

Relationship between the Zeigarnik Effect and Consumer Attention in Advertisement

Abeer Hammadi* and Faisal K. Qureishi**

Advertisers are constantly looking for new ways and tactics to get consumer attention making sure that their brand is one that the consumer remembers when he/she goes shopping. One of the techniques used in advertising is the Zeigarnik effect coined after a research made by a Russian psychologist Dr. Bluma Zeigarnik in 1927, which states that the human brain remembers interrupted tasks better. The rationale of this study is to see the association between Zeigarnik effect and consumer attention in ads. An inventory of ads was shown to 204 respondents to check if the relationship exists. The respondents included both males and females of different age groups and education levels. Data was collected on the basis of restricted non-probability sampling. To check that if there was a relationship between the Zeigarnik effect and consumer attention Paired Sample T-test was used. Study showed positive results which was then tested against different demographics. Implications for future research are discussed.

Keywords: Zeigarnik Effect, consumer attention, advertisements, marketing

JEL Codes: M30, M37 and M39

1. Introduction

Advertisers are constantly on an urge to learn how the black box works, how it responds to the given stimuli and how does that response effects the decision making process. The human mind will not build a memory unless something is noteworthy something that would not only grab the attention but also enables to recall the same when the need arises. Advertisers stress to create that something significant that would grab the customer's attention and create a memory of the message send and would later result in recall. Plessis (2005) elucidates that an advertisements job is to be remembered so that it is able to influence the customers purchase decision.

Advertisers constantly try new ideas and tactics in order to sell their product and make it stand out from the rest. There is a long list of marketing gimmicks that can be used to gain a competitive edge. "Zeigarnik Effect" is one of them coined after a research made by a Russian psychologist Dr. Bluma Zeigarnik.

*Abeer Hammadi, Iqra University, Karachi, Pakistan, Email: abeerhammadi@hotmail.com, Cell: 921- 345-2104285

**Faisal Kadeer Quresih, Director, Asian Institute of Fashion Designing, Email: faisalk@aifd.edu.pk; faisalk@iqra.edu.pk, Cell: 921-322-2160526 & 921-315-2120201

Hammadi & Quresih

The research aims to see the relationship between the Zeigarnik Effect and the consumer attention in advertisements. While most other theories like the Von Restorff Effect, the theory of incremental effects, and the psychodynamic perspective - have been discussed extensively by earlier researchers; relatively little attention has apparently been paid to the Zeigarnik Effect in advertising.

The paper is structured as follows. Section 1 is the introduction. Section 2 presents a literature review of different marketing tactics used in advertisements and how a consumer responds to a certain stimuli resulting in recall and recognition. Section 3 presents the conceptual framework of this study, methods used for data collection and the statistical tests involved. The analysis of the results is presented in section 4. Section 5 presents the limitation, managerial implication, discussions, some conclusions along with what we would like to include in our future research.

Zeigarnik Effect

Zeigarnik Effect” is coined after a research made by a Russian psychologist Dr. Bluma Zeigarnik. Zeigarnik Effect explains that people tend to remember unfinished tasks better than finished tasks. When a job is left incomplete it creates a sort of tension and irritation which begs for closure, thus, making it hard for human beings to forget. Zeigarnik effect triggers suspense; a feeling of doubt and nervousness about the result of certain events which keeps the audience glued to a certain situation begging for closure, thus, making it hard for human beings to forget.

Consumer Retention

Consumer Retention refers to consumer’s memory; when hit with a series of stimuli what are the things he’s able to retain. Consumers are bombarded with different commercials everyday of their lives; advertisers strive to create ads to grab consumer attention. Create ads that a consumer is able to retain and recall the same when he goes to make purchases.

Advertisements

Advertising is a form of a communication technique used to encourage or persuade the audience which can fall in the category of viewers, readers or listeners to carry on with the same good or service or take some new action. Usually, the preferred outcome is to drive consumers’ actions with relevance to the commercial offering. Advertising is done through a wide array of medium; print ads, television commercials, advertisements on the radio, outdoor advertising etc.

2. Literature Review

If advertising is to be effective, its impact should continue over time. It is not adequate that an advertisement have an effect on a particular moment; rather, it should continue to exert its effect throughout the decision-making process.

Hammadi & Quresih

Advertisers strive to create ads which would grasp maximum consumer attention. Plessis (2005) explains that an advertisement's job is to be remembered so that it is able to influence the customer's purchase decision. Consumers are bombarded with different commercials everyday of their lives; the real challenge is not only to produce an ad that would get their attention but to create an ad that the consumer is able to retain and recall. The way the human mind receives, processes and recalls information is necessary to know if advertising is to be efficiently developed and created to extract the highest possible effect. There are numerous definitions of "advertising impact"; (Heimbach & Jacoby 1972) pinpointed that it falls under three groups:

- Memorial effect (for example, consciousness, recognition, recall, awareness about the product)
- Attitudinal effect (for example, attitude, liking, belief, preference, passion)
- Behavioral effect (for example, investigation, purchase).

The text on advertising has included studies from both marketers and clients' viewpoints. For instance, from an advertiser's point of view, each advertisement also has a brand structuring purpose as it has a number of traits (e.g., a sign/logo or product name) that add to brand awareness. And from a buyer's point of view, a commercial may not stimulate further action if it is not perceived to be related to their existing wants, but exclusive traits of the commercial may result in building up the brand.

According to (Wang, Zhang, Choi, & D'Eredita 2002) brand awareness may rise without necessarily being related to a positive brand attitude. In contrast to that, a consumer may need to find ways to fulfill their needs. In that case ads help in directing the consumers. That is, the ad acts as a stimulus and directs human behavior.

Mackenzie (1986) demonstrated certain attributes and elements in advertisements which would draw consumer attention. Two experiments were designed to test the hypothesis; the first experiment maneuvered the amount of attention given to a certain attribute in an advertisement and the results indicated the importance of that particular attribute. The second one focused on the relevance of the ad content and the number of times an ad is repeated. The results indicated that attention had a mediating effect on the relevance and the correctness of the ad on attribute importance.

Creative complexity and artistic appearance continue to be a standard in contemporary print advertising, advertisers use different tactics to take hold of consumer attention. Creativity is questionably a very important constituent of advertising. A study by (Till & Baack 2005) highlighted the effectiveness of creativity on advertisements together with recall and persuasion; their study tested the hypothesis of creative advertisements and their effects on aided and unaided recall. Aided recall had lower mean as they were less cognitively challenging than unaided recall. Therefore impact of creative advertisements was reduced with aided recalls. As it had an element of novelty and suspense which the audience was unable to detach from keeping them glued to the situation and resulting in recall and recognition. Hence; the results of their study suggested that creative advertisements greatly facilitate unaided recalls. Advertisers make use of images,

Hammadi & Quresih

words, fonts, colors, slogan etc to get hold of consumers' attention. Print ads consists of three main elements the brand the text and the picture advertisers play around with them to create something new and unique to stand out from the rest so that the consumer would recognize the brand and retain the same. Research has shown that (Pieters & Wedel 2006) the brand, graphic, and content elements of print advertisements have considerable effects on attention capture and transfer that are on par with common ideas in advertising practice and literature.

In accordance with this (Pieters, Warlop, & Wedel 2002) focuses on advertisement originality and familiarity ads which lacks originality does not get much of consumer attention; in support to their hypothesis original ads drew more consumer attention and thus resulting in brand memory. Advertisements which are novel and unique grabs substantial amount of consumer attention than normal ads. According to (Nye, Roth, & Shimp2008) brands which are already familiar to the consumers are viewed less interesting than ads for new and fresh brands. Information inequalities would lead to different processing objectives for customers exposed to ads funded by well-known brands compared to new brands. It was further also mentioned by (Nye, Roth, & Shimp2008) in their research paper that those ads for unknown brands; which would appear more attractive and interesting, are likely to bring out broader processing. Advertisers and marketers make use of different tactics to clutch consumer attention.

When the consumer sees something eye catching and interesting it automatically gets viewer's attention (Bagozzi & Silk 1983) has shown in their research that recall and recognition is only a small section of memory, which is multidimensional, but when concentration in the commercial was held continuous, nevertheless, recall and recognition did quantify memory as a uni-dimensional construct. Stating the fact; that an ad which contains an element of interest gets consumer's attention and also results in brand recall and recognition.

Astounding stimuli draws consumer's attention, promotes further information processing, and are effortlessly retained in memory. As ads must be remembered to affect a behavior, it trails that ads should contain messages that would have an element of suspense in it to grasp the consumers' attention and in future would result in brand recall and purchase.

Research by (Leigh, Zinkhan, & Swaminathan 2006) focused on the cognitive aspects of print ads and their relationship with recall and recognition. They defined 'recall' as a reproduction of an item experienced earlier , where as 'recognition' is the awareness that the certain stimuli has been witnessed earlier. Their study highlighted different cognitive aspects of print ads which are as follows:

- **Meaningfulness:** A cognitive aspect of an ad which reflects that an ad is considered meaningful and conveys a clear and convincing message.
- **Length of Exposure:** This particular aspect reflects the time duration a consumer gives to an ad longer exposure indicates better recall.

Hammadi & Quresih

- **Quality of Copy Execution:** This aspect mirrors the extent to which the ad is delivered; fresh idea, entertaining, elements of empathy etc. if an ad is properly executed it gets greater attention to those ads which are not.
- **Ability to Predict Ad Content and Structure:** Another aspect which focuses on the predictability of the ad content, instead of using cliché copyrights which are easily predictable advertisers should make use of novel and new elements which would hold the attention of the consumer throughout the ad. For example, ads containing the Zeigarnik effect.

All these aspects are important for an advertiser to know before developing an ad. Actions or facts that the consumer pays attention reluctantly are termed as interruptions. Two main effects of interruptions have been highlighted by (Xia & Sudharshan 2002) (a) a raise in physiological activity, such as stimulation, and (b) a re-evaluation of the current object, which may lead to its revision or modification. Their study explored how consumers respond to interruptions and the influence of interruptions on decision making and satisfaction. Results of their study showed that when interpretations are used correctly they can be an effective tool for marketers to draw consumers' attention. On the other hand, the characteristics of interruptions play an important role, like differences of consumers, their goals and objectives.

Similar study by Liu (2008) she stated that human brains information processing changes after an interruption. It is projected that an interruption can direct to changes in preferences by altering the manner of information processing in decision making; Conventionally, consumer ambiguity in promotional claims has been regarded as a negative response factor. A research carried out by (Smith & Swinyard 1988) has shown that uncertainty is created due to many advertising claims. However, this is not all bad as this uncertainty tied up with product knowledge and interest can produce product related curiosity.

In their study, consumers were exposed to advertising generated curiosity statements. Inducing customer inquisitiveness can have two positive effects. First, it can alter the customer from an inert information processor to an energetic seeker of product information. Second, for inexpensive good categories, inquisitiveness can easily be reduced by test purchase; curiosity can successfully produce purchase decisions, generating immediate sales for the advertisers in the marketplace.

'Curiosity' defined as an emotion that represents an urge to know new things, curiosity is a key force behind new researches and developments in various sciences. Being curious is an in built element in human nature it is common at all ages from infancy to adulthood and it can also be observed in other animal species as well.

According to (Menon & Soman 2002) curiosity is been referred to as a 'knowledge gap'; the difference between two quantities: what a person knows and what he or she would like to know. A 'knowledge gap' is interpreted as what a person knows and what he or she wants to know. Curiosity occurs when people are aware of the knowledge gap in a certain field or when they come across an uncertain or ambiguous stimulus. A situation

Hammadi & Quresih

like this magnifies consumers' knowledge paucity; awareness of this lack creates anxiety and an uneasy feeling which gives rise to craving for that certain knowledge so the spotted gap can be filled.

Advertisers create uncertainty/ curiosity to attract consumers to buy their products. Zeigarnik Effect (1927) is one of the several marketing tactics that is used to grab consumer attention and is also the basis of this research paper; coined after a research made by a Russian psychologist Dr. Bluma Zeigarnik now named after her. Zeigarnik effect states that people tend to memorize incomplete tasks better the complete tasks. The question "What will happen next?" keeps them glued to the situation creating a sort of tension which begs for closure, thus, making it hard for human beings to forget. Listening or seeing an incomplete or interrupted stimulus develops to see the rest of it. The resulting anxiety leads to improvement in memory for that part of the message which has already been seen.

According to (Schiffman & Greist-Bousquet 1992), an incomplete task, one in which the goal has not yet been achieved, does not present closure. With reference to this belief, the lack of knowledge about the conclusion promotes thinking and reasoning together with certain traces from the memory results in retention.

Their experiment took in to consideration the time duration and its effects on consumer retention. The quantity of information stored affects time perception; the experiment was conducted to investigate the role of task interruption on retention and recall it was more like a tailored version of the Zeigarnik effect on perceived duration. The results of the experiment supported the assumption that the disruption of a task has an outgoing effect on its perceived duration. More particularly, these results revealed that interruption between a task stretches the perceived duration of the chunk of task which is completed, as compared to the similar task when it is offered alone and completed.

An empirical study done by (Madrigal & Bee 2005) have highlighted that people have a positive attitude towards suspenseful commercials than non suspenseful commercials. The suspense element in ads gets the attention of the audience and later results in brand recall.

A reference is being made to the state of current knowledge Hewett (1975) discusses that human curiosity has been acknowledged as one of the vital basic research areas of the future for buyer behavior. The study defines that curiosity creates a moment of discomfort due to incomplete information which leads to exploration. The results showed that the 'curiosity factor' was significant amongst the respondents.

(Heimbach & Jacoby 1972) have shown in their research that people with high need for achievement will manifest strong Zeigarnik effect than those with low need for achievement.

3. The Methodology and Model

3.1 Method of Data Collection

An inventory of 20 ads were shown to 204 respondents, the collection consisted of 10 ads which had the Zeigarnik effect and 10 filler ads. The slide show was timed for about 3- 4 seconds per ad after the ads were shown to the respondents they were requested to fill in a questionnaire pointing out the number of ads they remembered from the ads shown.

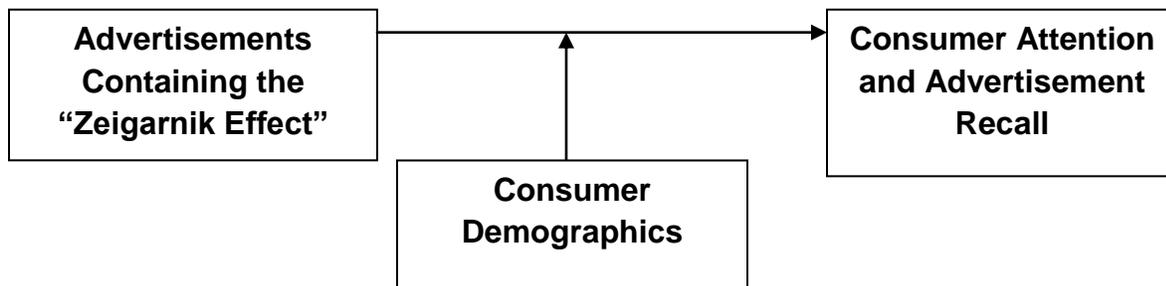
3.2 Sampling Technique

The Sampling Technique used was Restricted non-probability Sampling; the data was mainly collected from universities and high schools to get responses from different age groups. As this is a convenience based sampling method, very popular in academic research, the specific sample size rests arbitrarily with the researcher.

3.3 Instrument of Data Collection

The was collected with the aid of a questionnaire and a slide show which consisted of 20 ads out of which 10 ads had the Zeigarnik effect and remaining 10 were normal ads.

Figure 1: Theoretical Framework.



3.4 Sampling Framework

The sampling framework has been developed based on the empirical observation and cognition of the researchers.

3.5 Statistical Technique

The statistical techniques varied for all the three hypotheses. For the first hypothesis **Paired Sample T-test** was used to check that if there was a relationship between the Zeigarnik effect and consumer attention. Means of both Zeigarnik and normal ads were compared to see if there is difference between the two variables.

Hammadi & Quresih

For the next hypothesis the **Independent Samples T-test** was used to evaluate the mean scores of the two groups on a given variable (Male and Female).

And for the third hypothesis **Linear Regression** was applied since the variables (age) were scale.

4. Results

4.1 Findings and Interpretation of the Results

Results showed that people tend to remember incomplete ads better than complete one in this case ads containing the Zeigarnik effect.

H1: There is a significant relationship between ads containing the Zeigarnik effect and Consumer attention.

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Zeigarnik Ads	3.3137	204	1.87270	.13112
Normal Ads	2.9755	204	1.58017	.11063

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Zeigarnik Ads – Normal Ads	.33824	2.01186	.14086	.06050	.61597	2.401	203	.017

After Applying the Paired sample T – test the results indicated that the mean of ads containing the Zeigarnik effect was higher than that of normal ads. And the p-value of **0.017** being lower than significance level of **0.05** indicates that the null hypothesis is accepted and yes; there is a relationship between ads containing the Zeigarnik effect and Consumer attention.

H2: The relationship between Zeigarnik effect and consumer attention is independent of gender.

Hammadi & Quresih

Group Statistics

Gender	N	Mean	Std. Deviation	Std. Error Mean
Zeigarnik_Ads Female	63	3.8413	1.95272	.24602
Male	141	3.0780	1.79313	.15101

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Zeigarnik_Ads	Equal variances assumed	.116	.733	2.732	202	.007	.76326	.27938	.21238	1.31413
	Equal variances not assumed			2.644	110.568	.009	.76326	.28867	.19122	1.33529

To test the second hypothesis Independent sample t-test was applied; the results indicated that out of the sample of 204, there were 141 male and 63 females.

The results further showed that the mean of females were higher than males, signifying that females have higher retention and recall capacity than that of males. And the p-value of **0.007** being lower than significance level of **0.05** indicates that the hypothesis is **rejected**, and relationship between Zeigarnik effect and consumer attention is **dependent** of gender.

Hammadi & Quresih

H3: The relationship between Zeigarnik effect and consumer attention is independent of age.

Results have indicated that the variable age has no impact on consumer attention.

Variable Entered / Removed^b

Model	Variable Entered	Variable Removed	Method
1	Age ^a	-	Enter

a. All requested variables entered.
 b. Dependent variable: Zeigarnik_Ads

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.093a	.009	.004	1.86927

a. Predictors (Constant), Age.

The model summary table reports the strength of the relationship between the model and the dependent variable, the value of R is **0.093** indicates that there is a very weak relationship between the Zeigarnik effect and the respondents' age.

ANOVA
Zeigarnik_Ads

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	115.371	18	6.410	1.988	.012
Within Groups	596.550	185	3.225		
Total	711.922	203			

The p-value of **0.188** being greater than significance level of **0.05** indicating that the hypothesis is accepted, the relationship between Zeigarnik effect and consumer attention is **independent** of age. Age has no impact on consumer attention.

Hammadi & Quresih

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t.	Sig
		B	Std. Error	Beta		
1	(Constant)	4.315	.769		5.611	.000
	Age	-.043	.032	-.093	-1.321	.188

a. Dependent variable: Zeigarnik_Ads

Hypotheses Assessment Summary

Hypotheses	Significant Value	Empirical Conclusion
There is a significant relationship between ads containing the Zeigarnik effect and Consumer attention	0.017	The hypothesis is accepted since the p-value is lower than the significance level of 0.05.
The relationship between Zeigarnik effect and consumer attention is <u>independent</u> of gender.	0.007	The hypothesis is rejected since the p-value is lower than the significance level of 0.05.
The relationship between Zeigarnik effect and consumer attention is independent of age.	0.188	The hypothesis is accepted since the p-value is greater than the significance level of 0.05.

5. Conclusion

The aim of advertisers is not to create an ad that would only attract the consumer but influence the customers purchase decision. Consumers are bombarded with different commercials everyday of their lives; the real challenge is not only to produce an ad that would get their attention but to create an ad that the consumer is able retain and recall.

Out of the numerous tactics used by advertisers we selected the Zeigarnik effect for our study. And the results indicated a strong relationship between the Zeigarnik effect and consumer attention.

5.1 Discussions

The results indicated that there is a positive correlation among the ads containing the Zeigarnik effect and Consumer attention. Consumers tend to pay attention to things that appear novel, in this case ads with the Zeigarnik effect. Zeigarnik effect states that people tend to remember incomplete tasks better than completed tasks. The aspect of curiosity keeps the viewer glued to the situation. From the inventory of ads shown to the respondents, they were able to remember ads with the Zeigarnik effect better than normal ads. Furthermore, our second hypothesis revealed that females have a better

Hammadi & Quresih

memory span; they have higher retention and recall capacity over males. Hence, signifying the fact that gender has an impact on the Zeigarnik effect and consumer attention.

The third hypothesis of our study tested the impact of age on Zeigarnik effect and consumer attention. And the results signified that Age did not have impact on consumer attention.

5.2 Implications

This research will be beneficial to both, academics studying the disciplines of marketing and advertising, as well as practitioners: marketers and advertisers, to develop an understanding on how to apply the Zeigarnik effect in their marketing communication, and learn how to reap the maximum advantage out of it in terms of enhancing consumer involvement, attention and retention.

5.3 Future Research

In the current research, we took only two demographic variables to test the consumer attention in the Zeigarnik effect. In future we wish to test the effect against other demographics as well e.g. income, level of education etc. Secondly we also wish to see consumer attention toward video ads as well the current work is based on print ads only.

References

- Bagozzi, RP & Silk, AJ 1983, 'Recall, Recognition, and the Measurement of Memory for Print Advertisements', *Marketing Science*, vol.2 ,no.2, pp. 95-134.
- Heimbach, JT & Jacoby, J1972, 'the Zeigarnik Effect In Advertising', *Association for Consumer Research*, pp. 746-758.
- Hewett, WC 1975, 'The Significance of Human Curiosity in an Outdoor Advertising Experiment', *The Journal of Business*, vol 48, no.1, pp. 108-110.
- Leigh, JH, Zinkhan, GM & Swaminathan, V 2006, 'Dimensional Relationships of Recall and Recognition Measures with Selected Cognitive and Affective Aspects of Print Ads', *Journal of Advertising*, vol,35,no.1, pp. 105-122.
- Liu, W 2008, 'Focusing on Desirability: The Effect of Decision Interruption and Suspension on Preferences', *Journal Of Consumer Research*, Vol. 35, pp. 640-651.
- Mackenzie, SB1986, 'The Role of Attention in Mediating the Effect of Advertising on Attribute Importance', *Journal of Consumer Research*, vol.13,no.2, pp. 174-195.
- Madrigal, R & Bee, C 2005, 'Suspense as an Experience of Mixed Emotions: Feelings of Hope and Fear While Watching Suspenseful Commercials', *Advances in Consumer Research*, Volume 32, pp. 561-567.
- Menon, S & Soman, D 2002, ' Managing the Power of Curiosity for Effective Web Advertising Strategies', *Journal of Advertising* vol.31, no.3, pp. 1-14.

Hammedi & Quresih

- Nye, CW, Roth, MS & Shimp, TA 2008, 'Comparative advertising in markets where brands and comparative advertising are novel', *Journal of International Business Studies*, Volume 39, pp. 851–863.
- Pieters, R, Warlop, L & Wedel, M 2002, 'Breaking Through the Clutter: Benefits of Advertisement Originality and Familiarity for Brand Attention and Memory', *Management Science*, vol.48, no.6, pp. 765-781.
- Pieters, R & Wedel, M 2006, 'Attention Capture and Transfer in Advertising: Brand, Pictorial, and Text-Size Effects', *Journal of Marketing*, Volume 68, p. 36–50.
- Plessis, ED 2005, *The Advertised Mind: Ground-Breaking Insights Into How Our Brains Respond To Advertising*, London: Kogan Page Publishers.
- Schiffman, N & Greist-Bousquet, S 1992, 'The effect of task interruption and closure on perceived duration', *Bulletin of the Psychonomic Society*, vol.30, no.1, pp. 9-11.
- Smith, RE & Swinyard, WR 1988, 'Cognitive Response to Advertising and Trial: Belief Strength, Belief Confidence and Product Curiosity', *Journal of Advertising*, vol.17, no.3, pp. 3-14.
- Till, BD & Baack, DW 2005, 'Recall and Persuasion: Does Creative Advertising Matter?', *Journal of Advertising*, vol.34, no.3, pp. 47-57.
- Wang, C, Zhang, P, Choi, R & D'Eredita, M 2002, 'Understanding Consumers Attitude Toward Advertising', *Wang et al./Consumer Attitudes Toward Advertising*, pp. 1143-1148.
- Xia, L & Sudharshan, D 2002, 'Effects of Interruptions on Consumer Online Decision Processes', *Journal of Consumer Psychology*, vol.12, no.3, pp 265–280.