How a Celebrity Endorser in Advertisements can Influence the Credibility and Reliability of Information Received by Consumers

Michael Busler The Richard Stockton College, USA

Abstract: In any market driven economy, the consumer accounts for the vast majority of the output. Economists and Marketing scholars have long studied what motivates the consumer to demand, and eventually purchase, specific products. Depending on the type of product, consumers will seek information about the product prior to making the purchase. Much of this information comes from advertising. Information can be direct or indirect in nature. The consumer obtains indirect information after making inferences based on perceptions. The perception is strongly influenced by the credibility and reliability of the information found in advertisements. It is the intent of this paper to show an endorser in an ad can positively influence both the credibility and the reliability of indirect information. This positive influence on creditability and reliability of information results in the consumer perceiving higher product quality and in the consumer willing to pay significantly more for the product.

Keywords: Celebrity endorsement, Consumer perceptions, Consumer Perception Model, Credibility and reliability of information

1 Introduction

Prior research indicates that the use of a properly matched and positively viewed celebrity endorser in advertisements can have a significant effect on the consumer. Till and Busler (2000) found that the use of a celebrity endorser, can significantly effect brand awareness and purchasing intentions. Busler (2006) found that the most likely reason for this positive response is that the consumers' perception of product quality increases when a celebrity endorser is present in the ad. This increased quality perception should also translate into higher prices that the consumer is willing to pay.

Busler's Consumer Perception Model (see Figure 1) indicates that perceptions are formed by consumers after sufficient information is gathered. Much of this information comes from viewing advertisements for the product. The information in the ad can be either direct or indirect. Direct information is factual and usually includes such things as product price, features, locations where the product can be purchased, etc. Indirect information is obtained by the consumer after making inferences based on perceptions. The value of the indirect information, as well as the ad's ability to persuade consumer perceptions, is often based on who is presenting this information. For that reason, advertisers will use a positively viewed and properly matched celebrity endorser to present the information.

The intent of this paper is to show that both the creditability and reliability of the information in advertisements will significantly increase when a proper endorser is used in the ad. Based on Busler's Consumer Perception Model (2006) this increase in creditability and reliability will increase consumers' perception of product quality and performance.

2 Overview of Relevant Studies

The use of a celebrity to endorser a product in an advertisement is currently a very popular strategy. Advertising industry executives estimate that \$1 billion is spent annually on celebrity endorsers.

Through the use of these endorsers, the firm's intention is to affect consumer behavior so that their product is purchased. But does advertising effect consumer behavior? And what impact do these endorsers have on the consumer? Researchers have attempted to answer these questions for several decades. For



Figure 1 Consumer Perception Model

example, Chandy et. al (2001) point out that to date the research can be broadly classified into two streams: 1) experimental studies on the effect of ads on buying intentions, and 2) econometric studies on the effects of advertising intensity on purchase behavior.

In the marketing literature, experimental seminal studies have examined a variety of advertising elements including emotional cues (Holbrook and Batra 1987), types of arguments (Etgar and Goodwin 1982), humor (Sternthal and Craig 1973), endorser effectiveness (Friedman and Friedman 1979) and music (MacInnes and Park 1991). The dependent variables most often used include attitude toward the ad, attitude toward the brand, memory and purchase intent.

Most recently, Till, Stanley and Priluck (2008) explained how celebrities are used effectively as conditioned stimuli in the associative learning process. The authors conclude that conditioning with celebrities yields brand attitudes that are robust and enduring. Extending that research, this paper believes that celebrity based conditioning is enhanced because the information presented in the ad is more credible and more reliable.

3 The Effect of a Properly Matched Celebrity Endorser

Marketing scholars have researched the effect of a celebrity endorser in advertisements for some time. Specifically, the concept of source creditability and reliability has been and will continue to be of interest. Endorser credibility has received considerable attention in the academic literature (Dholakia et al., 1977; Frieden, 1984; Goldberg and hartwick, 1990; Harmon and Coney, 1982; Till and Busler, 2000). Various studies (Friedman and Friedman, 1979; Kamins, 1990) pointed out the several characteristics affecting creditability of endorsers such as trustworthy, knowledgeable, believable and expertise.

By properly matching the products being endorsed, the endorser's creditability can be enhanced. A number of studies have examined whether and under what conditions celebrities make appropriate endorsers for specific products (Agrewal and Kamakura, 1995; Frieden, 1984; Kamins, 1990; Till and Busler, 1998, 2000; Tripp et al., 1994). It is the intent of this study to build on that research stream by first examining the effect a celebrity endorser has on both the creditability and reliability of the information found in advertisements. Then this effect will be tested to determine if there is a correlation to the consumer's perception of quality and the price that the consumer is willing to pay.

4 Consumer Perception Model

A Consumer Perception Model (Figure 1) was introduced by Busler (2006). The intent of the model was to show how consumer perceptions are formed and to show the role that advertisements play in consumer perceptions. According to this model, once the consumer has determined the needs that must be satisfied, he gathers information so that he can make the purchasing choice that is believed to maximize his total utility. In other words, consumers will purchase specific products that they believe will provide the greatest value. In order to form this perception about value, the consumer gathers information. The more reliable and credible the consumer believes the information to be, the greater his perception of value will.

It is hypothesized that the use of a celebrity endorser in advertisements will result in the consumer believing that the information in the ad is both more credible and more reliable. Through a carefully designed questionnaire used in an experiment, this study will test that hypothesis. In addition, if the more credible and reliable information leads the perception of higher quality, then it is further hypothesized that the consumer will be willing to pay a higher price for the product. This hypothesis will also be tested.

5 Hypothesis Development

H(1) Indirect information found in advertisements will be significantly more reliable and more credible when a properly matched and positively viewed endorser is used to present the information.

After a product was selected (light bulbs) pre tests were done to find an endorser that is positively viewed and whose attributes match the attributes consumers seek when purchasing light bulbs. Two advertisements were then constructed that provided indirect information to the viewer of the ad. One ad used a celebrity endorser and the other did not. Respondents were then asked to rate the reliability and credibility of that information.

H(2) There is a positive correlation between the both the credibility and reliability of information found in advertisements and the consumers perception of product quality.

Busler (2006) showed that using a positively viewed and properly matched celebrity endorser in advertisements will signal higher product quality and product performance. It is hypothesized that result is based on the consumer believing that the information in the advertisement is both more credible and more reliable. A correlation analysis will be completed to test the direction and strength of this correlation.

H(3) Consumers will be willing to pay more for a product when they believe that the information found in the advertisements is more credible and more reliable.

Since consumers believe the information is more credible and reliable, they form better perceptions of product quality and product performance (Busler 2006). As a result the consumers are willing to pay significantly more for the celebrity endorsed product.

6 Data Gathering and Estimation Techniques

A specific experiment was designed to gather data necessary for this study. The data will then be used to test the hypotheses. A questionnaire was designed and distributed to 150 respondents. Half of the students saw the ad with the celebrity endorser and the other half saw the ad with the same information but without the celebrity endorser. The respondents were then asked to do the following using a nine point semantic differential scale:

- 1 to rate the credibility of the information in the ad
- 2 to rate the reliability of the information in the ad
- 3 to rate their perception of the quality of the product
- 4 to determine the price that the respondent was willing to pay for the product

Before the data is collected, some pre-testing must be done. This is necessary in order to determine the appropriate product, celebrity endorser and attributes. The first pretest determined which celebrities the respondents viewed positively and what attributes are associated with that celebrity. The second pretest is used to determine the products that exhibit the same attributes associated with the celebrities determined during the first pretest.

7 Pretests

The first step in the pre-testing process is to determine the proper celebrity endorser to use in the advertisements. Two focus groups consisting of 15 subjects each were used. The subjects were drawn randomly from the student population at a large Eastern United States University. During a brain-storming session a set of open-ended questions were given to the focus groups in order to get group interaction. The subjects were asked to identify celebrities that are well known to them. From the two focus groups 15 celebrity endorsers were compiled.

Then a questionnaire was prepared and distributed to 100 subjects at the same two Universities. The subjects were asked to list four or five attributes which the 15 celebrity endorsers exhibited. Also, the subjects were asked questions to determine if the celebrities were positively viewed. Each subject was asked to rate each celebrity on a nine point semantic differential scale using categories such as negative versus positive, unfavorable versus favorable and strongly dislike to strongly like.

A second questionnaire was prepared and distributed to 100 similar subjects. These respondents were asked to list two or three attributes associated with a number of products that the typical consumer is likely to purchase. The results of this pretest indicated that light bulbs had the most consistently mentioned attributes of: long-lasting, energy efficient and soothing natural light. A fictitious brand name "Billows" was given to the light bulbs.

The next step was to match the celebrity to the product. Baseball star Cal Ripken, Jr. had a very positive image and was associated with attributes that matched the light bulbs. Ripken was generally viewed as a long-lasting player having the record for most consecutive games played. He made the fewest error which resulted in the subjects viewing him as very efficient and his community service involvement was well known which created the perception of a friendly, soothing person. Thus Cal Ripken, Jr. and lights became a good match.

8 Empirical Results

A total of 150 questionnaires were distributed to students at the same two Eastern US Universities. This represented 75 questionnaires per treatment. Six questionnaires were discarded because of incomplete information. Each respondent was given a package of materials that contained either four or six pages. The four page package contained an advertisement for lights bulbs with no endorser in the ad. They were asked a series of questions to be answered using a nine point semantic differential scale. The six page package contained a similar ad for light bulbs except Cal Ripken Jr. was utilized as a celebrity endorser in the ad. Even though the pretests indicated the chosen endorser was viewed favorably and had attributes that matched the light bulb, respondents were, nonetheless asked to evaluate the endorser for the given attributes and for the overall perception utilizing a nine point semantic differential scale. The results are summarized below:

View of celebrit	y endorser		Attribute match-up			
Cal Ripken, Jr.			Billow's light bulbs			
	Mean	SD		Mean	SD	
			Long lasting	7.6	1.4	
Favorable impression	7.1	1.7	Efficient	7.3	1.7	
Appropriate endorser	6.5	1.8	Pleasant	7.4	1.7	

	Table	21	View	of	Cal	Rip	ken,	Jr.
--	-------	----	------	----	-----	-----	------	-----

Using the nine point semantic differential scale, a mean reading of less than five would have indicated a negative response, while a mean in excess of five would be positive. As shown above Cal Ripken, Jr. was viewed favorably and was an appropriate endorser for light bulbs. In addition the mean scores indicated that he was viewed to have attributes that matched-up with the attributes consumers considered when purchasing light bulbs. This re-affirms the results from the pre-test.

Hypothesis 1 – credibility and reliability of information. Hawkins et al. (2004) describes information processing as a "series of activities by which stimuli are perceived, transformed into information and stored." Further, the authors note, information processing is analyzed by a model based on four steps: exposure, attention, interpretation and memory.

The respondents in this study were exposed to an ad. The visual and headline got their attention since it was viewed in a controlled environment. Then each one interpreted the information and then assigned a meaning to it based on their perception of the creditability and reliability of that information. Each was then asked to rate both the credibility and reliability using a nine point semantic differential scale. The results are summarized below:

	Billows Light Bulbs			
Variable	with Cal Ripken, Jr.	with no endorser		
Credibility	5.89	5.07 (<.01)		
Reliability	6.36	5.61(<.01)		

Table 2 Evaluation of Credibility and Reliability of Information

Note: P values in parentheses

For the pairing of Cal Ripken, Jr. and the light bulbs, the respondents viewed the information in the ad to be significantly more credible and significantly more reliable. This conclusion supports the hypothesis.

Hypothesis 2 – correlation between consumer's perception of information and the perception of product quality. A correlation was done between the respondent's perception of the credibility of the information found in the ad and the consumer's perception of product quality. A similar correlation was done between reliability and perception of quality. Since it is believed that this correlation should hold regardless of the use of a celebrity endorser, all 144 respondents data was utilized. The results indicated there was a correlation coefficient of .54 between credibility of information and quality perception. This conclusion supports the hypothesis (regardless of whether a celebrity endorser is used in an ad or not) that consumers have a somewhat strong positive correlation between perceptions concerning the credibility and reliability of information and their resulting perception of product quality.

Hypothesis 3 – endorser effect on the price consumers are willing to pay. There was nothing in the prior literature that suggested a method to be used to test the impact of the advertisement on consumer pricing decisions. The scale below was developed. Respondents were told that the average light bulb sells for \$.60. This value was placed under the number five on the nine point scale. The scale was constructed as follows:

Table 3 Scale used to determine the price the consumer is willing to pay

1	2	3	4	5	6	7	8	9
\$.40	\$.45	\$.50	\$.55	\$.60	\$.65	\$.70	\$.75	\$.80

The respondents were then asked to circle the number that corresponded t the price they were willing to pay. For those that saw the ad with no endorser the mean was 5.6 and for those who saw the ad with Cal Ripken, Jr. the mean was 6.4 with a p value ,.01. This indicated that using Cal Ripken, Jr. in the ad resulted in the consumers willing to pay significantly more for the light bulbs. This hypothesis is supported.

It is interesting to note, that the respondents who saw the ad with no endorser were willing to pay more for the fictitious Billows light bulb then for an average bulb. This suggests that advertising has a positive impact on consumers' willingness to pay more for a product.

9 Conclusions

Products are differentiated in the marketplace based on physical differences, service differences and symbolic differences. If two products are physically the same and sold in the same manner with similar service given, they may still be differentiated based on symbolic differences. These differences are based on the consumers' perception (Busler 2006). The quality perception can be influenced by the information found in advertisements. This study revealed that the information found in the ad will be more credible and more reliable when a positively viewed and properly matched celebrity endorser is used to present the information. Similarly the more credible and reliable the information perception of the consumer, the higher the quality perception of the product will be. Finally consumers will be willing to pay significantly more for a product that they perceive to be of higher quality.

Celebrity endorsements are very expensive. Yet firms have realized that if a properly matched and positively viewed celebrity endorser is used in advertisements, the consumers are likely to view the information in the ad as more credible and more reliable. This results in the consumer having a higher quality perception of the product and in the consumer willing to pay significantly more. Firms reason that the increase in sales and the higher prices that result from the use of a celebrity endorser will more than offset the cost.

References

- Agrawal, J. & Kamakura, W.A. (1995). 'The economic worth of celebrity endorsers: An event study analysis', *Journal of Marketing* Vol. 59, No.3, pp. 56-63.
- Becker, G.S. & Murphy, K.M. (1993). 'A simple theory of advertising as a good or bad', *The Quarterly Journal of Economics* Vol. 108, No. 4, pp. 941-965.
- Belch, G.E. & Belch, M.A (1993). 'Introduction to Promotion and Advertising', New York, NY: Richard D. Irwin Co.
- Busler, M. (2006). 'The effect of a celebrity endorser in advertisements on the consumers' perception of product quality', *World Sustainable Development Outlook 2006* pp. 351-359.
- Chao, P. (1989). 'The Impact of Country Affiliation on the Credibility of Product Attribute Claims', *Journal of Advertising Research* Vol. 29, No. 2, pp. 35-42.
- Chandy, R.K., Tellis, G.J., Macinnis, D.J. & Thaivanich, P. (2001). 'What to say when: Advertising appeals in evolving markets', *Journal of Marketing Research* Vol. 38, No. 4, pp. 399-414.
- Cook, W.A. & Kover, A.J. (1997). 'Research and the Meaning of Advertising Effectiveness: Mutual Misunderstandings', In: *Measuring Advertising Effectiveness*, W. Wells (ed.) Hillside, NJ: Lawrence Erlbaum Associates, pp. 13-20.
- Dholakia, R.R. & Sternthal, B. (1977). 'Highly Credible Sources: Persuasive Facilitators or Persuasive Liabilities?', Journal of Consumer Research Vol. 3, No. 4, pp. 223-232.
- Dodds, W.B. & Monroe, K.B., Grewal, D. (1991). 'Effects of Price, Brand, and Store Information on Buyers', Journal of Marketing Research Vol. 28, No. 3, pp. 307-320.
- Dorfman, R & Steiner, P. (1954). 'Optimizing Advertising and Optimal Quality', *American Economic Review* Vol. 44, No. 5, pp. 826-836
- Etgar, M. & Goodwin, S.A. (1982). 'One-sided versus Two-sided Comparative Message Appeals for New Brand Introductions', *Journal of Consumer Research* Vol. 8, No. 3, pp. 460-465.
- Frieden, J.B. (1984). 'Advertising Spokesperson Effects: An Examination of Endorser Type and Gender on Two Audiences', *Journal of Advertising Research* Vol. 24, No. 5, pp. 33-42.

- Friedman, H.H. & Friedman, L. (1979). 'Endorser Effectiveness by Product Type', *Journal of Advertising Research* Vol. 19, No. 5, pp. 63.
- Goldberg, M.E. & Hartwick, J. (1990). 'The Effects of Advertiser Reputation and Extremity of Advertising Claim on Advertising Effectiveness', *Journal of Consumer Research* Vol. 17, No. 2, pp. 172-79.
- Han, C.M. & Terpstra, V. (1988). 'Country-Of-Origin Effects For Uni-National And Bi-National', Journal of International Business Studies Vol. 19, No. 2, pp. 235-256.
- Harmon, R.R.& Coney, K.A (1982). 'The Persuasive Effects of Source Credibility in Buy and Lease Situations', *Journal of Marketing Research* Vol. 19, No. 2, pp. 255-261.
- Hawkins, D.I., Best, R.J., Coney, K.A. (2004). 'Consumer Behavior', Boston, MA: Irwin McGraw Hill.
- Holbrook, M.B. & Batra, R. (1987). 'Assessing the Role of Emotions as mediators of Consumer Responses to Advertising', *Journal of Consumer Research* Vol. 14, (December), pp. 404-20.
- Jacoby, J. & Szybillo, G.J. (1995). 'Consumer research in FTC versus Kraft (1991): A case of heads we win, tails you lose', Journal of Public Policy & Marketing Vol. 14, No. 1, pp. 1-15.
- Laband, D.N. (1986). 'Advertising as Information: An Empirical Note', *The Review of Economics and Statistics* vol. 68, no. 3, pp. 517-522
- Kamins, M.A. (1990). 'An Investigation Into The 'Match-Up' Hypothesis In Celebrity Advertising: When Beauty May Be Only Skin Deep', *Journal of Advertising* Vol. 19, No. 1, pp. 4-14.
- MacInnes, D.J. & Park, C.W. (1991). 'The Differential Role of Characteristics of Music on High and Low Involvement Consumers' Processing of Ads', *Journal of Consumer Research* Vol. 18, No. 3, pp. 161-173.
- Mixon, F.G. Jr., (1995),"Advertising as information: Further evidence," *Southern Economic Journal*, vol. 61, no. 4, pp. 1213-1219.
- Ohanian, R. (1991). 'The Impact of Celebrity Spokespersons' Perceived Image on Consumers' Intention to Purchase', *Journal of Advertising Research* Vol. 31, No. 1, pp. 46-55.
- Ohanian, R. (1990). 'Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness', *Journal of Advertising* Vol. 19, No. 3, pp. 39-53.
- Richardson, P.S., Dick, A.S. & Jain, A.K. (1994). 'Extrinsic and intrinsic cue effects on perceptions of store brand quality', *Journal of Marketing* Vol. 58, No. 4, pp. 28-37.
- Sternthal, B. & Craig, C.S. (1973). 'Humor in Advertising', Journal of Marketing Vol. 37, No. 10, pp. 12-18.
- Stewart, D.W. (1992). 'Speculations on the Future of Advertising Research', Journal of Advertising Vol. 21, No. 3, pp. 1-46.
- Till, B.D., Stanley, S.M. & Priluck, R. (2008). 'Classical conditioning and celebrity endorsers: An examination of belongingness and resistance to extinction], *Psychology & Marketing* Vol. 25, No. 2, p. 179.
- Till, B.D. & Busler, M. (2000). 'The match-up hypothesis: Physical attractiveness, expertise, and the role of fit on brand attitude, purchase intent and brand beliefs', *Journal of Advertising* Vol. 29, No. 3, pp. 1-14.
- _____ (1998). 'Matching Products with Endorsers: Attractiveness versus Expertise', *Journal of Consumer Marketing* Vol. 15, No. 6, pp. 576-586.
- Tripp, C., Jensen, T.D. & Carlson, L. (1994). 'The effects of multiple product endorsements by celebrities', *Journal of Consumer Research* Vol. 20, No. 4, pp. 535-548.
- Wadman, W. (2000). 'Variable Quality in Consumer Theory', New York: M.E. Sharpe.
- Wells, W. (1993). 'Discovery-oriented Consumer Research', Journal of Consumer Research Vol. 19, No. 2, pp. 489-504.
- Winer, R.S. (1999). 'Experimentation in the 21st Century: The Importance of External Validity', Journal of the Academy of Marketing Science Vol. 27, No. 3, pp. 349-358.