniak and Murphy 1993), Gallagher et al. (2001) proposed that most people have become expert, skeptical processors of advertisements. According to these researchers, once people classify a communication message as an advertisement, they very quickly, without conscious effort, either extract from it what is

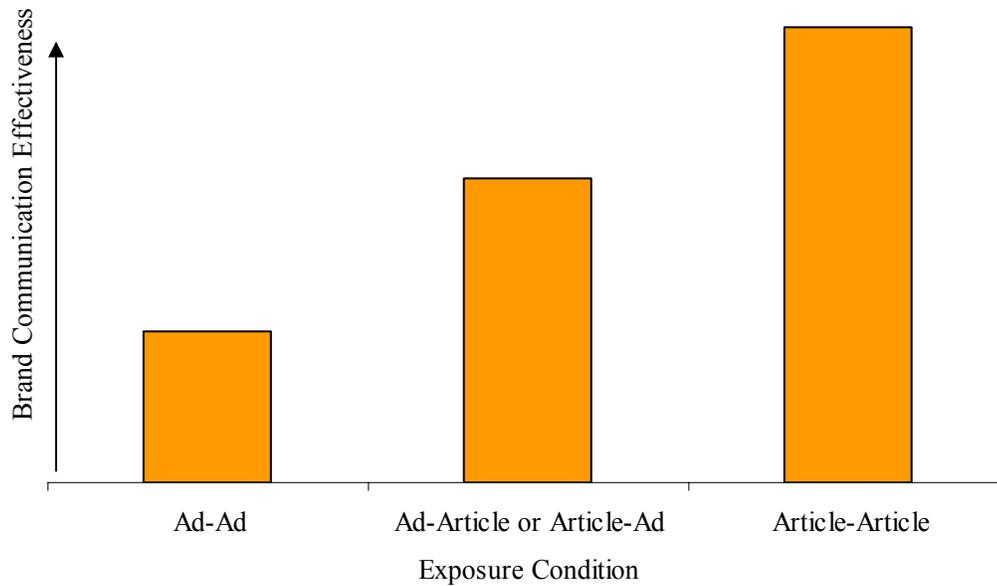
useful to them, or abandon it--regardless of medium. Hence, Gallagher and her colleagues concluded, a person's response to an advertisement is based on its message and presentation, not on the medium in which it appears. In contrast, if people do not classify a communication as an advertisement rather as a news article, then they may process it more attentively.

For the purpose of this dissertation, it is hypothesized that publicity does outperform advertising because of the credibility granted by the third-party endorsement. It is also hypothesized that a synergistic publicity-advertising combination would yield more positive brand evaluations than the repetitive advertising situation of a pure advertising campaign.

A summary of the relationships between pure advertising, publicity, and any advertising-publicity combination is presented in Figure 2-6 below. Following the third-party endorsement hypothesis, a pure advertising exposure condition would generate less positive brand attitudes than any exposure condition that includes publicity. Similarly, a pure publicity exposure condition would outperform any exposure condition that includes advertising.

As shown in Figure 2-6, the third-party endorsement concept adds the relationship between repetitive advertising and repetitive publicity. Following the third-party endorsement reasoning the article-article (repetitive publicity) condition is superior to the ad-ad (repetitive advertising) condition. As opposed to the synergistic concept, in this case, the article-article condition is superior to the other three.

**Figure 2-6. Exposure Conditions in Order of Brand Communication Effectiveness According to the Third-Party Endorsement Concept**



Considering that the third-party endorsement concept relates specifically to advertising and publicity as opposed to the more general synergy concept, the relationships between the article-article condition and the combined conditions (ad-article and article-ad) are predicted to be the ones built on the third-party endorsement theoretical foundation.

### **Hypotheses and Proposed Path Model**

Considering the presented theoretical concepts relating to IMC, synergy, and third-party endorsement, the relationships resulting from the review of literature are presented in the hypotheses and Figure 2-7 below.

H1: The Ad-Ad (pure advertising) condition is the least effective in terms of brand communication effectiveness from the four possible conditions.

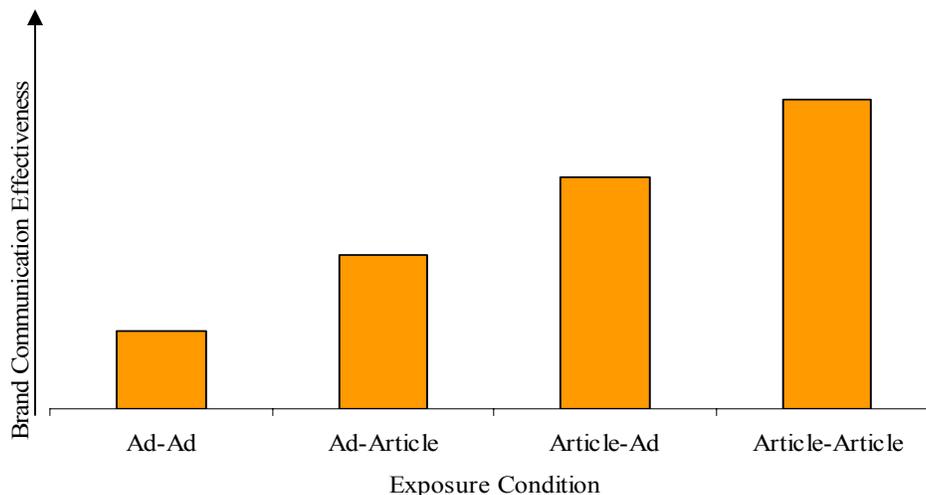
H2: The Ad-Article (advertising priming) condition is more effective than the Ad-Ad condition but less effective than the Article-Ad and Article-Article conditions in terms of brand communication effectiveness.

H3: The Article-Ad (publicity priming) condition is more effective than both the Ad-Ad and Ad-Article conditions but less effective than the Article-Article condition in terms of brand communication effectiveness.

H4: The Article-Article (pure publicity) condition is the most effective in terms of brand communication effectiveness from the four possible conditions.

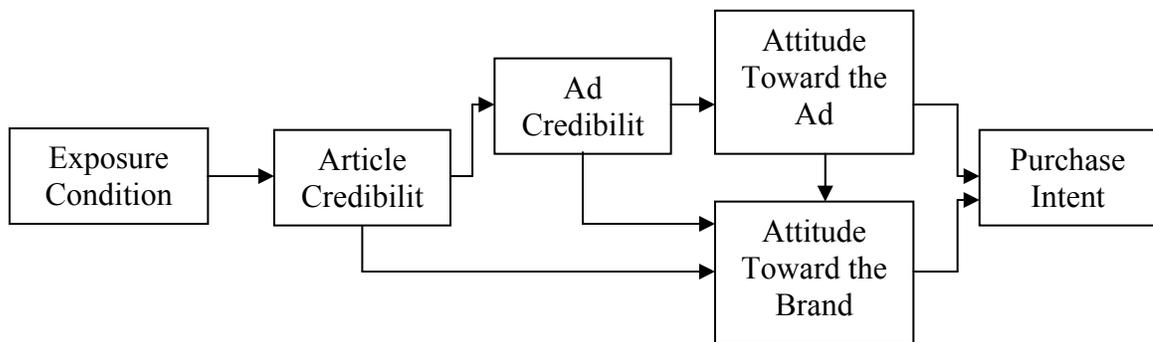
While hypotheses 1 and 4 are clearly based on the third-party endorsement concept about the superiority of publicity over advertising, hypotheses 2 and 3 require additional explanations. Why would publicity priming be superior to advertising priming? The answer comes from the cognitive psychology literature, specifically from Petty and Cacioppo (1996), who wrote that people process information via either the central route or the peripheral route. Attentively reading an article would require central route processing, while noticing an ad may require only peripheral processing. Hence, priming with publicity should have a stronger impact than priming with an ad.

**Figure 2-7. Exposure Conditions in Order of Brand Communication Effectiveness According to IMC and Third-Party Endorsement**



Going back to the path through which the exposure condition impacts purchase intent, the notion of credibility was added in the model. Credibility is stressed in the third-party endorsement explanations. Mackenzie and Lutz (1989) examined the antecedents of attitude toward the ad and included advertising credibility. In the framework proposed in this dissertation, publicity is more effective than advertising because of its credibility. Brand message credibility has an influence on attitude toward the brand. Hence, when using advertising and publicity combination, article credibility is an antecedent of attitude toward the brand. Also, article credibility will influence ad credibility and, indirectly, attitude toward the ad. Attitude toward the ad has been shown to be an important mediating variable that can influence assessments about brands featured in ads (Lutz, 1985; Batra and Ray 1986; Mackenzie and Lutz 1989; Mackenzie, Lutz, and Belch 1986; Mitchell and Olson 1981). According to Mackenzie, Lutz, and Belch (1986), attitude toward the ad directly affects attitude toward the brand. Both attitude toward the ad and attitude toward the brand are documented antecedents of purchase intent (Mackenzie, Lutz, and Belch 1986; Kim and Pysarchik 2000).

**Figure 2-8. Path Model of the Impact of Exposure Condition on Purchase Intent**



The proposed model features the paths through which the exposure condition (varying from pure advertising to pure publicity) indirectly impacts attitude toward the

ad, attitude toward the brand, and ultimately purchase intent. The credibility of the publicity message is a mediator between the exposure condition and attitude toward the brand as well as between exposure condition and advertising message credibility. Advertising message credibility is both a mediator and a moderator. It mediates a relationship between publicity message credibility and attitude toward the ad and moderates the relationship between publicity message credibility and attitude toward the brand. Attitude toward the brand and attitude toward the ad mediate the relationship between purchase intent and article and ad credibility.

## **CHAPTER 3**

### **METHOD**

Testing for the various effects of strategic communication messages online was a challenge in terms of both setting up a web site for the experiment and linking the web site to a database. Since participants were to browse using a variety of computer terminals, the web site had to be technically reliable so that it would not crash with unexpected browsing patterns or deform when seen on different computer monitors. Also, participants could have chosen to skip through the pages without either paying attention to the messages or clicking on the feedback buttons. Hence, ensuring active participation and gathering of accurate data were of concern as well.

This chapter addresses the following issues:

- Experiment design
- Questionnaire
- Operational definitions of variables
- Setting up the online experiment
- Sample and data collection

#### **Experiment Design**

A 4 (experiment condition, between subjects) X 4 (product, within subjects) mixed design was used to set up an experiment that would assess the differences among the four conditions and consistence across product categories. The sequences of the four experiment conditions are presented in the table below.

Table 3-1

## Experiment Design

Condition	Treatment 1 X 4 products	Treatment 2 X 4 products
<b>1. Pure Advertising (Ad-Ad)</b>	Ad1, Ad2, Ad3, Ad4	Ad1, Ad2, Ad3, Ad4
<b>2. Advertising Priming (Ad-Article)</b>	Ad1, Ad2, Ad3, Ad4	Art1, Art2, Art3, Art4
<b>3. Publicity Priming (Article-Ad)</b>	Art1, Art2, Art3, Art4	Ad1, Ad2, Ad3, Ad4
<b>4. Pure Publicity (Article-Article)</b>	Art1, Art2, Art3, Art4	Art1, Art2, Art3, Art4

In the pure advertising condition, participants were exposed twice to the same ad for each target brand as in Chang and Thorson's (2004) experiment (also called repetitive advertising condition.)

Conditions 2 and 3 were the synergistic conditions, in which participants were exposed to both ads and articles. In their experiment testing for advertising context effects, De Pelsmacker, Geuens, and Anckaert (2002) had created 10-page mock magazines and 10-minute television programs in which they inserted print ads and commercials respectively. However, De Pelsmacker and his colleagues did not include articles relating to the brands in the ads. They were interested in the impact of the mood generated by the articles on advertising and brand evaluations. In the current experiment, the articles were also mentioning the advertised brands.

Participants in condition 2 saw ads first and then read articles for each of the four brands. This condition was labeled advertising priming since it dealt with priming publicity with advertising. Jin (2003) specifically tested for the impact of publicity priming on ad and brand evaluations. Jin's experiment exposed participants to articles about the target brands first, followed by ads for the target brands. Hence, the article-ad condition was labeled publicity priming.

Finally, in the fourth condition, participants were exposed twice to the same article for each target brand. A repetitive condition in itself, this condition was a pure-publicity condition where brand evaluations were benefiting from the third-party endorsement effect based on credibility (Cameron 1994; Hallahan 1999; Linning 2004).

The four product categories chosen for this experiment were: MP3 player, candy, DVD player, and sports shoes. These products were chosen because of their relevance to college students. A brand name was made up for each product category and then articles and ads were created for each of the four brands. There were two articles on each treatment web page, one target article and one filler. The ads were also two on a page, Filler ads and articles with made-up brands were created to be placed on the same page with the target ones. In addition, cartoons were placed as fillers between the web pages containing either ads or articles.

### Validity

The way the four conditions of the experiment are set up controls for order effects of treatments. Participants were randomly assigned to one of the four conditions ensuring external validity. Also, for counterbalancing purposes, the order of the four ads and four articles within treatments was randomized. Since the purpose was to test for the effects of strategic communication on the Internet, the experiment was set up online and participants accessed the experiment from the computer terminal of their choice (where they would normally browse the Internet) thus ensuring for ecological validity.

First, participants saw an introductory page with instructions before each treatment. To ensure active participation, participants were asked to complete tasks that required them to read the articles and examine the ads. For the article treatment,

participants were told to read the two articles on the page and indicate the one they considered most newsworthy. For the ad treatment, participants were asked to examine the two ads on each page and indicate the one where the ad best matched the brand name. After browsing through all treatments, participants were asked to complete a questionnaire.

### **Questionnaire**

The questionnaire had 7 sections (see Appendix 1). The first section measured aided brand recall for each of the four brands. Aided recall is a common measure of implicit memory (Coates, Butler, and Berry 2004). Participants were asked to identify the brand they saw during the experiment for each product category. Sections 2 through 5 were identical. These four sections included, in this order, measures for ad recall, attitude toward the ad, ad credibility, article credibility, attitude toward the brand, and purchase intent for the four brands respectively. Section 6 included questions intended to measure the participants' interest in the four product categories. Finally, section 7 included the demographic questions: year in school (freshman, sophomore, junior, senior, or graduate student), gender, and income.

#### Operational Definitions of Variables

*Brand Recall* A measure of implicit memory, brand recall was measured via first-choice recognition. Participants were asked to pick the brand they remember for each product category from a list of made-up brand names that included the target brand (Coates, Butler, and Berry 2004).

Which of these [product category] brands did you notice during this experiment?
---

*Ad Recall* For assessing ad recall, participants were instructed to write down everything they could remember about the ads themselves (Jin 2003).

You saw an ad for the [brand] [product category]. List as many things about the ad you can remember:

*Article Credibility* A five-point Likert scale was used to measure article credibility.

You read a story about the [brand]. On a scale from 1 to 5, where 1 is “not at all” and 5 is “definitely agree” rate how much do you agree with the following statement:

I found the story believable.

Not at all      Definitely agree

*Ad Credibility* Chang and Thorson (2004) used a message credibility measure to study a synergistic effect between television and Internet advertising. Following Chang and Thorson’s (2004) measure for source credibility, ad credibility was measured using three five-point semantic differential scales.

Would you say the [brand] **ad** was:

Unbelievable      Believable

Convincing      Unconvincing

Not credible      Credible

*Attitude Toward the Ad* Previous studies focusing on online advertising effectiveness have used attitude toward the ad as one of the effectiveness measures (Cho, Lee, and Tharp 2001; Gallagher, Foster, and Parsons 2001; Chang and Thorson 2004). Yi (1990b) has also used attitude toward the ad as a dependent variable in his study of advertising priming. Attitude toward was measured using three five-point semantic differential scales anchored by the

adjectives "good-bad," pleasant-unpleasant," and "unfavorable-favorable" (Yi 1990b; Chang and Thorson 2004).

Would you say your attitude toward the [brand] **ad** you saw is:

Bad      Good

Pleasant      Unpleasant

Unfavorable      Favorable

*Attitude Toward the Brand* Attitude toward the brand is another popular measure of marketing communication effectiveness (Mackenzie and Lutz 1989). This measure was borrowed to measure online marketing communication effectiveness by several researchers (Cho, Lee, and Tharp 2001; Gallagher, Foster, and Parsons 2001; Chang and Thorson 2004). As with attitude toward the ad, attitude toward the brand was also a dependent variable in Yi's (1990b) study on priming advertising with news articles. Attitude toward the brand was assessed by three five-point semantic differential scales anchored by the adjectives "good-bad," pleasant-unpleasant," and "unfavorable-favorable" (Yi 1990b; Chang and Thorson 2004).

Would you say your overall opinion about the [brand] is:

Bad      Good

Pleasant      Unpleasant

Unfavorable      Favorable

*Purchase Intent* Purchase intent is another common measure of marketing communication effectiveness (for the online environment, Cho, Lee, and Tharp 2001; Gallagher, Foster, and Parsons 2001). Purchase intent was measured on a five-point Likert scale. Participants were asked to rate how likely they were to purchase the specified target brand (Yi 1990b).

How likely would you be to purchase a [brand]?

Not likely at all      Very likely

*Product Involvement* Previous studies showed that involvement with a product category affected the advertising effect (De Pelsmacker, Geuens, and Anckaert 2002). Participants were asked to rate their interest in each of the four product categories.

How interested are you in [product category]?

Not interested at all      Very interested

### **Setting up the online experiment**

A web site was set up for the experiment. Participants were recruited via e-mail (see Appendix 2). Since all participants were students, the e-mail was sent to class instructors who then forwarded it to the students. Once the e-mail was received, the participant had to click on the experiment URL and access the experiment web site. The experiment web site was set up by a professional computer programmer and underwent usability testing before being released to the participants. Navigation through the web site was made easy by placing a “next page” button on all pages.

Usability testing revealed that some participants had a tendency to go back and reevaluate their choices of ads and articles and answers to questionnaire items. This would have corrupted the data as it was recording in the database since it would have added two values for the same variable. Hence, a warning to not go back was added on all experiment web pages. In addition, usability testing helped reformulate instructions and questions so that they were best understood by participants.

There were four versions of the site, treatment 1 and treatment 2 being different across versions according to the four experiment conditions presented above. For the advertising repetition condition, treatment 1 and 2 were exactly the same, featuring four ads and three fillers each. For the advertising priming condition, treatment 1 featured four ads and three fillers, while treatment 2 featured four articles and 3 fillers. For the publicity priming condition, treatment 1 featured articles and treatment 2 featured ads. Lastly, for the pure-publicity condition, both treatments featured the exact same four articles and fillers. It has to be noted here that participants in condition 1 (ad-ad) answered a version of the questionnaire that did not include questions about articles, while participants in condition 4 (article-article) were not asked questions pertaining to ads.

Active participation was ensured by asking subjects to vote for articles or ads according to pre-defined criteria (i.e., newsworthiness for articles and design-brand name match for ads). Also, to detect participants who skipped reading the articles, the web site was set up so that the corresponding database recorded the time spent on each page.

Students were randomly assigned to one of the 4 conditions. To ensure enough participants per condition, forced random assignment was used till all four groups

reached 32 participants. Once the quota of 64 was reached for all four groups totaling 256 participants, additional participants were randomly assigned to the four groups with no restrictions.

The web site included the following pages in this order:

- Login page
- General Instructions page
- Instructions page for Treatment 1
- Treatment 1 pages (4 target pages with either ads or articles and 3 fillers in between the target pages)
- Instructions page for Treatment 2
- Treatment 2 pages (4 target pages with either ads or articles and 3 fillers in between the target pages)
- Instructions page for questionnaire
- Questionnaire
- Thank you page

#### The Login Page

The login page was the same for all participants. Students were welcomed and asked to input their student identification code (i.e., called “pawprint” at the participants’ university), which went into the database. The database rejected duplicate identification codes, therefore stopping one student from participating twice (see Appendix 3)

#### The General Instructions Page

The general instructions page introduced participants to what they were going to see throughout the experiment, specifically articles, cartoon figures, and ads. This page

also summarized what participants were asked to do, first pick articles and ads according to stated criteria and then answer the questions at the end (see Appendix 3).

#### The Ad Treatment Instructions Page

The ad treatment instructions page informed participants that they will be exposed to pairs of ads and pairs of cartoons (filler pages, Appendix 7). For each page, participants were instructed to indicate the ad where the layout best matched the brand name and the most eye-catching cartoon. Participants were also instructed to take their time evaluating (see Appendix 4).

#### The Ad Treatment

The four ad treatment pages had exactly the same look. Each page had two banner ads and buttons for participants to vote between the two. In terms of stimulus material development, the banner ads were exactly the same size and they had a similar look featuring a white background, the brand name, and some small visuals (see Appendix 5).

#### The Article Treatment Instructions Page

The article treatment instructions page informed participants that they will be exposed to pairs of articles and pairs of cartoons (filler pages). For each page, participants were instructed to indicate the most newsworthy article and the most eye-catching cartoon. Participants were also instructed to take their time evaluating (see Appendix 4).

#### The Article Treatment

The four article treatment pages had a similar look. Each page had two articles and buttons for participants to vote between the two. The articles featured the same fonts and formatting, a title in larger font, and the date, news section, and byline to have the appearance of an online news story (see Appendix 6).

### The Questionnaire Instructions Page

After going through the treatment pages, participants saw a page announcing the beginning of the questionnaire and that they would have to answer questions about the articles and ads they saw.

### The Questionnaire

The questionnaire featured the 7 sections described earlier. Each section was on a different page and the pages featured a button reading “next” for going from one page to another. The questionnaire web pages were programmed in such a way that participants could not advance if they haven’t answered all the questions on the page. In case a participant was clicking the “next” button to advance without answering all the questions on a page, a small window would pop up on the screen reading “Please answer all questions” (see Appendix 8). This way, data quality was insured by reducing the chance for missing data. The questions featured the “don’t know” answer option where applicable so that participants were not forced to click on an answer that would be untruthful. In addition, participants were not able to return to previous questions once they answered.

The 7-part questionnaire was set up in a modular way that allowed for participants in the repetitive advertising condition to answer only questions related to ads and participants in the third-party endorsement condition to answer only questions pertaining to articles. Participants in the advertising context and publicity priming conditions answered questions relating to both ads and articles. All participants answered questions about brand attitude, purchase intent, and demographics.

### The Thank You Page

After completing the last page of the questionnaire, participants advanced to the last page of the web site (see Appendix 9). On this page, they were thanked again for participating and were provided the e-mail contact of the researcher in case they were interested in the purpose and results of the study.

### **Sample and Data Collection**

Subjects were 634 students from a large Midwestern university. This convenience sample was from a homogenous population of students interested in the online environment. Participants were recruited via e-mail from three large classes. Since all participants were students, the e-mail was sent to class instructors who then forwarded it to the students. Once the e-mail was received, the participant had to click on the experiment URL and access the experiment web site. According to a power analysis table that indicates the sample size as a function of power, effect size, and significance level (Keppel 1991), the minimum sample size needed for a power level of .90, an effect size of .06, and a significance level of .05 is 57 participants. There were at least 100 participants in each group corresponding to the 4 exposure conditions, with 142 (24.36%) cases in the ad-ad condition, 143 (24.53%) in the ad-article condition, 148 (25.39%) in the article-ad condition, and 150 (25.73%) in the article-article condition, after data screening.

**CHAPTER 4**  
**DATA ANALYSIS**

**Data Clean Up**

Before starting analysis, the data were screened for missing values, univariate and multivariate outliers, linearity, and homoscedasticity.

*Missing data:* There were 634 participants in the experiment. After deleting cases with missing data, there were 583 cases left.

*Outliers:* According to Tabachnick and Fidell (2001), there are four reasons for the presence of a univariate outlier. First is incorrect data entry. This is not the case in this experiment since the experiment web site recorded the data as check-marked by the participants. The data did not go through a second hand to be inputted. The participants had to press a button on the screen and the web site automatically recorded the corresponding value to that button in the dataset.

Second is failure to specify missing value codes in SPSS so that missing values are read as “real” data. “Don’t know” answers were coded as such in SPSS for all variables that were used in the analysis.

Third is that the outlier is not a member of the sampled population. Participants were asked to indicate which year in school they were. There were just a few graduate students participating and their data were checked to ensure they were not outliers for the purpose of this study.

Fourth is the situation when the distribution for a variable in the population has more extreme values than a normal distribution. No such cases were detected quite understandably since most variables were measured on five-point Likert scales.

*Normality:* Normality of variables was assessed through both statistical and graphical methods. For all variables, both skewness and kurtosis had values between -1 and 1.

*Linearity and Homoscedasticity:* Before starting the analysis, linearity and homoscedasticity were diagnosed by examining scatter plots for all continuous variables.

### **Dependent Variables Obtained Via Factor Analysis**

The following variables were measured with three five-point semantic differential scales: attitude toward the ad, attitude toward the brand, and ad credibility. This was completed for each of the four products.

The three semantic differential scales for measuring attitude were: bad/good, pleasant/unpleasant, and favorable/unfavorable. The three semantic differential scales for measuring credibility were: credible/not credible, believable/unbelievable, and convincing/unconvincing. Factor analysis was used to reduce the number of variables so that one variable was left to measure each construct.

Before proceeding with factor analysis, the data were checked for multivariate outliers. For each of the three variables, for all four products, the author checked for the Mahalanobis distance at  $\alpha = .001$  and found no multivariate outliers.

Then, initial communalities and Eigenvalues were checked to test for multicollinearity and singularity. Since the largest communality estimates were not close to one and smallest Eigenvalues were not close to 0, it was decided that multicollinearity and singularity were not a threat.

Therefore, the following variables were obtained through factor analysis for each of the four products: attitude toward the ad, attitude toward the brand, and ad credibility. Sampling adequacy for factor analysis was checked with the Kaiser-Meyer-Olkin measure, which was higher than .55 for all analyses. Also, Bartlett's test of sphericity was significant for all analyses as well, meaning that the sample intercorrelation matrices came from a population in which the variables are noncollinear. Hence, the samples were factorable (Tabachnick and Fidell 2001).

Table 4-1

Factor Analysis Loadings and Reliability for Attitude Toward the Brand Variables

Item <sup>a</sup>	Loading	Alpha	Variance Explained (%)
<b>Attitude Toward Sonex Brand</b>		<b>.89</b>	82
Sonex Ad Bad/Good	.949		
Sonex Ad Unfavorable/Favorable	.964		
Sonex Ad Unpleasant/Pleasant	.794		
<b>Attitude Toward Sweeteez Brand</b>		<b>.86</b>	78.86
Sweeteez Ad Bad/Good	.904		
Sweeteez Ad Unfavorable/Favorable	.913		
Sweeteez Ad Unpleasant/Pleasant	.830		
<b>Attitude Toward RoVision Brand</b>		<b>.80</b>	73.44
RoVision Ad Bad/Good	.880		
RoVision Ad Unfavorable/Favorable	.874		
RoVision Ad Unpleasant/Pleasant	.815		
<b>Attitude Toward Talpa Brand</b>		<b>.88</b>	80.59
Talpa Ad Bad/Good	.921		
Talpa Ad Unfavorable/Favorable	.919		
Talpa Ad Unpleasant/Pleasant	.852		

<sup>a</sup>Extraction Method: Principal Component Analysis.

Factor loadings, percentages of total variance explained, and Cronbach's alphas for the twelve variables are reported in Tables 4-1, 4-2, and 4-3. With the exception of the variable measuring the credibility of the MP3 player ad, all other variables obtained through factor analysis have explained about seventy percent or more of the total variance and were reliable with a Cronbach's alpha of .75 or higher.

Table 4-2

Factor Analysis Loadings and Reliability for Ad Credibility Variables

Item <sup>a</sup>	Loading	Alpha	Variance Explained (%)
<b>Sonex Ad Credibility</b>		<b>.45</b>	47.87
Sonex Ad Believable	.709		
Sonex Ad Credible	.780		
Sonex Ad Convincing	.570		
<b>Sweeteez Ad Credibility</b>		<b>.77</b>	68.43
Sweeteez Ad Believable	.859		
Sweeteez Ad Credible	.845		
Sweeteez Ad Convincing	.776		
<b>RoVision Ad Credibility</b>		<b>.75</b>	67.25
RoVision Ad Believable	.869		
RoVision Ad Credible	.861		
RoVision Ad Convincing	.722		
<b>Talpa Ad Credibility</b>		<b>.78</b>	70.11
Talpa Ad Believable	.872		
Talpa Ad Credible	.841		
Talpa Ad Convincing	.798		

<sup>a</sup>Extraction Method: Principal Component Analysis.

This author looked at what might have caused the third item (convincing) on the ad credibility variable for the Sonex MP3 player brand. Considering all outliers and

missing variables were excluded, the only explanation left was in the design of the Sonex ad.

Table 4-3

Factor Analysis Loadings and Reliability for Attitude Toward the Ad Variables

Item <sup>a</sup>	Loading	Alpha	Variance Explained (%)
<b>Attitude Toward Sonex Ad</b>		<b>.81</b>	72.76
Sonex Ad Bad/Good	.869		
Sonex Ad Unfavorable/Favorable	.871		
Sonex Ad Unpleasant/Pleasant	.818		
<b>Attitude Toward Sweeteez Ad</b>		<b>.86</b>	78.86
Sweeteez Ad Bad/Good	.898		
Sweeteez Ad Unfavorable/Favorable	.925		
Sweeteez Ad Unpleasant/Pleasant	.839		
<b>Attitude Toward RoVision Ad</b>		<b>.82</b>	73.37
RoVision Ad Bad/Good	.911		
RoVision Ad Unfavorable/Favorable	.883		
RoVision Ad Unpleasant/Pleasant	.770		
<b>Attitude Toward Talpa Ad</b>		<b>.87</b>	79.66
Talpa Ad Bad/Good	.896		
Talpa Ad Unfavorable/Favorable	.907		
Talpa Ad Unpleasant/Pleasant	.875		

<sup>a</sup>Extraction Method: Principal Component Analysis.

### Hypotheses Testing

A 4 X 4 (4 products, within-subjects factor X 4 experiment conditions, between-subjects factor) repeated measures multivariate analysis of covariance (MANCOVA) was used to test the hypotheses. It was hypothesized that the third-party endorsement condition would be more effective than the publicity-priming condition, which in turn

would be more effective than the advertising context condition, which would ultimately surpass the repetitive advertising condition.

There were three dependent variables: attitude toward the brand ( $A_B$ ), attitude toward the ad ( $A_{AD}$ ), and purchase intent (PI). Three separate multivariate models were employed in order to assess whether the condition to which participants were exposed had a significant influence on:

- attitude toward the brand,
- attitude toward the ad, and
- purchase intent.

All three models included gender as a covariate as well as interest in the four product categories.

Levene's test of equality of error variances was used to check for normality of each dependent variable corresponding to each product respectively. Box's test of equality of covariance matrices was employed to check the for homogeneity of variance for the multivariate variance-covariance matrix.

After obtaining an overall significant F for the between-subjects independent variable (i.e., experiment condition), pairwise comparisons were used to determine the significant differences between every two conditions. Also, the plot of residual means was checked to identify possible differences among the four products in terms of participants' attitude toward the brand, attitude toward the ad, and purchase intent across the four conditions. The three repeated measures MANCOVAs provided the order in which the four conditions are situated on the brand communication effectiveness continuum for each of the three dependent variables respectively.

## Path Analysis

Path analysis was used to model the predicted relationships among experiment condition and the dependent variables included in the analysis. The data were uploaded in the structural equation modeling software AMOS. One path model was designed for each brand. Significance of paths at the .05 level and goodness of fit measures for the model were assessed (Tabachnick and Fidell 1991). Goodness of fit measures included:

- a normed fit index (NFI) of .9 or higher
- a non-normed fit index or Tucker-Lewis coefficient (TLI) of .9 or higher
- a comparative fit index (CFI) of .9 or higher
- a root mean square error of approximation (RMSEA) of .05 or lower

Bentler and Bonett (1980) suggest that the goodness of fit of a particular model may be usefully assessed relative to the fit of some baseline “null model”. Such a null model would be an arbitrary, highly restricted model (e.g., all correlations are zero or equal), which would represent a baseline level that any realistic model would be expected to exceed. The NFI is an index that represents the point at which the model being evaluated falls on a scale running from this baseline model to perfect fit. The closer the NFI is to 1 the better the fit. The CFI is a population-based version of the NFI. This index falls between 0 and 1 as the NFI. The closer the CFI is to 1 the better the fit of the model. The same applies to the TLI, a goodness-of-fit measure introduced by Tucker and Lewis in 1973 (Loehlin 1998), the closer to 1 the better the fit of the model. The RMSEA is another population-based fit index, meaning it is relatively insensitive to sample size. It has an explicit parsimony adjustment and does not require specification of a baseline model. The RMSEA is 0 for a perfect fit.

## CHAPTER 5

### RESULTS

A convenience sample of 634 students participated in this experiment. After data screening, 583 cases remained for analysis. Out of 583 participants, 43 percent were males and 57 percent were females. The number of participants was evenly split among conditions, with 142 (24.36%) cases in the ad-ad condition, 143 (24.53%) in the ad-article condition, 148 (25.39%) in the article-ad condition, and 150 (25.73%) in the article-article condition.

A 4 X 4 (4 products, within-subjects factor X 4 experiment conditions, between-subjects factor) repeated measures multivariate analysis of covariance (MANCOVA) was used to test the hypotheses. It was hypothesized that the pure publicity condition would be more effective than the publicity priming condition, which in turn would be more effective than the advertising priming condition, which would ultimately surpass the pure advertising condition. A repeated measures MANCOVA was used for comparing the four exposure conditions for each of the three dependent variables: attitude toward the brand ( $A_B$ ), attitude toward the ad ( $A_{AD}$ ), and purchase intent (PI).

#### **Attitude Toward the Brand Across Conditions**

Findings indicate that between-subjects there were significant differences among the four conditions in terms of attitude toward the brand ( $F(3, 573) = 10.52, p < .000$ ). Also, gender was found to be a significant overall covariate ( $F(1,573) = 6.17, p < .03$ ). The gender means for each exposure condition are presented in Table 5-1, Appendix 10. In addition, interest in MP3 players, candy, DVD players, and sports shoes were

significant covariates for each of the four repeated measures respectively. Means for the four groups are presented in Table 5-2.

Table 5-2

Group Means for Attitude Toward the Brand		
Condition	<i>M</i>	( <i>SE</i> )
Ad-Ad	3.03	(.05)
Ad-Article	3.19	(.05)
Article-Ad	3.25	(.05)
Article-Article	3.41	(.05)

Results of the repeated measures MANCOVA for  $A_B$  show that participants in the ad-ad condition had a significantly less positive attitude toward the brand than participants in either of the other three conditions. Also, participants in the article-article condition manifested a significantly more positive attitude toward the brand than participants in any of the other conditions. While the pairwise comparisons presented in Table 5-3 do not indicate a significant superiority of any one of the two priming conditions over the other, for this sample, it appears participants in the article-ad condition had a more positive attitude toward the brand they saw than participants in the ad-article condition.

Table 5-3

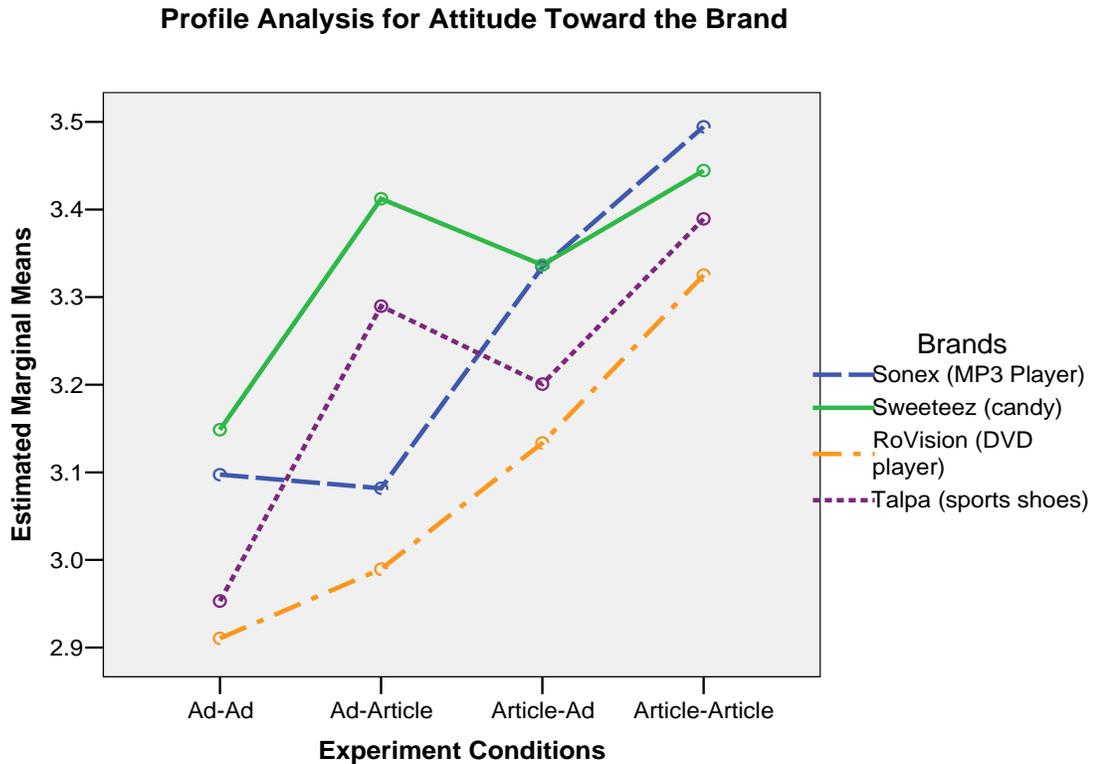
## Group Comparisons for Attitude Toward the Brand

Condition	Condition	<i>M Diff.</i>	<i>(SE)</i>	<i>p</i>
Ad-Ad	Ad-Article	-0.17	(.07)	.02*
	Article-Ad	-0.22	(.07)	.00*
	Article-Article	-0.39	(.07)	.00*
Ad-Article	Ad-Ad	0.17	(.07)	.02*
	Article-Ad	-0.06	(.07)	.41
	Article-Article	-0.22	(.07)	.00*
Article-Ad	Ad-Ad	0.22	(.07)	.00*
	Ad-Article	0.06	(.07)	.41
	Article-Article	-0.16	(.07)	.02*
Article-Article	Ad-Ad	0.39	(.07)	.00*
	Ad-Article	0.22	(.07)	.00*
	Article-Ad	0.16	(.07)	.02*

\* The mean difference is significant at the .05 level.

Participants' attitude toward the brand differed among the four product categories. As shown in Figure 5-1, it appeared that the pattern across conditions was similar for the two more technical products (i.e., MP3 player and DVD player) as well as for the two less technical products (i.e., candy and sports shoes). Additional separate graphical representations for the technical and non-technical products are included in Appendix 11, Figures 5-2 and 5-3.

**Figure 5-1. Group Means for Attitude Toward the Brand**



Two additional repeated measures MANCOVAs were employed to test models for the technical and non-technical product categories respectively. By examining the pairwise comparisons, it appeared that respondents had a significantly more positive attitude toward the technical brands when exposed to an articles first and then to ads rather than the other way around. The order did not appear to affect evaluation of the non-technical brands. Means and comparisons are presented in Tables 5-4 and 5-5.

Table 5-4

## Group Means for Attitude Toward the Brand

Condition	Non-Tech Brand		Tech Brand	
	<i>M</i>	( <i>SE</i> )	<i>M</i>	( <i>SE</i> )
Ad-Ad	3.05	(.06)	3.00	(.06)
Ad-Article	3.35	(.06)	3.04	(.06)
Article-Ad	3.27	(.06)	3.23	(.06)
Article-Article	3.42	(.06)	3.41	(.06)

Table 5-5

## Group Comparisons for Attitude Toward the Brand

Condition	Condition	Non-Tech Brands			Tech Brands		
		<i>M Diff.</i>	( <i>SE</i> )	<i>p</i>	<i>M Diff.</i>	( <i>SE</i> )	<i>p</i>
Ad-Ad	Ad-Article	-0.30	(.09)	.00*	-0.04	(.08)	.64
	Article-Ad	-0.22	(.09)	.01*	-0.24	(.08)	.00*
	Article-Article	-0.37	(.09)	.00*	-0.41	(.08)	.68
Ad-Article	Ad-Ad	0.30	(.09)	.00*	0.04	(.08)	.64
	Article-Ad	0.08	(.09)	.38	-0.20	(.08)	.01*
	Article-Article	-0.07	(.09)	.45	-0.37	(.08)	6.11
Article-Ad	Ad-Ad	0.22	(.09)	.01*	0.24	(.08)	.00*
	Ad-Article	-0.08	(.09)	.38	0.20	(.08)	.01*
	Article-Article	-0.14	(.09)	.10	-0.18	(.08)	.03*
Article-Article	Ad-Ad	0.37	(.09)	.00*	0.41	(.08)	6.68
	Ad-Article	0.07	(.09)	.45	0.37	(.08)	6.11
	Article-Ad	0.14	(.09)	.10	0.18	(.08)	.03*

\* The mean difference is significant at the .05 level.

This further analysis indicated that females were different from males in their expressed attitude toward the non-technical brands, candy ( $F(1,578) = 12.11, p < .001$ ) and sports shoes ( $F(1,580) = 3.491, p < .06$ ) products. No gender differences were observed for the two technical products in terms of attitude toward the brand.

To summarize, the hypotheses were supported for the attitude toward the brand measure only for the technical brands. For the MP3 player and the DVD player, attitude toward the brand was most positive for participants in the pure publicity condition, less positive in the publicity priming condition, even less positive in the advertising priming condition, and least positive for participants in the pure advertising condition. For non-technical products (candy and sports shoes) the hypothesized order of exposure conditions in terms of brand communications effectiveness was respected except for the two priming conditions (ad-article and article-ad), which appeared in the reverse order than the one hypothesized. Hence, hypotheses 2 and 3 were supported only partially for the two non-tech brands.

### **Attitude Toward the Ad Across Conditions**

In terms of attitude toward the ad, results indicate that participants significantly differed ( $F(2, 353) = 6.85, p < .00$ ) in their attitude toward the ad across the three conditions where ads were included (i.e., ads were not shown in the article-article condition). Pairwise comparisons among the three groups show that participants in the ad-ad condition had a significantly less positive attitude toward the ad than participants in the two conditions in which an ad and an article were shown. No significant difference was found between the article-ad and ad-article conditions. Also, gender did not make a significant difference among the three groups as a covariate for this dependent variable.

Table 5-6

## Group Means for Attitude Toward the Ad

Condition	<i>M</i>	( <i>SE</i> )
Ad-Ad	2.67	(.04)
Ad-Article	2.82	(.04)
Article-Ad	2.86	(.04)

Table 5-7

## Group Comparisons for Attitude Toward the Ad

Condition	Condition	<i>M Diff.</i>	( <i>SE</i> )	<i>p</i>
Ad-Ad	Ad-Article	-0.16	(.06)	.01*
	Article-Ad	-0.19	(.06)	.00*
Ad-Article	Ad-Ad	0.16	(.06)	.01*
	Article-Ad	-0.04	(.06)	.50
Article-Ad	Ad-Ad	0.19	(.06)	.00*
	Ad-Article	0.04	(.06)	.50

\* The mean difference is significant at the .05 level.

In conclusion, for attitude toward the ad the ad-ad condition appeared to have generated significantly less positive evaluations of the ads than the ad-article and article-ad conditions. So, for this dependent variable, even though the means of the three groups are in the predicted order, only hypothesis 1 was statistically supported, in terms of the repetitive advertising condition being inferior to both the publicity priming and

advertising priming conditions. Hypothesis 4 dealt with the pure publicity condition and was not applicable to the attitude toward the ad effectiveness measure.

### **Purchase Intent Across Conditions**

Results of the third multivariate analysis of covariance indicate that participants in the four conditions differed in terms of their inclination to purchase the presented products ( $F(3,575) = 4.33, p < .005$ ). Gender was a significant covariate in this model, females being more likely to purchase the presented products than males. Further analysis indicated that females were different from males in their expressed likelihood to purchase only for the non-technical products, candy ( $F(1,580) = 23.48, p < .000$ ) and sports shoes ( $F(1,580) = 3.258, p < .07$ ) products. No gender differences were observed for the two technical products in terms of intention to purchase. Also, interest in MP3 players, candy, DVD players, and sports shoes were significant covariates for each of the four repeated measures respectively.

Pairwise comparisons among the four conditions show that participants in the article-article condition were significantly more likely to purchase the presented products than participants in any of the other three conditions, thus supporting hypothesis 4. Even though the groups means indicate support for the hypotheses, there was no significant difference among the three conditions involving ad exposure in terms of participants' likelihood to purchase the presented products.

Table 5-8

## Group Means for Intention to Purchase

Condition	<i>M</i>	( <i>SE</i> )
Ad-Ad	2.40	(.06)
Ad-Article	2.45	(.06)
Article-Ad	2.49	(.06)
Article-Article	2.70	(.06)

Table 5-9

## Group Comparisons for Intention to Purchase

Condition	Condition	<i>M Diff.</i>	( <i>SE</i> )	<i>p</i>
Ad-Ad	Ad-Article	-0.05	(.09)	.58
	Article-Ad	-0.09	(.09)	.33
	Article-Article	-0.29	(.09)	.00*
Ad-Article	Ad-Ad	0.05	(.09)	.58
	Article-Ad	-0.04	(.09)	.68
	Article-Article	-0.24	(.09)	.01*
Article-Ad	Ad-Ad	0.09	(.09)	.33
	Ad-Article	0.04	(.09)	.68
	Article-Article	-0.21	(.09)	.02*
Article-Article	Ad-Ad	0.29	(.09)	.00*
	Ad-Article	0.24	(.09)	.01*
	Article-Ad	0.21	(.09)	.01*

\* The mean difference is significant at the .05 level.

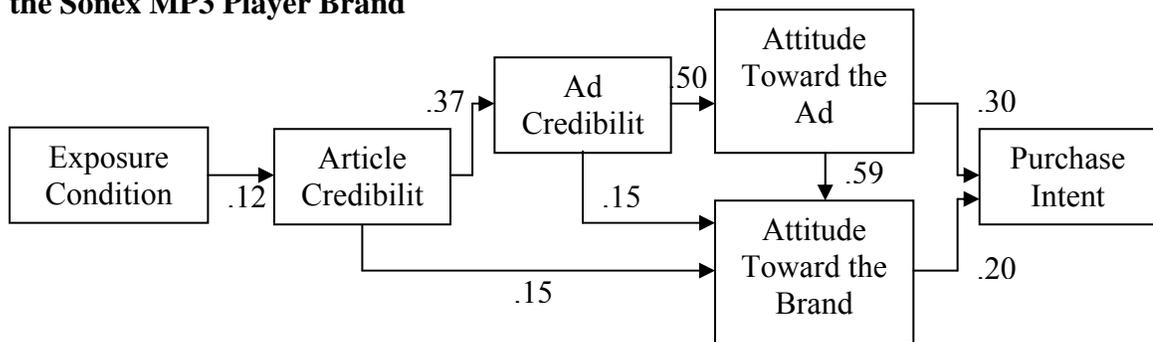
So, participants in the article-article condition appeared to be more likely to purchase the presented products than participants in the three conditions that involved advertising. Hence, for this dependent variable, even though the means of the four groups

are in the predicted order, only hypothesis 4 was supported meaning the pure publicity condition turned out to be superior to the publicity priming, advertising priming, and pure advertising conditions for the purchase intent measure of brand communication effectiveness.

### Path Models

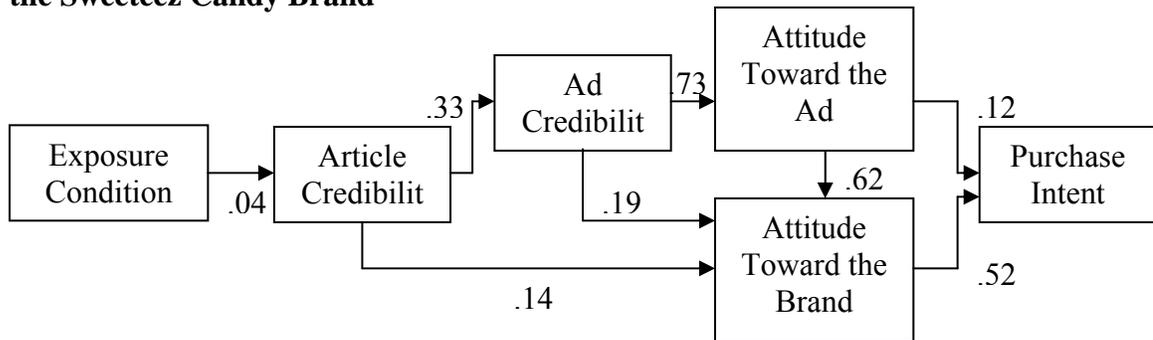
Four path models, one for each product, were tested to model the influence of the four situations on purchase intent. The exposure condition variable was a dichotomous variable that included the ad-article and article-ad combination conditions. Attitude toward the brand and attitude toward the ad were included as mediators. Also, based on the fact that third-party endorsement is based on the assumption that is the source credibility that generates the more positive evaluations of articles over ads, both article and ad credibility were included in the path models.

**Figure 5-4. Path Model of the Impact of Exposure Condition on Purchase Intent for the Sonex MP3 Player Brand**



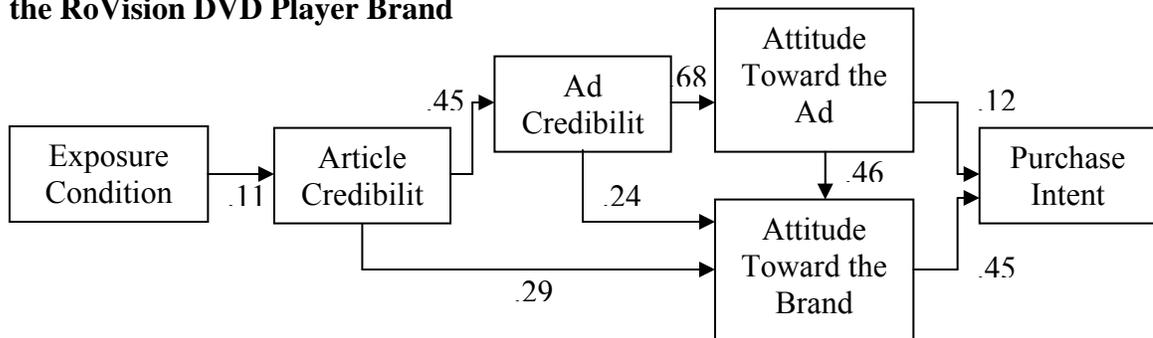
The path model for the Sonex MP3 player brand had a chi-square of 22.12 with 7 degrees of freedom. The chi-square was significant however. One explanation might be non-linearity of the data considering the five-point Likert scale measurements. All paths were significant. The goodness of fit measures are very good: NFI=.961, TLI=.917, CFI=.972, and RMSEA=.06.

**Figure 5-5. Path Model of the Impact of Exposure Condition on Purchase Intent for the Sweeteez Candy Brand**



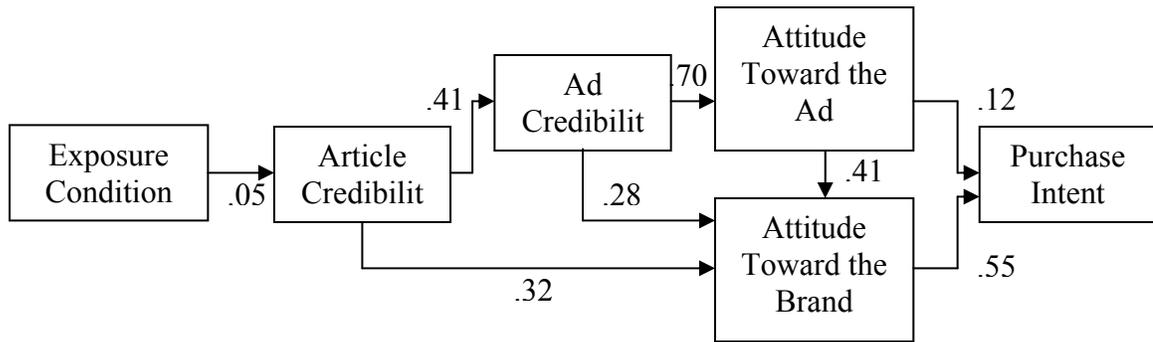
The path model for the Sweeteez candy brand had a chi-square of 8.16 with 7 degrees of freedom. The chi-square was not significant at  $p=.319$ . All paths were significant except for the initial exposure condition starting path. The goodness of fit measures were very good:  $NFI=.992$ ,  $TLI=.996$ ,  $CFI=.999$ , and  $RMSEA=.01$ .

**Figure 5-6. Path Model of the Impact of Exposure Condition on Purchase Intent for the RoVision DVD Player Brand**



The path model for the RoVision DVD player brand had a chi-square of 21.99 with 7 degrees of freedom. The chi-square was significant however. One explanation might be non-linearity of the data considering the five-point Likert scale measurements. All paths were significant, except for the path from attitude toward the ad toward intention to purchase, which had a significance of  $.06$ . The goodness of fit measures were good:  $NFI=.972$ ,  $TLI=.940$ ,  $CFI=.980$ , and  $RMSEA=.06$ .

**Figure 5-7. Path Model of the Impact of Exposure Condition on Purchase Intent for the Talpa Sports Shoes Brand**



The path model for the Talpa sports shoes brand had a chi-square of 19.04 with 7 degrees of freedom. The chi-square was significant however. One explanation might be non-linearity of the data considering the five-point Likert scale measurements. All paths were significant. The goodness of fit measures were good: NFI=.981, TLI=.963, CFI=.988, and RMSEA=.05.

The next chapter covers a discussion of the findings presented in the Results chapter.

## **CHAPTER 6**

### **SUMMARY AND DISCUSSION**

#### **Summary of Findings**

This dissertation examined the relationship among four exposure conditions in marketing communications (pure advertising, advertising priming, publicity priming, and pure publicity) that include either advertising or publicity or both. Also, the indirect relationship between brand communication exposure condition and purchase intent was modeled via path analysis.

Based on theoretical concepts from integrated marketing communications and third-party endorsement, the pure advertising condition (ad-ad) was hypothesized to be less effective than a pure publicity condition or a combined advertising-publicity condition. Following the third-party endorsement concept, the pure publicity condition (article-article) was hypothesized to be more effective than any other exposure condition that included advertising. Brand communication effectiveness was measured with three dependent variables: attitude toward the brand, attitude toward the ad, and intention to purchase. Overall, these two hypotheses were supported, the pure advertising exposure condition being least effective, the pure publicity condition being most effective, while the two combination conditions were somewhere in the middle in terms of brand communication effectiveness. While the two combination conditions turned out to be indeed more effective than pure advertising and less effective than pure publicity, there were no definite findings about the difference in terms of effectiveness between the two

combination conditions. For this sample of students, the article-ad exposure condition was superior to the ad-article condition in terms of attitudes toward the ad and brand and also in term of likelihood to purchase. However, this superiority of publicity priming over advertising priming was not supported statistically.

Results show that the pure advertising condition generated significantly the least positive attitude toward the ad. Also, participants exposed to an article about the brand before the ad (article-ad condition) had a significantly more positive attitude toward the brand than those exposed to only ads. For the two non-technical products only (candy and sports-shoes), participants in both conditions that included publicity (article-ad and ad-article) expressed a significantly more positive attitude toward the brand than participants in the pure advertising condition. In addition, women turned out to have significantly more positive attitudes toward the non-technical brands than men.

In terms of purchase intent, participants exposed to the pure publicity condition (article-article) were significantly more likely to purchase the promoted brand than participants in the pure advertising condition. Actually, participants in the pure publicity condition were significantly more likely to purchase the presented brands than participants in any of the other three conditions. Also, participants in the pure publicity condition had a more positive attitude toward the brand than participants in the publicity priming condition (article-ad) in the case of the two technical brands (MP3 player and DVD player).

Advertising researchers extensively investigated the relationships among attitude toward the ad, attitude toward the brand, and purchase intent, and added message credibility as an antecedent to attitudes. Using the third-party endorsement theoretical

underpinning, the author of this dissertation added exposure condition as an antecedent to message credibility. The resulting model featured the paths through which the exposure condition (varying from pure advertising to pure publicity) indirectly impacts attitude toward the ad, attitude toward the brand, and ultimately purchase intent. The credibility of the publicity message was a mediator between the exposure condition and attitude toward the brand as well as between exposure condition and advertising message credibility. Advertising message credibility was both a mediator and a moderator. It mediated a relationship between publicity message credibility and attitude toward the ad and moderated the relationship between publicity message credibility and attitude toward the brand. Attitude toward the brand and attitude toward the ad mediated the relationship between purchase intent and article and ad credibility. Exposure condition turned out to be a significant starting path only for the two technical brands for which the article-ad exposure condition was more effective than the ad-article one. For the non-technical brands, a path model that had ad credibility mediate the relationship between exposure condition and article credibility did not return exposure condition as a significant starting point either.

## **Discussion**

In an article published in 2004, British author Richard Linning complains about public relations identifying itself with publicity along the years.

“Any history of public relations is a running commentary on the techniques used to deliver third party endorsement as the media has evolved: from Ivy Lee's simple packaging of information approach, through Bernays' 'engineering consent', to today's use of bloggers on the web or the more sophisticated journo lobbying', it is a record of how practitioners deliver public relations' unique selling proposition, the plausible deniability which is third party endorsement” (Linning 2004, p.65).

Linning's words were picked to open this discussion section not only because they stress the third-party endorsement concept, which is part of the theoretical foundation of this dissertation, rather because Linning mentions web bloggers. The hypotheses of this dissertation about the effects of publicity, advertising and the combination of publicity and advertising were tested in the digital environment, hence the blogs that Linning mentions could be one form of publicity on the Internet.

Publicity is often the step child among the many forms of public relations. While criticized by authors such as Linning, publicity is without question a powerful means to promote brands. Why not promote brands with advertising only? According to Hallahan (1999) there is an apparent bias against advertising. This negative feeling about advertising, coupled with expectations about strong arguments to be found in ads, suggest that audiences are quite discerning when processing ads. On the other hand, suggests Hallahan, audiences might exhibit greater flexibility in terms of the quality of arguments that they are willing to accept as credible when information is presented as news. Such findings are consistent with correspondence theory (Smith and Hunt 1978). Stated another way, argument quality might not be as important in publicity as it is in advertising. The mere presence of information presented as news might have a compensatory, heuristic effect that enhances an otherwise weak argument. Hence, news with weak arguments appeared to perform just as well as news presented with strong arguments and as well as advertising with strong arguments (Hallahan 1999). *Publicity superior to advertising.* The findings of this dissertation support the idea of publicity being superior to advertising in terms of brand communication effectiveness for

the online environment. This finding supports ideas promoted by several researchers who embraced the third-party endorsement concept (Salmon, Reid, Pokrywczski, and Willett 1985; Cameron 1994; Cameron and Ju-Pak 2000) that news articles benefit from increased credibility as opposed to advertising messages. Cameron and Ju-Pak investigated advertorials as a means through which advertising attempts to “borrow” credibility by imitating the news format. The findings of publicity being more effective than advertising contradicts findings by Hallahan (1999), who found publicity to be as effective as advertising. Hallahan imposed the condition of strong arguments to be used with both tactics in order for them to be equally effective. A future study could replicate Hallahan’s study for the digital environment. Manipulations for argument strength should be included.

The path model tested in this dissertation presents the mechanism through which an increasingly news-like exposure condition (as opposed to advertising-like) indirectly impacts strategic communication effectiveness. Previous literature acknowledged the superior effectiveness of news-like advertising (Balasubramanian 1991). He introduced the concept of hybrid messages to the academic literature, a hybrid message being a paid-for publicity message that is not labeled as sponsored content. Hybrid messages are proof that no matter the dispute between the advertising and the public relations departments, there are communication professionals who write like public relations practitioners and place what they wrote wearing the advertising hat (and a coat with large pockets).

In addition, this dissertation found support for the superiority of a synergistic publicity-advertising condition over the situation when advertising is used alone. Testing for a synergistic effect has been the endeavor of many scholars who embraced the

integrated marketing communications framework (Jin 2003; Naik and Raman 2004). However, as stated before in this dissertation, most studies looking at synergy have tested for type II cross-media synergies such as between Internet and television or between radio and print (Edell and Keller 1989, 1999; Chang and Thorson 2004). One such previous study pointed to synergy between Internet and television advertising by comparing a TV-Internet condition to a repetitive Internet-Internet condition (Chang and Thorson 2004). While finding the existence of such cross-media synergy does encourage integration of marketing communications efforts across media, it does not address the central idea of IMC, which is integration of tactics. This is what this dissertation addressed by testing for a type III cross-tactics synergistic effect between publicity and advertising. Findings encourage managers to solve the traditional differences between public relations and advertising departments (Moriarty 1996) and coordinate publicity and advertising for a more successful brand communications plan.

*Gender differences.* It has to be added here that findings suggest a gender difference in brand communication effectiveness for non-technical brands being promoted on the Internet. Females are more likely to develop a more positive attitude toward the brand and to purchase a non-technical product than males.

Non-technical products differed from technical products in terms of them being more effectively promoted with advertising first supported by publicity later. For technical products publicity should be implemented first. For the candy and sports shoes brands tested in this dissertation, the advertising-publicity condition generated a more positive attitude toward the brand than the publicity-advertising condition specifically for the female participants. Yi (1990b) found that affective priming impacts attitude toward

the ad. Assuming that the candy and sports shoes ads generated positive affect, which in turn impacted attitude toward the brand (Mackenzie and Lutz 1989), it can be concluded that for products that are subjectively chosen (such as candy and sports shoes) the advertising effort should come before the publicity, especially when addressing a female target audience.

*Technical versus non-technical products.* A difference between promotional strategies that employ technical versus non-technical language has been covered in previous literature (Bradley and Meeds 2002, 2004; Wyer 2002). Bradley and Meeds examined the influence of linguistic variables both on the comprehension of the information presented in advertising and on the amount and type of cognitive elaboration of its implications. More general differences result from persons' facility with the language in which the information is conveyed, writes Wyer. For both the MP3 player and the DVD player, the stimulus articles included technical details such as memory capacity, types of files played, speed, etc. Reading these articles required increased cognitive elaboration, hence a stronger priming effect when the article was shown before the ad. So, when promoting technical products, reading the article first and seeing the ad later is the more effective combination because the article is more cognitively involving. Cognitive priming has been shown to be more effective in generating a more positive attitude toward the brand (Yi 1990b).

When promoting non-technical products, showing the ad first and implementing publicity later may prove to be more effective. For the candy and sports shoes brands tested in this dissertation, the advertising-publicity condition generated a more positive attitude toward the brand than the publicity-advertising condition. Yi (1990b) found that

affective priming impacts attitude toward the ad. Assuming that the candy and sports shoes ads generated positive affect, which in turn impacted attitude toward the brand (Mackenzie and Lutz 1989), it can be concluded that for products that are subjectively chosen (such as candy and sports shoes) the advertising effort should come before the publicity. Future research should replicate this study and manipulate for the cognitive and affective dimensions of ads and articles.

### **Limitations**

Although this dissertation found valuable information regarding the combined use of publicity and advertising online, it has at least a couple of limitations.

First, there are aspects relating to the sample of participants. While a homogenous population and experienced with the Internet, the student population is not representative of the general population. Also, the sample used was a convenience sample, not one statistically drawn. While participants were randomly assigned to conditions and counterbalancing was employed when coordinating exposure to the stimulus material, these measures do not make the results generalizable as they would have been if the sample of participants would have been statistically drawn. Also, some students received extra credit points from their instructors and some participated entirely voluntary. The thorough data screening excluded participants with inconsistent and incomplete answers however the difference in motivation to participate might have impacted the results beyond control. A future study on the topic of combining different tactics of marketing communication should employ a statistically-drawn sample of participants from the general population that is browsing the Internet nowadays.

The second limitation of this dissertation comes the very nature of the study. Since the tests were done for four different brands, the ads and articles had to be different from one product to another. Due care was employed when designing the stimulus materials for all articles to look alike and have the same length and especially the same impartial tone. Also, when designing the banner ads, a similar format and layout was attempted with minimal differences. Still, the four target articles and four target ads could not have been exactly the same. Something in the text of the articles or in the design of the ads might have caused affective differences that could not be controlled. This limitation was unavoidable considering the high interest in testing the hypotheses for a variety of products. A future study may focus on separately investigating the affective and cognitive components of attitude toward the ad and attitude toward the brand and control for affect generated by the stimulus material.

## APPENDICES

### Appendix 1. Questionnaire

#### **\*\*Section 1: First-choice recognition \*\***

**Answer the following questions about brands you've seen while browsing:**

Which of these DVD player brands did you notice during this experiment?

Muviz  
RoVision  
Electronix

Which of these candy brands did you notice during this experiment?

Sweeteez  
ChocoChic  
Sweeto

Which of these MP3 player brands did you notice during this experiment?

Data 32  
Sonex  
P 234

Which of these pizza brands did you notice during this experiment?

Cheezy  
MyPizza  
Round&Square

Which of these sports shoes brands did you notice during this experiment?

Assist  
Roar  
Talpa

**Legend for the questionnaire:**



Not shown to groups that saw only articles



Not shown to groups that saw only ads

**\*\*Section 2: Product 1 – MP3 Player\*\***

**Answer the following questions about brands you've seen while browsing:**

You saw an ad for the Sonex MP3 player. On a scale from 1 to 5 where 1 is “no attention at all” and 5 is “a lot of attention” rate how much attention you paid to that ad:  
 1 2 3 4 5

List as many things about the ad you can remember:  
 \_\_\_\_\_

Would you say the Sonex MP3 player **ad** was:

Unbelievable	_	_	_	_	_	Believable
Convincing	_	_	_	_	_	Unconvincing
Not credible	_	_	_	_	_	Credible

Would you say your attitude toward the Sonex MP3 player **ad** you saw is:

Bad	_	_	_	_	_	Good
Pleasant	_	_	_	_	_	Unpleasant
Unfavorable	_	_	_	_	_	Favorable

You read a story about a new MP3 player. How well do you remember the story?  
 Not at all \_ \_ \_ \_ \_ Very well

How much do you agree with the following statements?  
 I paid a lot of attention to the story.  
 Not at all \_ \_ \_ \_ \_ Definitely agree

I closely read the story.  
 Not at all \_ \_ \_ \_ \_ Definitely agree

I found the story believable.  
 Not at all \_ \_ \_ \_ \_ Definitely agree

Would you say your overall opinion about the Sonex MP3 player is:

Bad	_	_	_	_	_	Good
Pleasant	_	_	_	_	_	Unpleasant
Unfavorable	_	_	_	_	_	Favorable

How likely would you be to purchase a Sonex MP3 player?  
 Not likely at all \_ \_ \_ \_ \_ Very likely

**\*\*Section 3: Product 2 – Candy\*\***

**Answer the following questions about brands you’ve seen while browsing:**

You saw an ad for Sweeteez candy. On a scale from 1 to 5 where 1 is “no attention at all” and 5 is “a lot of attention” rate how much attention you paid to that ad:  
 1 2 3 4 5

List as many things about the ad you can remember:  
 \_\_\_\_\_

Would you say the Sweeteez candy **ad** was:

Unbelievable	–	–	–	–	–	Believable
Convincing	–	–	–	–	–	Unconvincing
Not credible	–	–	–	–	–	Credible

Would you say your attitude toward the Sweeteez candy **ad** you saw is:

Bad	–	–	–	–	–	Good
Pleasant	–	–	–	–	–	Unpleasant
Unfavorable	–	–	–	–	–	Favorable

You read a story about new Sweeteez candy. How well do you remember the story?  
 Not at all \_\_\_\_\_ Very well

How much do you agree with the following statements?

I paid a lot of attention to the story.  
 Not at all \_\_\_\_\_ Definitely agree

I closely read the story.  
 Not at all \_\_\_\_\_ Definitely agree

I found the story believable.  
 Not at all \_\_\_\_\_ Definitely agree

Would you say your overall opinion about Sweeteez candy is:

Bad	–	–	–	–	–	Good
Pleasant	–	–	–	–	–	Unpleasant
Unfavorable	–	–	–	–	–	Favorable

How likely would you be to purchase Sweeteez candy?  
 Not likely at all \_\_\_\_\_ Very likely

**\*\*Section 4: Product 3 – DVD Player\*\***

**Answer the following questions about brands you've seen while browsing:**

You saw an ad for the RoVision DVD player. On a scale from 1 to 5 where 1 is “no attention at all” and 5 is “a lot of attention” rate how much attention you paid to that ad:

1 2 3 4 5

List as many things about the ad you can remember:

\_\_\_\_\_

Would you say the the RoVision DVD player **ad** was:

Unbelievable	_	_	_	_	_	Believable
Convincing	_	_	_	_	_	Unconvincing
Not credible	_	_	_	_	_	Credible

Would you say your attitude toward the RoVision DVD player **ad** you saw is:

Bad	_	_	_	_	_	Good
Pleasant	_	_	_	_	_	Unpleasant
Unfavorable	_	_	_	_	_	Favorable

You read a story about a new RoVision DVD player. How well do you remember the story?

Not at all	_	_	_	_	_	Very well
------------	---	---	---	---	---	-----------

How much do you agree with the following statements?

I paid a lot of attention to the story.

Not at all	_	_	_	_	_	Definitely agree
------------	---	---	---	---	---	------------------

I closely read the story.

Not at all	_	_	_	_	_	Definitely agree
------------	---	---	---	---	---	------------------

I found the story believable.

Not at all	_	_	_	_	_	Definitely agree
------------	---	---	---	---	---	------------------

Would you say your overall opinion about the RoVision DVD player is:

Bad	_	_	_	_	_	Good
Pleasant	_	_	_	_	_	Unpleasant
Unfavorable	_	_	_	_	_	Favorable

How likely would you be to purchase a RoVision DVD player?

Not likely at all	_	_	_	_	_	Very likely
-------------------	---	---	---	---	---	-------------

**\*\*Section 5: Product 4 – Sports Shoes\*\***

**Answer the following questions about brands you’ve seen while browsing:**

You saw an ad for Talpa sports shoes. On a scale from 1 to 5 where 1 is “no attention at all” and 5 is “a lot of attention” rate how much attention you paid to that ad:  
 1 2 3 4 5

List as many things about the ad you can remember:  
 \_\_\_\_\_

Would you say the Talpa sports shoes **ad** was:

Unbelievable	–	–	–	–	–	Believable
Convincing	–	–	–	–	–	Unconvincing
Not credible	–	–	–	–	–	Credible

Would you say your attitude toward the Talpa sports shoes **ad** you saw is:

Bad	–	–	–	–	–	Good
Pleasant	–	–	–	–	–	Unpleasant
Unfavorable	–	–	–	–	–	Favorable

You read a story about the new Talpa sports shoes. How well do you remember the story?  
 Not at all                      –                      –                      –                      –                      –                      Very well

How much do you agree with the following statements?

I paid a lot of attention to the story.  
 Not at all                      –                      –                      –                      –                      –                      Definitely agree

I closely read the story.  
 Not at all                      –                      –                      –                      –                      –                      Definitely agree

I found the story believable.  
 Not at all                      –                      –                      –                      –                      –                      Definitely agree

Would you say your overall opinion about Talpa sports shoes is:

Bad	–	–	–	–	–	Good
Pleasant	–	–	–	–	–	Unpleasant
Unfavorable	–	–	–	–	–	Favorable

How likely would you be to purchase Talpa sports shoes?  
 Not likely at all                      –                      –                      –                      –                      Very likely

**\*\*Section 6: Involvement\*\***

**Answer the following questions about products you might purchase in the future:**

- How interested are you in DVD players?  
Not interested at all    \_    \_    \_    \_    \_    Very interested
- How interested are you in candy?  
Not interested at all    \_    \_    \_    \_    \_    Very interested
- How interested are you in sports shoes?  
Not interested at all    \_    \_    \_    \_    \_    Very interested
- How interested are you in pizza?  
Not interested at all    \_    \_    \_    \_    \_    Very interested
- How interested are you in MP3 players?  
Not interested at all    \_    \_    \_    \_    \_    Very interested

**\*\*Section 7: Demographics\*\***

**Answer the following questions about yourself:**

In the following section you will answer a few questions about yourself.

What year are you in college?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate Student

What is your major?

- Journalism
- Accounting
- Other, please state \_\_\_\_\_

How old were you on your last birthday?

\_\_\_\_\_

What is your gender?

- F      M

How would you describe yourself?

White, Non-hispanic

African American

Hispanic/Latino

Asian American

Arab American

Don't know

Mark the range appropriate for your total yearly parental income (from your permanent home):

\$ 0 to \$ 9,999

\$ 10,000 to \$ 19,999

\$ 20,000 to \$ 29,999

\$ 30,000 to \$ 39,999

\$ 40,000 to \$ 49,999

\$ 50,000 to \$ 59,999

\$ 60,000 to \$ 69,999

\$ 70,000 to \$ 79,999

\$ 80,000 to \$ 89,999

\$ 90,000 to \$ 99,999

\$ 100,000 to \$ 109,999

Over \$ 110,000

**Thank you for your participation!**

## Appendix 2. Recruitment E-mail

Hi!

Share your opinions in order to help improve communication over the Internet in an online experiment conducted by researchers in the School of Journalism!

All you have to do is to click on the following link:

<http://iats-coe2.missouri.edu/~iqieeb>

You will be directed to a website where you will have to watch advertisements, read news articles, have fun with cartoon characters and answer a questionnaire at the end.

We appreciate you lending us a helping hand. The information you provide is completely confidential and will be used only for research purposes. For questions or comments please feel free to e-mail Anca Micu at: [anca@mizzou.edu](mailto:anca@mizzou.edu).

The Research Team

*For additional information regarding human participation in research, please feel free to contact the UMC Campus Institutional Review Board Office at 573-882-9585.*

*Please understand that your participation is voluntary, your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and you may discontinue your participation at any time without penalty or loss of benefits. Also, you do not have to answer any questions that are asked.*

### Appendix 3. Login Page and General Instructions Page

Internet Study	
<p>Hi!</p> <p>Thank you for participating in this study.</p> <p>Please share your opinions with us to help improve communication over the Internet! The study will take up to 30 minutes.</p> <p>The information you provide is confidential and will be used only for research purposes. For questions or comments please feel free to e-mail Anca Micu at: <a href="mailto:anca@mizzou.edu">anca@mizzou.edu</a></p> <p>Please fill in your name and e-mail id.</p> <p><i>The Research Team</i></p> <p><small>For additional information regarding human participation in research, please feel free to contact the UMC Campus Institutional Review Board Office at 573-882-9585.</small></p> <p><small>Please understand that your participation is voluntary, your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled, and you may discontinue your participation at any time without penalty or loss of benefits. Also, you do not have to answer any questions that are asked.</small></p>	<p>First Name: <input type="text"/></p> <p>Last Name: <input type="text"/></p> <p>Pawprint: <input type="text"/></p> <p><input type="button" value="Start"/></p>
General Introduction	
<p>This study is about evaluating the effectiveness of different types of online communication. On the following pages you will see pairs of news stories, pairs of cartoon figures, and pairs of ads.</p> <p>Please indicate your favorite one as instructed at the top of the page.</p> <p>Take your time so you will be able to tell us why. After voting, please fill out the questionnaire at the end.</p> <p><b>Also please DO NOT press the BACK button at any time during this experiment!!!</b></p>	
<p><b>Please DO NOT press the BACK button at any time during this experiment!!!</b></p>	<p><input type="button" value="Next -&gt;"/></p>

## Appendix 4. Ad and Article Treatments Instructions Pages

### Advertisements

In the next pages you will see pairs of ads and pairs of cartoon figures. On the pages with ads indicate the ad in which the layout best matches the brand name. On the pages with cartoon figures please indicate which one you think is the most eye-catching.

Take your time to evaluate carefully.

**Please DO NOT press the BACK button at any time during this experiment!!!**

Next ->

### Articles

In the next pages you will see pairs of news stories and pairs of cartoon figures. On the pages with news stories indicate which one you think is the most newsworthy. On the pages with cartoon figures please indicate which one you think is the most eye-catching.

Take your time to evaluate carefully.

**Please DO NOT press the BACK button at any time during this experiment!!!**

Next ->

## Appendix 5. Sample Advertising Treatment Pages

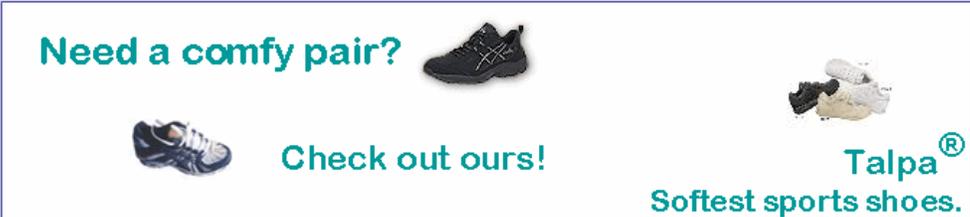
Please vote for the ad in which the layout best matches the brand name:

Banner #1		Vote: <input type="radio"/>
Banner #2		Vote: <input type="radio"/>

Please DO NOT press the BACK button at any time during this experiment!!!

Next ->

Please vote for the ad in which the layout best matches the brand name:

Banner #1		Vote: <input type="radio"/>
Banner #2		Vote: <input type="radio"/>

Please DO NOT press the BACK button at any time during this experiment!!!

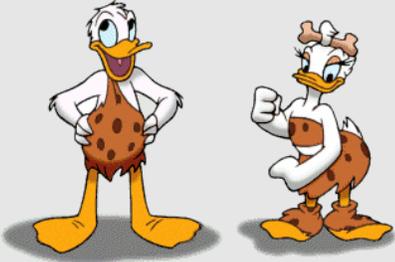
Next ->

## Appendix 6. Sample Article Treatment Pages

Please vote for the most newsworthy story:			
<b>First Look: Sonex® Scores with New MP3 Player</b>	Vote: <input type="radio"/>	<b>New Smartphone</b>	Vote: <input type="radio"/>
<p><i>March 5, 2005 - Technology Section</i></p> <h3 style="margin: 0;">First Look: Sonex® Scores with New MP3 Player</h3> <p>Eric Dahlen, Tech News</p> <p>Everyone seems to be gunning for MP3 players. Joining competitors like the Rio Carbon and the Creative Zen Micro is Sonex®'s \$230 P20. I tested a shipping model of the 6GB, color-screen player. The highlight of the P20 is a 1.5-inch display combined with a hardware-and-software interface. Navigating your music library is easy with the touch-sensitive slider control. You can browse by artist, album, genre, or song title. The player lets you add individual songs to an on-the-go playlist.</p> <p>More Features: The P20 does more than play music: You can also listen to and record FM radio, record audio with a built-in microphone, display text files, and view JPG photos. The P20's battery is replaceable and rechargeable. The company rates the battery's run time between charges at about 12 hours.</p>		<p><i>March 12, 2005 - Tech News</i></p> <h3 style="margin: 0;">New Smartphone</h3> <p>By Cristal Lemekis</p> <p>ASIA : A premium provider of mobile phones exclusively unveils the world's first 3GB HDD embedded music smartphone, the SGH-I300.</p> <p>This development follows its 2004 introduction of the world's first 1.5GB hard disk drive phone. This 3GB handset is the first phone featuring 'Plug &amp; Play Files-to-go,' which allows the phone to function as a removable hard disk drive. Businessmen and students can easily transfer files to / from their computers, as well as store and transfer files in any format conveniently.</p> <p>Capable of storing up to 1,000 music files and featuring scroll-wheel navigation, this handset enables users to easily search files. It is perfect for people with a passion for music as the device supports 3D-sound through its stereo speakers. The i300 also enables users to download and enjoy music from not only online music services but also from OTA music services provided by mobile operators.</p>	
<b style="color: red;">Please DO NOT press the BACK button at any time during this experiment!!!</b>			<input type="button" value="Next -&gt;"/>

Please vote for the most newsworthy story:			
<b>Candy of the Week: Sweeteez® Caramilk Maple</b>	Vote: <input type="radio"/>	<b>Irresistible Italian Desserts: Cremoneta</b>	Vote: <input type="radio"/>
<p><i>February 23, 2005 - Social Section</i></p> <h3 style="margin: 0;">Candy of the Week: Sweeteez® Caramilk Maple</h3> <p>By Jo Mochrie, Toronto News</p> <p>With Caramilk Maple, Sweeteez® adds a hint of maple to its popular chocolate bar. As with other "fusion" bars, the company is hoping that the combination of two sweet ingredients will spell success.</p> <p>In terms of packaging, instead of employing the swirls of color the competition has resorted to in this chocolate bar war, Sweeteez® continue to rely on their trademark deep green wrapper, accented, in this variation, with a gentle streak of maple brown. The highlight of this wrapper is the candied maple leaf.</p> <p>They say " Sweeteez® Caramilk Maple brings together two Canadian icons - Caramilk and the flavour of maple syrup. With creamy, melt-in-your mouth chocolate pockets and the natural flavour of sweet maple syrup, it's one hundred percent Sweeteez® quality," says John Killip, VP of Marketing at Sweeteez®. "By bringing maple to its centre, you might just say that the Sweeteez® Caramilk secret just got a little sweeter..."</p>		<p><i>March 14, 2005 - Local News Section</i></p> <h3 style="margin: 0;">Irresistible Italian Desserts: Cremoneta</h3> <p>By Rita Simonetta</p> <p>Dolce: sweets, dessert. It's one of the best parts of a meal: the grand finale of a delicious dinner. It's a tradition that dates back thousands of years to the ancient Romans, who enjoyed a sweet end to their dinners. Wealthy Romans had a large dinner that would end with dolci, consisting of cakes. When not at banquets, the well-to-do Romans would have their dessert given by their servants. But Mom's apple pie was not on the menu. Instead, the Romans enjoyed honey with poppy seeds and cakes made from honey. Also quite popular were fruits stuffed in sauces.</p> <p>Italians have a celebrated sweet tooth that has produced some of the most famous desserts recognized around the world. Cremoneta is the queen of all Italian desserts. Custard is the leading ingredient in this layered cake, and it's smooth texture is the reason for this cake's name.</p>	
<b style="color: red;">Please DO NOT press the BACK button at any time during this experiment!!!</b>			<input type="button" value="Next -&gt;"/>

## Appendix 7. Sample Fillers

Please vote for the most eye-catching cartoon figure:	
Jungle Ducks 	Vote: <input type="radio"/>
Pluto and Goofy 	Vote: <input type="radio"/>
<b>Please DO NOT press the BACK button at any time during this experiment!!!</b>	
<input type="button" value="Next -&gt;"/>	
Please vote for the most eye-catching cartoon figure:	
Donald in the Tub 	Vote: <input type="radio"/>
Goofy Ballerina 	Vote: <input type="radio"/>
<b>Please DO NOT press the BACK button at any time during this experiment!!!</b>	
<input type="button" value="Next -&gt;"/>	

## Appendix 8. Sample Questionnaire Page with Warning Message

Internet Study - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address [http://lats-coe2.missouri.edu/~igieeb/S\\_2.php](http://lats-coe2.missouri.edu/~igieeb/S_2.php) Go

Google Search Web Search Site Search Froogle 25 blocked AutoFill options

**Answer the following questions about the brands you saw:**

You saw an ad for the Sonex MP3 player. On a scale from 1 to 5 where 1 is "no attention at all" and 5 is "a lot of attention" rate how much attention you paid to that ad. 1  2  3  4  5

List as many things about the ad you can remember:

Would you say the Sonex MP3 player ad was:

Unbelievable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Believable
Convincing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unconvincing
Not credible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Credible
Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good

Would you say your attitude toward the Sonex MP3 player ad was:

Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Favorable
Very unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very favorable

You read a story about the Sonex MP3 player. How well do you remember the story:

**How much do you agree with the following statements?**

I paid a lot of attention to the story.	Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Definitely agree
I closely read the story.	Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Definitely agree
I found the story believable.	Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Definitely agree

Would you say your overall opinion about the Sonex MP3 player is:

Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good
Pleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Unpleasant
Unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Favorable

How likely would you be to purchase a Sonex MP3 player?

Not likely at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very likely
-------------------	-----------------------	-----------------------	-----------------------	-----------------------	-------------

**Please DO NOT press the BACK button at any time during this experiment!!!**

Continue to Next Section

Microsoft Internet Explorer Please answer all questions! OK

start Internet 9:01 PM

## Appendix 9. Thank You Page

### General Introduction

Thank you again for taking part in this experiment.

If you are interested in the results and what they will be used for please contact Anca Micu at [anca@mizzou.edu](mailto:anca@mizzou.edu).

PLEASE CLOSE THE BROWSER!

**Please DO NOT press the BACK button at any time during this experiment!!!**

**Appendix 10. Additional Table with Gender Means for Non-Technical Brands**

Table 5-1

Self-Reported Attitude Toward the Brand by Gender and Brand

Group	Ad-Ad		Ad-Article		Article-Ad		Article-Article		Total	
	<i>M</i>	<i>(SD)</i>	<i>M</i>	<i>(SD)</i>	<i>M</i>	<i>(SD)</i>	<i>M</i>	<i>(SD)</i>	<i>M</i>	<i>(SD)</i>
Attitude Toward Sweeteez Brand										
Male	2.91	(1.07)	3.33	(0.84)	3.23	(0.93)	3.24	(0.88)	3.18	(0.94)
Female	3.32	(0.93)	3.48	(0.95)	3.42	(0.94)	3.60	(0.84)	3.45	(0.92)
Attitude Toward Talpa Brand										
Male	2.96	(0.95)	3.23	(0.85)	3.12	(1.14)	3.18	(0.88)	3.13	(0.97)
Female	2.97	(0.99)	3.34	(0.99)	3.27	(0.97)	3.55	(1.03)	3.28	(1.01)

## Appendix 11. Additional Graphical Representations of Attitude Toward the Brand

Figure 5-2. Group Means for Attitude Toward the Technical Brand

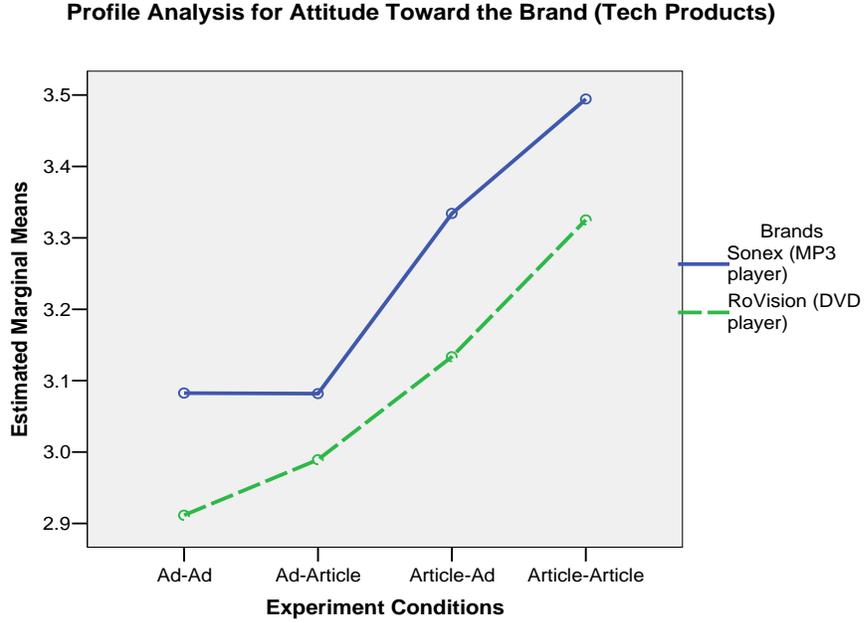
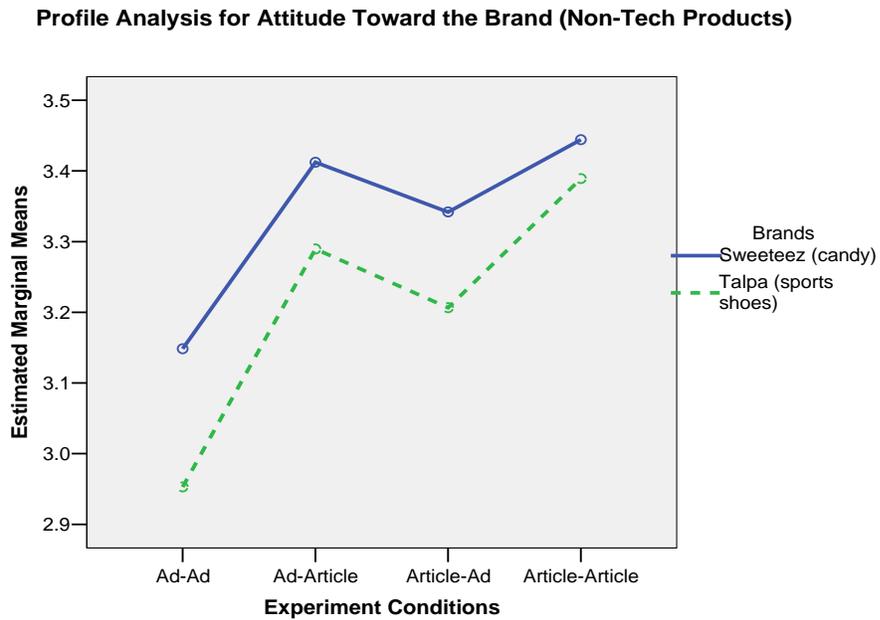


Figure 5-3. Group Means for Attitude Toward the Non-Technical Brand



## REFERENCES

- Alba, Joseph W. and J. Wesley Hutchinson (1987), "Dimensions of Consumer Expertise," *Journal of Consumer Research*, 13 (4), 411-454.
- Aylesworth, Andrew B., and Scott B. MacKenzie (1998), "Context Is Key: The Effect of Program-Induced Mood on Thoughts about the Ad," *Journal of Advertising*, 27 (2), 17-27.
- Balasubramanian, Siva K. (1991), *Beyond advertising and publicity: The domain of hybrid messages* (Rep. No. 91-131), Cambridge, MA: Marketing Science Institute.
- Batra, Rajeev and Michael Ray (1986), "Affective Responses Mediating the Acceptance of Advertising," *Journal of Consumer Research*, 13 (2), 234-249.
- Belch, George E., and Michael A. Belch (1998), *Advertising and Promotion: An Integrated Marketing Communications Perspective*, 4<sup>th</sup> ed., Boston, MA: Irwin-McGraw Hill.
- Bemmaor, Albert C., and Dominique Mouchoux (1991), "Measuring the Short-Term Effect of In-Store Promotion and Retail Advertising on Brand Sales: A Factorial Experiment," *Journal of Marketing Research*, 28 (2), 202-214.
- Bentler, Peter M. and Douglas G. Bonnett (1980), "Significance tests and goodness of fit in the analysis of covariance structures," *Psychological Bulletin*, 88, 588-606.
- Bradley, Samuel D. III, and Robert Meeds (2002), "Surface-structure transformations and advertising slogans: The case for moderate syntactic complexity," *Psychology and Marketing*, 19 (7-8), 595-619.
- Bradley, Samuel D. III, and Robert Meeds (2004), "The Effects of Sentence-Level Context, Prior Word Knowledge, and Need for Cognition on Information Processing of Technical Language in Print Ads," *Journal of Consumer Psychology*, 14 (3), 291-302.
- Briggs, Rex (1996), HotWired Advertising Effectiveness Study, [www.mbinteractive.com](http://www.mbinteractive.com)
- Briggs, Rex (1997), IAB Online Advertising Effectiveness Study, [www.mbinteractive.com](http://www.mbinteractive.com)
- Briggs, Rex, and Nigel Hollis (1997), "Advertising on the Web: Is There Response Before Clickthrough?" *Journal of Advertising Research*, 37 (2), 33-45.

- Buchholz, Laura M., and Robert E. Smith (1991), "The Role of Consumer Involvement in Determining Cognitive Response to Broadcast Advertising," *Journal of Advertising*, 20 (1), 4-17.
- Bucy, Eric P. (2003), "Media Credibility Reconsidered: Synergy Effects Between On-air and Online News," *Journalism and Mass Communications Quarterly*, 80 (2), 247-264.
- Burnkrant, Robert E., and Alan G. Sawyer (1983), "Effects of Involvement and Message Content on Information Processing Intensity," in *Information Processing Research in Advertising*, Richard Jackson Harris, ed., Hillsdale, NJ: Lawrence Erlbaum, 43-64.
- Cameron, Glen T. (1994), "Does Publicity Outperform Advertising: An Experimental Test of the Third-Party Endorsement," *Journal of Public Relations Research*, 6 (3), 185-207.
- Cameron, Glen T., and Kuen-Hee Ju-Pak (2000), "Information Pollution? Labeling and Format of Advertorials in National Newspapers," *Newspaper Research Journal*, 27 (1).
- Cameron, Glen T., Kuen-Hee Ju-Pak, and Bong Hyun Kim (1996), "Advertorials in Magazines: Current Use and Compliance with Industry Guidelines," *Journalism and Mass Communication Quarterly*, 73 (3).
- Caywood, Clarke L., Don E. Schultz, and Paul Wang (1991), *A Survey of Consumer Goods Manufacturers*, New York: American Association of Advertising Agencies.
- Center for Media Research (2004a), "Internet Ad Spending Outpaces Traditional Media Worldwide," *Electronic Newsletter*, November 16, 2004.
- Center for Media Research (2004b), "Internet Chosen for Information, Television for Entertainment," *Electronic Newsletter*, November 4, 2004.
- Chang, Yuhmiin, and Esther Thorson (2004), "Television and Web Advertising Synergies," *Journal of Advertising*, 33 (2), 75-84.
- Chatterjee Patrali, Donna L. Hoffman, and Thomas P. Novak (1998), "Modeling the Clickstream: Implications for Web-Based Advertising Efforts," Project 2000 Vanderbilt Working Paper, <http://elab.vanderbilt.edu/research/papers/pdf/manuscripts/Clickstream-pdf.pdf> .
- Chew, C., Slater, M. D., & Kelly, K. (1995, August). Advertising versus product publicity. The effects on credibility and purchase intent. Paper presented to Association for Education in Journalism and Mass Communication, Washington, DC.

- Cho, Chang-Hoan (1999), "How Advertising Works on the WWW: Modified Elaboration Likelihood Model." *Journal of Current Issues and Research in Advertising*, 21 (1), 33-50.
- Cho, Chang-Hoan, Jung-Gyo Lee, and Marye Tharp (2001), "Different forced-exposure levels to banner advertisements," *Journal of Advertising Research*, 41 (4), 45-56.
- Chun, Marvin M. (2000), "Contextual cuing of visual attention," *Trends in Cognitive Science*, 4 (5), 170-178.
- Chun, Marvin M., and E.A. Phelps (1999), "Memory deficits for implicit contextual information in amnesic subjects with hippocampal damage," *Nature Neuroscience*, 2, 844-847.
- Chun, Marvin M., and Yuhong Jiang (1998), "Contextual Cueing: Implicit Learning and Memory of Visual Context Guides Spatial Attention," *Cognitive Psychology*, 36, 28-71.
- Chun, Marvin M., and Yuhong Jiang (2003), "Implicit Long-term Spatial Contextual Memory," *Journal of Experimental Psychology Learning, Memory, and Cognition*, 29 (2), 224-234.
- Cofer, Charles N. (1967), "Conditions for the use of verbal associates," *Psychological Bulletin*, 68, 1-12.
- Confer, Marian G., and Donald McGlathery (1991), "The Research Study: The Advertising Impact of Magazines in Conjunction with Television," *Journal of Advertising Research*, 31 (1), RC2-RC5.
- Dahlen, Micael (2001), "Banner advertisements through a new lens," *Journal of Advertising Research*, 41 (4), 23-30.
- Dahlen, Micael, Y. Ekborn, and N. Morner (2000), "To Click or Not to Click: An Empirical Study of Response to Banner Ads for High and Low Involvement Products," *Consumption, Markets & Culture*, 4, 1-20.
- De Pelsmacker, Patrick, Maggie Geuens, and Pascal Anckaert (2002), "Media Context and Advertising Effectiveness: The Role of Context Appreciation and Context/Ad Similarity," *Journal of Advertising*, 31 (2), 49-61.
- Dreze, Xavier, and François Hussherr (2003), "Internet Advertising: Is Anybody Watching?," *Journal of Interactive Marketing*, 17 (4), 8-23.
- Duncan, Tom, and Clarke Caywood (1996), "The Concept, Process, and Evolution of Integrated Marketing Communication," in *Integrated Communication: Synergy of Persuasive Voices*, Esther Thorson and Jeri Moore, eds., Mahwah, NJ: Lawrence Erlbaum, 13-34.

- Edell, Julie A., and Kevin L. Keller (1989), "The Information Processing of Coordinated Media Campaigns," *Journal of Marketing Research*, 26 (May), 149-163.
- Edell, Julie A., and Kevin L. Keller (1999), "Analyzing Media Interactions: The Effects of Coordinated TV-Print Advertising Campaigns," Working Paper No. 99-120, Marketing Science Institute, Cambridge, MA.
- eMarketer (2004a), *The State of the Online Advertising Industry*, Report Issued November 8, 2004.
- eMarketer (2004b), *Retail Industry: Online Advertising Spending and Trends*, Report Issued December 4, 2004.
- Fishbein, Martin, and Icek Ajzen (1975), *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
- Frensch, Peter A. (1998), "One concept, multiple meanings," in *Handbook of implicit learning*, M. A. Stadler and P. A. Frensch, eds., Thousand Oaks, CA: Sage, 3-47.
- Friestad, Marian, and Esther Thorson (1993), "Remembering Ads: The Effects of Encoding Strategies, Retrieval Cues and Emotional Response," *Journal of Consumer Psychology*, 2, 1-23.
- Gallagher, Katherine, Dale K. Foster, and Jeffrey Parsons (2001), "The medium is not the message: Advertising effectiveness and content evaluation in print and on the Web," *Journal of Advertising Research*, 41 (4), 57-70.
- Gardner, Meryl P. (1985), "Does Attitude Toward the Ad Affect Brand Attitude Under a Brand Evaluation Set?" *Journal of Marketing Research*, 22 (2), 209-15.
- Gatignon, Hubert, and Dominique M. Hanssens (1987), "Modeline Marketing Interactions with Application to Salesforce Effectiveness," *Journal of Marketing Research*, 24 (3), 247-257.
- Goldberg, Marvin E., and Gerald J. Gorn (1987), "Happy and Sad TV Programs: How They Affect Reactions to Commercials," *Journal of Consumer Research*, 14 (December), 387-403.
- Gopalakrishna, Srinath, and Rabikar Chatterjee (1992), "A Communications Response Model for a Mature Industrial Product: Application and Implications," *Journal of Marketing Research*, 29 (2), 189-200.
- Hallahan, Kirk (1996), "Product publicity: An orphan of marketing research," in *Integrated communications: The search of synergy in communication voices*, E. Thorson and J. Moore eds., Mahwah, NJ: Lawrence Erlbaum Associates, Inc., 305-330.

- Hallahan, Kirk (1999), "Content Class as a Contextual Cue in the Cognitive Processing of Publicity Versus Advertising," *Journal of Public Relation Research*, 11 (4), 293-320.
- Heath, Timothy B., and Gary J. Gaeth, (1994), "Theory and method in the study of ad and brand attitudes: Toward a systematic model," in *Attention, attitude and affect in response to advertising*, E. M. Clark, T. C. Brock, and D.W. Stewart eds., Hillsdale, NJ: Lawrence Erlbaum Associates, Inc., 25–148.
- Houston, Michael J., and Michael L. Rothschild (1978), "Conceptual and Methodological Perspectives on Involvement," In *Research Frontiers in Marketing: Dialogues and Directions*, Subhash C. Jam, ed. Chicago, IL: American Marketing Association.
- Jacoby, Larry L., and Mark Dallas (1981), "On the relationship between autobiographical memory and perceptual learning," *Journal of Experimental Psychology: General*, 110, 306-340.
- Jagpal, Harsharanjeet (1981), "Measuring Joint Advertising Effects in Multiproduct Firms," *Journal of Advertising Research*, 21 (1), 65-69.
- Jin, Hyun Seung (2003), "Compounding Consumer Interest: Effects of Advertising Campaign Publicity on the Ability to Recall Subsequent Advertisements," *Journal of Advertising*, 32 (4), 29-41.
- Ju-Pak, Kuen-Hee, Bong Hyun Kim and Glen T. Cameron (1995), "Trends in the Use and Abuse of Advertorials in Magazines," *Mass Communication Review*, 22 (3-4), 112-128.
- Keppel, Geoffrey (1991), *Design and analysis. A researcher's handbook*, Upper Saddle River, NJ: Prentice Hall.
- Kim, Soyong, and Thorndike Pysarchik (2000), "Predicting purchase intentions for uni-national and bi-national products," *International Journal of Retail & Distribution Management*, 28 (6), 280-291
- Kitchen, Philip J., Joanne Brignell, Tao Li, and Graham Spickett Jones (2004), "The emergence of IMC: a theoretical perspective," *Journal of Advertising Research*, 44 (1), 19-30.
- Krugman, Herbert E. "The Impact of Television Advertising: Learning without Involvement," *Public Opinion Quarterly*, 29 (3), 349-56.
- Laczniak, Gene R., and Patrick E. Murphy (1993), *Ethical Marketing Decisions*, Boston MA: Allyn and Bacon.
- Lee, Angela (2002), "Effects of implicit memory on memory-based versus stimulus-based brand choice," *Journal of Marketing Research*, 39 (4), 440-454.

- Lemon, Katherine N., and Stephen M. Nowlis (2002), "Developing Synergies Between Promotions and Brands in Different Price-Quality Tiers," *Journal of Marketing Research*, 39 (2), 171-185.
- Levitt, Theodore (1969). *The marketing mode*. New York: McGraw-Hill.
- Linning, Richard (2004), "Abuse and self-abuse: PR and its USP, plausible deniability," *Journal of Communication Management*, 9 (1), 65-73.
- Loehlin, John C. (1998), *Latent variable models. An introduction to factor, path, and structural analysis*, 3<sup>rd</sup> edition. Mahwah, NJ: Lawrence Erlbaum.
- Lord, Kenneth R., and Robert E. Burnkrant (1993), "Attention versus Distraction: The Interactive Effect of Program Involvement and Attentional Devices on Commercial Processing," *Journal of Advertising*, 22 (1), 47-60.
- Lutz, Richard J. (1985), "Affective and cognitive antecedents of attitude toward the ad: A conceptual framework," in *Psychological processes and advertising effects: Theory, research and application*, L. Alwitt and A.A. Mitchell, eds., Hillsdale, NJ: Lawrence Erlbaum Associates, Inc., 45-63.
- Lutz, Richard J. (1996), "Some general observations about research on integrated marketing communications," in *Integrated Communication: Synergy of Persuasive Voices*, Esther Thorson and Jeri Moore, eds., Mahwah, NJ: Lawrence Erlbaum, 355-367.
- MacInnis, Deborah J. and Bernard J. Jaworski (1989), "Information processing from advertisements: Toward an Integrative Framework," *Journal of Marketing*, 53 (4), 1-23.
- MacInnis, Deborah J., C. Moorman, and Bernard J. Jaworski (1991), "Enhancing and measuring consumers' motivation, opportunity and ability to process brand information from ads," *Journal of Marketing*, 55, 32-53.
- Mackenzie, Scott B., and Richard J. Lutz (1989), "An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context," *Journal of Marketing*, 53, 48-65.
- Mackenzie, Scott B., Richard J. Lutz, and George E. Belch, (1986), "The role of attitude toward the ad as mediator of advertising effectiveness: A test of competing explanations," *Journal of Marketing Research*, 23, 130-143.
- Mantrala, Murali K. (2002), "Allocating Marketing Resources," in *Handbook of Marketing*, Barton A. Weitz and Robin Wesley, eds., Thousand Oaks, CA: Sage Publications.

- McGuire, William J. (1973), "Persuasion, resistance and attitude change," in *Handbook of communication*, I. Poole, F. W. Frey, W. Schramm, N. Maccobby, and E. B. Parker, eds., Chicago: Rand McNally College, 216–253.
- McLeod, J. M., Pan, Z., & Rucinski, D. M. (1988). Processing news and advertising: Same strategies and same effects? Paper presented to Association for Education in Journalism and Mass Communication, Portland, OR.
- Mitchell, Andrew A., and Jerry C. Olson (1981), "Are product attribute beliefs the only mediator of advertising effects on brand attitude?," *Journal of Marketing Research*, 18, 318–332.
- Moorman, Marjolein, Peter C. Neijens, and Edith G. Smith (2002), "The Effects of Magazine-Induced Psychological Responses and Thematic Congruence on Memory and Attitude Toward the Ad in a Real-Life Setting," *Journal of Advertising*, 31 (4), 27-40.
- Moriarty, Sandra E. (1996) "The Circle of Synergy: Theoretical Perspectives and an Evolving IMC research agenda," in *Integrated Communication: Synergy of Persuasive Voices*, Esther Thorson and Jeri Moore, eds., Mahwah, NJ: Lawrence Erlbaum, 333-354.
- Murry Jr., John P., John L. Lastovicka, and Surendra N. Singh (1992), "Feeling and Liking Responses to Television Programs: An Examination of Two Explanations for Media Context Effects," *Journal of Consumer Research*, 18 (4), 441-451.
- Naik, Prasad A., and Kalyan Raman (2003), "Understanding the impact of synergy in multimedia communications," *Journal of Marketing Research*, 40 (4), 375-388.
- Norris, Christopher, and Andrew M. Colman (1992), "Context Effects on Recall and Recognition of Magazine Advertisements," *Journal of Advertising*, 21 (3), 37-46.
- Online Publishers Association and Frank N. Magid Associates Inc. (2004), *Generational Media Study*  
[http://www.online-publishers.org/pdf/opa\\_generational\\_study\\_sep04.pdf](http://www.online-publishers.org/pdf/opa_generational_study_sep04.pdf)
- Patricia A. Stout, Gary B. Wilcox, and Lorrie Greer (1989), "Trends in magazine advertorial use," *Journalism Quarterly*, (4), 960-964
- Pechmann, Cornelia and David W. Stewart (1988), "Advertising repetition: A critical review of wearin and wearout", in *Current Issues and Research in Advertising*, J. H. Leigh and C. R. Martin, Jr., eds., Michigan Business School, University of Michigan.
- Petty, Richard E., and John T. Cacioppo (1996), *Attitude and Persuasion: Classic and Contemporary Approaches*, Boulder, CO: Westview Press.
- Raman, Niranjana V., and John D. Leckenby (1998), "Factors affecting consumers' Webad visits," *European Journal of Marketing*, 32 (7-8), 737-48.

- Ray, Michael L., A.G. Sawyer, M.L. Rothschild, R.M. Heeler, E.C. Strong, and J.B. Reed (1973), "Marketing Communications and the Hierarchy-of-Effects," In *New Models for Mass Communications Research*, P. Clarke, ed. Beverly Hills, CA: Sage Publications.
- Reeves, Byron, Steven H. Chaffee, and Albert R. Tims (1982), "Social cognition and mass communication research," in *Social cognition and communication*, M. E. Roloff and C. R. Berger eds., Beverly Hills, CA: Sage, 287–326.
- Rossiter, John R. and Larry Percy (1997), *Advertising Communications and Promotion Management*, 2nd Edition. McGraw-Hill: New York.
- Salmon, Charles T. (1986), "Perspectives on Involvement in Consumer and Communication Research," in *Progress in Communication Sciences*, B. Dervin, and M. J. Voight, eds., Norwood, NJ: Ablex.
- Salmon, Charles T., Lenn N. Reid, J. Pokrywcznski, and R. W. Willett (1985), "The effectiveness of advocacy advertising relative to news coverage," *Communication Research*, 12, 546–567.
- Sarah L. Coates, Laurie T. Butler, and Dianne C. Berry (2004), "Implicit memory: a prime example for brand consideration and choice," *Applied Cognitive Psychology*, 18 (9), 1195-1211.
- Schacter, Daniel L. (1987), "Implicit memory: History and current status," *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 13, 501–518.
- Schacter, Daniel L., and Endel Tulving (1994), "What are the Memory Systems of 1994?" in *Memory Systems 1994*, Schacter D.L., and Endel Tulving, eds., Cambridge, MA: MIT Press.
- Schudson, Michael (1984). *Advertising: The uneasy persuasion*. New York: Basic Books.
- Schultz, Don E., and Philip J. Kitchen (1997). "Integrated Marketing Communications in U.S. Advertising Agencies: An Exploratory Study," *Journal of Advertising Research*, 37 (5), 7-18.
- Schultz, Don E., Stanley I. Tannenbaum, and Robert F. Lauterborn (1993), *Integrated Marketing Communications*, Lincolnwood, IL: NTC Publishing.
- Schumann, David, and Esther Thorson (1990), "The Influence of Viewing Context on Commercial Effectiveness: A Selection-Processing Model," *Current Issues and Research in Advertising*, 12 (1), 1-24.
- Shamdasani, Prem N., Andrea J.S. Stalalad, and Juliana Tan (2001), "Location, Location, Location: Insights for Advertising Placement on the Web," *Journal of Advertising Research*, 4 (4), 7-21.

- Sharma, Andrew (2000), "Recall of Television Commercials as a Function of Viewing Context: The Impact of Program-Commercial Congruity on Commercial Messages - Statistical Data Included," *Journal of General Psychology*, 127 (4), 383-396.
- Sheppard, Blair H., Hartwick, Jon and Warshaw, Paul R. (1988), "The Theory of Reasoned Action: A Meta-Analysis of Past Research with Recommendations for Modifications and Future Research", *Journal of Consumer Research*, 15, 325-343.
- Sissors, Jack Z., and Lincoln Bumba (1995), *Advertising Media Planning* 5<sup>th</sup> ed., Lincolnwood, IL: NTC Publishing.
- Smith, Robert E., and Shelby D. Hunt (1978), "Attributional processes and effects in promotional situations," *Journal of Consumer Research*, 5, 149–158.
- Soldow, Gary F., and Victor Principe (1981), "Response to Commercials as a Function of Program Context," *Journal of Advertising Research*, 21 (2), 59-65.
- Squire, Larry R., Barbara Knowlton, and Gail Musen (1993), "The structure and organization of memory," *Annual Review of Psychology*, 44, 453–495.
- Stadler, Michael A. and Henry L. Roediger, III. (1998), "The question of awareness in research on implicit learning," in *Handbook of implicit learning*, M. A. Stadler, and P. A. Frensch, eds., Thousand Oaks, CA: Sage.
- Stafford, Thomas F, Marla Royne Stafford and Lawrence L. Schkade (2004), "Assessing Uses and Gratifications for the Internet," *Decision Sciences*, 35 (4), 259-285.
- Stewart, David W., and Michael A. Kamins (2002), "Marketing Communications," in *Handbook of Marketing*, Barton A. Weitz, and Robin Wensley, eds., Thousand Oaks, CA: Sage Publications.
- Straughan, D., Bleske, G. L., & Zhao, X. (1994, August). Modeling format and source effects of an advocacy message. Paper presented to Public Relations Division, Association for Education in Journalism and Mass Communication, Atlanta, GA.
- Tabachnik, Barbara G., and Linda S. Fidell (2001), *Using Multivariate Statistics*, Allyn and Bacon: Needham Heights, MA.
- Tellis, Gerard J. (1988), "The Price Sensitivity of Competitive Demand: A Meta-Analysis of Sales Response Models," *Journal of Marketing Research*, 15 (3), 331-341.
- Tellis, Gerard J. (1997), "Effective Frequency: One Exposure or Three Factors?" *Journal of Advertising Research*, 37 (4), 75-80.

- Thorson, Esther, and Jeri Moore (1996), "Introduction," in *Integrated Communication: Synergy of Persuasive Voices*, Esther Thorson and Jeri Moore, eds., Mahwah, NJ: Lawrence Erlbaum, 1-10.
- Tulving, Endel (1972), "Episodic and Semantic Memory," in *Organization of Memory*, Tulving E., and Donaldson W., eds., New York: Academic Press.
- Tulving, Endel (2001), "Episodic Memory and Common Sense: How Far Apart," *Philosophical Transactions of The Royal Society London*, 356, 1505-1515.
- Tulving, Endel, and Daniel L. Schacter, (1990), "Priming and Human Memory Systems," *Science*, 247, 301-306.
- Unnava, R. Hanumantha, and Robert E. Burnkrant (1991), "Effects of repeating varied ad executions on brand name memory," *Journal Of Marketing Research*, 28(4), 406-417.
- Wells, William, John Burnett, and Sandra Moriarty (2003), *Advertising Principles and Practice*, 6<sup>th</sup> ed., Upper Saddle River, NJ: Prentice Hall.
- Wyer, Robert S. and Thomas K. Srull (1981), "Category accessibility: Some theoretical and empirical issues concerning the processing of social stimulus information," In E.T. Higgins, C.P. Herman, and M.P. Zanna (eds), *Social Cognition: The Ontario Symposium*, Vol. I. Hillsdale, N.J.: Erlbaum, 161-198.
- Wyer, Robert S. Jr. (2002), "Language and advertising effectiveness: Mediating influences of comprehension and cognitive elaboration," *Psychology and Marketing*, 19 (7-8), 683-712.
- Yi, Youjae (1990a), "Cognitive and affective priming effects of the context for print advertisements," *Journal of Advertising*, 19 (2), 40-48.
- Yi, Youjae (1990b), "The Effects of Contextual Priming in Print Advertisements," *Journal of Consumer Research*, 17 (2), 215-222.
- Yoo, Chan Yun (2005), "Memory Based Measures For Web Advertising Effectiveness," Paper presented at the 2005 Conference of the American Academy of Advertising, Houston, TX.
- Zeelenberg, Rene, Diane Pecher, and Jeroen G.W. Raaijmakers (2003), "Associative repetition priming: A Selective Review and Theoretical Implications," in *Rethinking Implicit Memory*, J.S. Bowers and C.J. Marsolek, eds., Oxford: Oxford University Press.

## **VITA**

Anca Cristina Micu is originally from Romania in Eastern Europe. She received her B.S. in Finance from the Romanian Academy of Economic Studies (1998). Micu then attended the College of Business at the University of Missouri – Columbia and received her Masters in Business Administration (2001). Micu worked in marketing communications for BBDO Worldwide and The Estée Lauder Companies. Once her PhD completed, she will start as an assistant professor of marketing at Sacred Heart University, Fairfield, Connecticut.

Micu is married to one of her MBA colleagues, who happened to be from Romania as well.