Implicit Assimilation and Explicit Contrast: A Set/Reset Model of Response to Celebrity Voice-Overs

MARK R. FOREHAND
ANDREW PERKINS*

An experiment reveals that the relationship between celebrity attitude and attitude toward brands paired with the celebrity's voice is moderated by identification of the celebrity but only when attitude is measured explicitly. Using explicit measures, celebrity attitude was positively (negatively) related to brand attitude change when the evaluator could not (could) identify the celebrity. This finding is attributed to "resetting," a correction of the perceived influence from irrelevant cues. On implicit measures, a positive relationship between celebrity and brand attitude was observed regardless of celebrity identification. The disassociation between the explicit and implicit results suggests that resetting requires explicit evaluation.

A dvertisers frequently use celebrities as spokespeople to increase consumer attention, build brand affinity, and provide credibility in specific consumer segments (Hovland and Weiss 1951; Kamins 1990). A more subtle advertising strategy is the inclusion of celebrity voices in advertising without explicit identification of the celebrity. Since consumers often fail to recognize the presence of a celebrity in voice-overs, the voice-overs have the potential to influence consumer attitude without the consumer's conscious awareness, a process of implicit cognition.

Implicit cognition involves human learning and attitude formation in the absence of overt processing and, in some cases, conscious awareness (Alba and Hutchinson 2000; Bargh and Chartrand 1999; Greenwald and Banaji 1995; Janiszewski 1988, 1993; Janiszewski and Meyvis 2001; Shapiro 1999). In the case of consumer response to celebrity voice-overs, implicit cognition research suggests that voice-overs may implicitly influence brand response simply by pairing the celebrity with the brand. This close pairing may cause the consumer's attitude toward a celebrity (the contextual stimulus) to generalize to the brand paired with the celebrity's voice (the target stimulus), provided that a prior attitude toward the celebrity exists (Forgas 1995). However, following the Set/Reset Model

of context effects, this positive relationship (assimilation) may become negative (contrast) if the consumer recognizes the celebrity, considers the celebrity to be an irrelevant cue, and therefore partials out the perceived influence of the celebrity (Martin, Seta, and Crelia 1990; Meyers-Levy and Sternthal 1993).

The objectives of this project are thus to experimentally test both whether celebrity voice-overs prompt assimilation and/or contrast effects and whether celebrity recognition moderates response and also to discern the underlying processes. To assess process, we have utilized both explicit and implicit measures (the Implicit Association Test). The use of both types of measures is helpful as they are differentially sensitive to attempts to partial out or adjust evaluation.

CONCEPTUAL DEVELOPMENT

The vast majority of research on celebrity influence has studied the effects of explicit endorsements. These endorsements involve public statements of support by the celebrity and tend to improve brand evaluation to the extent that the celebrity is trustworthy and credible (Atkin and Block 1983; Freiden 1984; Kamins 1990). Explicit endorsements can also influence evaluation when they are processed heuristically, provided that the celebrity is attractive or appealing (Heath, McCarthy, and Mothersbaugh 1994). Dual process models of persuasion are able to explain both the systematic and heuristic effects of explicit endorsements by arguing that the type of influence is dependent upon depth of processing (Heuristic-Systematic Model [HSM], Chaiken 1987; Elaboration

Likelihood Model [ELM], Petty and Cacioppo 1981). Although these models help explain when consumers will process explicit endorsements systematically or heuristically, they do not address the potential effects of celebrity voice-overs that are not consciously processed by evaluators.

Unlike explicit celebrity endorsements, celebrity voice-overs do not visually feature the celebrity, nor do they acknowledge the celebrity's presence. As a result, consumers are often unaware that a celebrity provided the voice-over. In this situation, the voice-over may influence brand attitude without the consumer's awareness by prompting affect infusion. Affect infusion occurs when a contextual stimulus triggers affect that generalizes to other associated stimuli. The ability of activated affect to "interact and inform cognition and judgments" has been repeatedly observed within psychology and generally occurs when individuals are less motivated or less able to critically evaluate (Forgas 1995; Martin, Harlow, and Strack 1992; Schwarz and Clore 1983). For example, exposure to an affect-arousing film can influence judgments of unrelated stimuli such as political candidates or topical issues (Forgas and Moylan 1987). Assuming an individual associates affect with a given celebrity, it is then possible that the activation of that affect could inform other judgments. However, for this affect infusion to occur with unidentified celebrity voice-overs, one must accept that exposure to a celebrity's voice can activate associated affect independent of voice recognition. Recent research on implicit cognition suggests that such unconscious concept activation is fairly common (Bargh 1989; Greenwald and Banaji 1995).

In general, voice-over-based affect infusion should produce an assimilation response (a positive relationship between celebrity attitude and brand attitude), but a contrast response (a negative relationship between celebrity attitude and brand attitude) is also possible under certain processing conditions. Assimilation/contrast responses are moderated by many factors, including the extremity of the context, the ambiguity of the target, the context-target similarity, the strength of the evaluator's prior beliefs, the evaluator's resource availability, and epistemological goals (Aronson and Carlsmith 1962; Mussweiler 2003). Within consumer domains, contrast effects between contextual stimuli and target stimuli are more common when consumers have increased cognitive resources (Broach, Page, and Wilson 1995; Meyers-Levy and Sternthal 1993; Meyers-Levy and Tybout 1997).

One prominent model of contexts effects, the Set/Reset Model, argues that increased processing capacity heightens ability to evaluate the appropriateness of contextual information (Martin 1986). Martin argued that when individuals take impression formation seriously, they assess not only their immediate reaction to a stimulus but also the factors that shape that immediate reaction. If the individual identifies a contextual cue as a factor in their reaction and believes that the contextual cue is inappropriately biasing their genuine reaction, a motivated individual will reset their judgment away from the influence of the cue (Martin 1986). During resetting,

the evaluator partials out affect they believe is attributable to the context. In many cases, an evaluator may unintentionally overcorrect for the influence of the contextual stimuli and thereby create a contrast response. For example, if an evaluator believes that pleasant weather (a contextual cue) is biasing their evaluation of a new acquaintance, they may estimate how much positive affect is prompted by the weather and adjust their evaluation of the acquaintance accordingly. If the evaluator overestimates the degree to which positive affect is due solely to the weather, the net effect of resetting is a less positive evaluation of the acquaintance than is objectively warranted. Similarly, an overestimation of the negative affect produced by a contextual cue can prompt a more positive evaluation than warranted. This resetting process is dependent on both recognition of the contextual cue and a belief that the cue is an inappropriate influence. Such recognition-based moderation of implicit cognition has been documented in response to both primes (Bornstein and D'Agostino 1994; Klinger and Greenwald 1995; Lombardi, Higgins, and Bargh 1987) and affect manipulations (Schwarz and Clore 1983).

Following the Set/Reset Model, celebrity voice-overs should generally prompt an assimilation response but may prompt a contrast response if the celebrity is identified and the evaluator believes the celebrity is biasing their genuine reaction. It should be noted that this correction is much more likely with a voice-over than with an explicit endorsement. Although explicit endorsements vary in their persuasiveness, they clearly provide information that can influence a brand judgment and should therefore generally be considered relevant to the evaluation. In contrast, the identity of a voice-over provider delivers no direct information about the brand and is therefore more likely to be deemed irrelevant by a motivated evaluator. A caveat to this reaction is that the pairing of voice-over and brand should not possess any particularly strong match or any egregious mismatch. If a strong celebrity/brand match or mismatch exists, then a recognized celebrity may be considered relevant to the evaluation and processed in the same manner as an explicit endorsement.

> **H1:** Participant ability to identify the celebrity providing a voice-over will moderate the relationship between celebrity attitude and attitude toward the brand paired with the celebrity voice-over, provided that neither a strong match nor mismatch exists between the celebrity and brand.

To assess the nature of any assimilation or contrast response, both explicit and implicit attitude measures are utilized in this project. The implicit measures were collected using the Implicit Association Test (IAT), a computer-based categorization task that measures the strength of association between concepts in memory (Greenwald, McGhee, and Schwartz 1998). Due to its use of a series of latency-based measurements, the IAT is highly resistant to attempts to adjust or correct response (the basis of resetting) while still being sensitive to changes in association between concepts (such as those produced by assimilation). As a result, the hypothesized

resetting process should influence explicit brand evaluation (hypothesis 1) but not implicit brand evaluation (hypothesis 2).

> **H2:** On implicit measures, a positive relationship between celebrity attitude and brand attitude should be observed regardless of celebrity voice-over recognition.

EXPERIMENT 1

Method

Participants. Two hundred and thirty-two undergraduate students participated as part of a class requirement. One hundred and eighteen participants were female (51%), and 114 were male (49%). The average age of the participants was 21.

Advertisement Stimuli. Six 30 sec. voice-over advertisements that never aired in the participants' home region were used as stimuli (four experimental ads, two filler). The celebrities providing the voice-overs were never visually presented or explicitly acknowledged in the ads. The advertisements were presented in one of two counterbalanced orders, with filler ads in the first and last positions. To avoid unintended explicit inferences common to traditional endorsements, the advertisements featured celebrities who possessed neither a strong match nor a strong mismatch with the product category (Kamins 1990). The resulting celebrity/brand pairs were Sprint/David Duchovny, Volvo/Donald Sutherland, Lipton/David Hyde Pierce, and Qwest/Willem Dafoe. A pretest confirmed that all four of these celebrity pairs were viewed neutrally and that none contained a noteworthy match or mismatch.

Procedure and Measures. The study was conducted in three phases. During phase 1, participants completed a questionnaire that assessed celebrity familiarity, celebrity liking, and brand attitude. Reactions to numerous nonexperimental celebrities and brands were also assessed. One week later, participants completed a series of celebrity IATs (phase 2) as part of an experiment that was ostensibly unrelated to the phase 1 questionnaire.

The celebrity IATs measured the ease or difficulty with which a participant associates a celebrity (the target-concept) with pleasant and unpleasant terms (the attribute dimension). In these IATs, participants categorized names as either "Celebrity" or "Non-celebrity" (the target-concept discrimination task) and a number of concepts as "Pleasant" or "Unpleasant" (the attribute dimension discrimination task) as quickly as possible. The key dependent measure in the IAT is the speed with which the participant can categorize a concept when it shares a response key with pleasant terms compared to when it shares a response key with unpleasant terms. As an illustration, during one celebrity IAT, the "Celebrity" stimuli included the name "David Duchovny" and the "Non-celebrity" stimuli included four noncelebrity

names. The pleasant (unpleasant) terms included lucky, gift, peace, miracle, sunny, and pleasure (evil, grief, poison, bomb, hurt, and violence). To the extent that a celebrity is associated with pleasant attributes, the mean latency of response should be faster (slower) when the target shares a response key with pleasant (unpleasant) terms. As the strength of association between the celebrity and pleasantness increases, the latency difference between the two paired categorization tasks (or IAT effect) should also increase (Greenwald et al. 1998).

The third phase was conducted 3 wk. after phase 2 and was ostensibly unrelated to earlier phases. In this phase, participants watched a series of television advertisements on a computer while wearing headsets for sound. After watching the advertisements, participants completed four brand IATs that assessed strength of association between the advertised brands and pleasant and unpleasant attributes. After completing the brand IATs, participants completed a questionnaire that contained the following measures: a brand attitude scale (six items), an open-ended written-protocol measure, a celebrity identification cued-recall task that assessed identification confidence, and a measure of celebrity-brand fit.

Results

Two separate regressions were conducted. The first regressed participants' explicit celebrity attitude on change in explicit brand attitude. The second regressed participants' implicit celebrity attitude on their post ad exposure implicit brand attitude. Celebrity identification (0/1), the participant's familiarity with the celebrity, the perceived "fit" between the celebrity and brand, and brand dummy variables were also included in the regressions.

Up to four observations were provided by each participant (one for each of the four celebrity/brand pairs). Observations were dropped from the analysis if the participant reported no familiarity with the celebrity. Of the resulting 610 observations, the celebrity was correctly identified in 176 (29%). This raw measure of identification was improved by removing observations in which the participants randomly guessed the celebrity's identity (e.g., the celebrity was correctly identified, but the participant expressed absolutely no confidence/"a total guess") and by removing observations in which the participant was confused about the identity of the celebrity (e.g., an incorrect identification was made with a very high level of confidence). A total of 42 guesses and 38 confusions were identified. After removing guesses and confusions, the final observation count was 530 (134 correct identifications and 396 nonidentifications).

Findings on Explicit Measures. As hypothesized, correct identification of the celebrity moderated the relationship between explicitly measured celebrity attitude and the change in explicitly measured brand attitude (coefficient = -0.327, $t = -3.29$, $p < .01$). Neither the degree of celebrity familiarity nor perceived celebrity/brand fit was significantly related to brand attitude change (FAM coefficient =

TABLE 1

OLS ESTIMATION RESULTS FOR THE EFFECT OF
EXPLICIT CELEBRITY ATTITUDE AND CELEBRITY
IDENTIFICATION ON EXPLICIT BRAND ATTITUDE CHANGE

Variable	Coefficient	Standard error	t-ratio	p-value
Celebrity attitude	.180	.051	3.53	.01
Celebrity identification	1.435	.470	3.05	.01
Identification × attitude	−.327	.099	−3.29	.01
Celebrity familiarity	−.038	.034	−1.14	.26
Celebrity/brand fit	.005	.026	.19	.85
Brand dummy 1	−.153	.133	−1.15	.25
Brand dummy 2	−.055	.133	−.41	.68
Brand dummy 3	−.094	.126	−.74	.46
Gender	−.007	.087	.08	.94
Intercept	−.420	.249	−1.68	.10

NOTE.—Number of observations = 530. $R^2 = .03$, $F = 1.97$ ($p < .05$).

-0.038, $t = -1.14$, $p > .20$; FIT coefficient = 0.005, $t = 0.19$, $p > .20$). The regression results and independent variable correlations are provided in tables 1 and 2.

To test whether the component assimilation and contrast effects in the interaction were significant, two additional regressions were conducted, one for correct identifications and one for nonidentifications. When participants failed to identify the celebrity, a significant positive relationship (an assimilation response) was found between celebrity attitude and brand attitude change (coefficient = 0.192, $t = 3.52$, $p < .001$). When participants were able to identify the celebrity, a significant negative relationship (a contrast response) was found between celebrity attitude and brand attitude change (coefficient = -0.199, $t = -2.44$, $p < .01$).

To provide insight into the observed assimilation and contrast responses, we analyzed the mean brand attitude change of participants with initially positive or negative celebrity attitude. To do this, a quartile split was performed on celebrity liking to create four conditions—positive or negative celebrity attitude crossed with correct or nonidentification. When participants were unable to identify the celebrity and had an initially positive (negative) celebrity attitude, their brand attitude improved (dropped) by an average of 0.21

(0.20) after ad exposure. Although these means do not include many observations and miss a great deal of the variation in the celebrity liking measure, a planned contrast nonetheless revealed that the difference between them is significant ($F(1, 201) = 8.77$, $p < .01$). In addition, both attitude change scores were significantly different from 0 ($M = 0.21$, $t(127) = 2.20$, $p < .05$; $M = -0.20$, $t(75) = -1.94$, $p < .05$).

When able to identify the celebrity, participants with initially positive (negative) celebrity attitude demonstrated a decrease (increase) in brand attitude of 0.01 (0.44) after ad exposure. A planned contrast revealed that the difference between these means is significant ($F(1, 60) = 3.83$, $p < .05$). However, while the brand attitude change of participants who recognized the celebrity and had a negative celebrity attitude was significantly different from 0 ($M = 0.44$, $t(17) = 3.95$, $p < .01$), the brand attitude change of participants with a positive celebrity attitude was not ($M = -0.01$, $t(44) = -0.07$, $p > .20$). It should be noted that the lack of a significant change in brand attitude among participants who recognized a liked celebrity does not mean that contrast has not occurred. Contrast is demonstrated by the observed negative relationship between celebrity attitude and brand attitude change in the regression. What the minimal brand attitude change does signify is that these participants did not overcorrect their attitude. Although resetting may have eliminated the otherwise positive influence of the celebrity, it did not cause them to significantly dip below their baseline brand evaluation.

Findings on Implicit Measures. Prior to analyzing the IAT results, the raw response latencies were log transformed and recoded to provide stability of variance for analyses (Greenwald et al. 1998). As hypothesized, an overall positive relationship between implicit celebrity attitude and implicit brand attitude was observed (coefficient = 0.263, $t = 6.00$, $p < .00$), and identification did not moderate this relationship (coefficient = 0.028, $t = 0.30$, $p > .20$). This assimilation response was significant for instances of celebrity identification (coefficient = 0.238, $t = 3.07$, $p < .01$) and nonidentification (coefficient = 0.267, $t = 5.83$, $p < .01$). Neither celebrity familiarity nor celebrity/brand fit was

TABLE 2

CORRELATION TABLE OF INDEPENDENT VARIABLES IN EXPLICIT MEASURE REGRESSION

Variable	Mean	Standard deviation	ATT	ID	FAM	FIT	DUM1	DUM2	DUM3
Celebrity attitude (ATT)	4.37	1.08							
Celebrity identification (ID)	.25	.37	.14*						
Celebrity familiarity (FAM)	3.05	1.56	.44**	.22**					
Celebrity/brand fit (FIT)	3.24	1.71	.05	.24**	.04				
Brand dummy 1 (DUM1)	.24	.43	.11*	.15**	−.01	.06			
Brand dummy 2 (DUM2)	.23	.42	−.21**	−.15**	−.19**	−.12*	−.31**		
Brand dummy 3 (DUM3)	.30	.46	.23**	−.04	.32**	−.06	−.37**	−.36**	
Gender (GEN)	.49	.50	−.01	.17**	.06	.04	−.02	.02	−.03

*$p < .01$.
**$p < .001$.

TABLE 3

OLS ESTIMATION RESULTS FOR THE EFFECT OF IMPLICIT
CELEBRITY ATTITUDE AND CELEBRITY IDENTIFICATION
ON IMPLICIT BRAND ATTITUDE

Variable	Coefficient	Standard error	t-ratio	p-value
Celebrity attitude	.263	.044	6.00	.01
Celebrity identification	.002	.017	.13	.90
Identification × attitude	−.028	.094	−.30	.77
Celebrity familiarity	.002	.005	.47	.64
Celebrity/brand fit	.003	.004	.67	.51
Brand dummy 1	−.045	.019	−2.34	.02
Brand dummy 2	−.027	.019	−1.41	.16
Brand dummy 3	−.048	.018	−2.63	.01
Gender	.020	.013	1.60	.11
Intercept	−.084	.031	−2.61	.01

NOTE.—Number of observations = 530. R^2 = .11, F = 6.81 ($p <$ .0001).

significantly related to implicit brand attitude (FAM coefficient = 0.002, $t = 0.47, p > .20$; FIT coefficient = 0.002, $t = 0.67, p > .20$). The regression results and independent variable correlations are provided in tables 3 and 4.

Written Protocol Results. To test for the influence of specific cognitions in the resetting process, participants completed written protocols that asked: "Why did you evaluate Brand X as you did?" Two coders, blind to the experimental hypotheses, assessed whether the voice-over was mentioned and, if so, whether it was a positive, neutral, or negative influence on brand evaluation. The coders demonstrated 100% agreement on the first item and 88% agreement on the second item. Disagreements were resolved by discussion. The coding results revealed that very few participants (18 of 530 or 3%) mentioned the voice-over as an input in their evaluation. Eleven of these comments were neutral (65%), four were positive (24%), and three were negative (18%). Most participants did not notice the celebrity voice-overs, and it appears that most of the participants who did notice them deemed them to be irrelevant to their evaluations.

DISCUSSION

Celebrity identification moderated the relationship between celebrity attitude and brand attitude change, but it did so only when attitude was measured explicitly. Participants who did (did not) recognize the celebrity demonstrated a contrast (an assimilation) response in which their celebrity attitude negatively (positively) predicted brand attitude change. The assimilation response is noteworthy as it suggests that advertising elements can influence brand attitude independent of any conscious awareness. On the other hand, the contrast response suggests that such influence may be "reset" to the extent that consumers recognize the potential influence and deem it irrelevant. When participants identified a disliked celebrity, exposure to an ad featuring the celebrity's voice prompted an improvement in brand attitude, likely an overcorrection for the influence of the celebrity. However, when participants identified a liked celebrity, no change in brand attitude was observed. Although resetting likely eliminated the otherwise positive influence of the celebrity in this condition, it did not cause an absolute drop in brand attitude. From a practical standpoint, the findings suggest that unrecognized celebrity voice-overs positively influence brand attitude to the extent that the celebrity is liked. In addition, although the relationship between celebrity attitude and brand attitude change was negative when the celebrity was recognized, the influence of ad exposure still ranged from neutral to positive.

At first glance, the null effect of a liked and recognized celebrity on brand attitude change may seem contrary to past research on celebrity influence (Kamins and Gupta 1994; Kelman 1961). However, two important differences between this research and past celebrity research should be noted. First, the current project assesses the effect of voice-overs as opposed to explicit endorsements. Compared to endorsements, voice-overs provide less brand information and are more likely to be deemed irrelevant. Second, whereas past research on endorsement has typically manipulated variables related to credibility, the current research used celebrity-brand pairs possessing neither a significant match nor mismatch. This further reduces the information

TABLE 4

CORRELATION TABLE OF INDEPENDENT VARIABES IN IMPLICIT MEASURE REGRESSION

Variable	Mean	Standard deviation	ATT	ID	FAM	FIT	DUM1	DUM2	DUM3
Celebrity attitude (ATT)	−.09	.16							
Celebrity identification (ID)	.25	.37	−.01						
Celebrity familiarity (FAM)	3.05	1.56	.03	.22**					
Celebrity/brand fit (FIT)	3.24	1.71	.07	.24**	.04				
Brand dummy 1 (DUM1)	.24	.43	.06	.15**	−.01	.06			
Brand dummy 2 (DUM2)	.23	.42	−.14**	−.15**	−.19**	−.12*	−.31**		
Brand dummy 3 (DUM3)	.30	.46	−.06	−.04	.32**	−.06	−.37**	−.36**	
Gender (GEN)	.49	.50	.07	.17**	.06	.04	−.02	.02	−.03

*$p < .01$.
**$p < .001$.

conveyed by the voice-over and decreases its relevancy to brand evaluation.

On the implicit measures, a positive relationship between celebrity attitude and brand attitude was observed regardless of whether the celebrity was recognized. The disassociation between the explicit and implicit results suggests that the resetting process may require explicit evaluation. This dissociation also supports the notion that implicit and explicit measures assess related but distinct constructs in memory (Cunningham, Preacher, and Banaji 2001; Greenwald and Farnham 2000) and that information processing may be both controlled and automatic (Banaji 2001). In this instance, the data suggest a two-step cognitive process, where knowledge structures are activated implicitly and then modified (reset) following explicit evaluation.

However, two measurement limitations temper the implicit/explicit comparisons. First, due to logistical constraints, the implicit brand measures could only be collected post–ad exposure while a pre–post design was possible for the explicit measure. Although it is unlikely that the strong assimilation response observed on the implicit measures would have changed with a difference measure, that possibility cannot be definitively ruled out. Second, the study is technically a quasi-experiment since celebrity identification is measured, and it is therefore possible that participants who could and could not identify a celebrity differ in important ways beyond momentary recognition (Stouffer 1950). However, this concern is mitigated by the fact that most of the participants were able to recognize some, but not all, of the celebrities.

In summary, the results of this research are highly consistent with past assimilation/contrast research that has generally observed assimilation at lower levels of processing and contrast at higher levels processing (Martin et al. 1990). Moving beyond this basic finding, future research should assess what aspects of celebrity voice-overs prompt attitude activation. For example, the experiment did not measure the quality of the celebrity's voice separately from overall attitude toward the celebrity. It is possible that voice quality activates affect independent of affect specific to the celebrity. As a result, voice quality could be contributing to the observed assimilation response, especially to the extent that voice quality and celebrity affect are highly correlated. However, celebrity identification should not moderate the influence of voice quality since voice quality can be processed explicitly regardless of celebrity recognition. Consequently, the potential influence of voice quality should not contribute to the contrast response observed when the celebrity is identified. Finally, more research is needed into the processes that differentially influence explicit and implicit measures. As the results of this project attest, explicit measures alone may only tell half of the story.

[*Dawn Iacobucci served as editor and Wayne Hoyer served as associate editor for this article.*]

REFERENCES

Alba, Joseph W. and J. Wesley Hutchinson (2000), "Knowledge Calibration: What Consumers Know and What They Think They Know," *Journal of Consumer Research*, 27 (2), 123–56.

Aronson, Elliot and J. Merrill Carlsmith (1962), "Performance Expectancy as a Determinant of Actual Performance," *Journal of Abnormal and Social Psychology*, 65 (3), 178–82.

Atkin, Charles and Martin Block (1983), "Effectiveness of Celebrity Endorsers," *Journal of Advertising Research*, 23 (1), 57–61.

Banaji, Mahzarin R. (2001), "Implicit Attitudes Can Be Measured," in *The Nature of Remembering: Essays in Honor of Robert G. Crowder*, Science Conference Series, ed. Henry L. Roediger III and James S. Nairne, Washington, DC: American Psychological Association, 117–50.

Bargh, John A. (1989), "Conditional Automaticity: Varieties of Automatic Influence in Social Perception and Cognition," in *Unintended Thought*, ed. James S. Uleman and John A. Bargh, New York: Guilford, 3–51.

Bargh, John A. and Tanya L. Chartrand (1999), "The Unbearable Automaticity of Being," *American Psychologist*, 54 (7), 462–79.

Bornstein, Robert F. and Paul R. D'Agostino (1994), "The Attribution and Discounting of Perceptual Fluency: Preliminary Tests of a Perceptual Fluency/Attributional Model of the Mere Exposure Effect," *Social Cognition*, 12 (2), 103–28.

Broach, Carter V., Thomas J. Page, and R. Dale Wilson (1995), "Television Programming and Its Influence on Viewers' Perceptions of Commercials: The Role of Program Arousal and Pleasantness," *Journal of Advertising*, 24 (4), 45–54.

Chaiken, Shelly (1987), "The Heuristic Model of Persuasion," in *Social Influence: The Ontario Symposium on Personality and Social Psychology*, Vol. 5, ed. Mark P. Zanna and James M. Olson, Hillsdale: Lawrence Erlbaum, 3–39.

Cunningham, William A., Kristopher J. Preacher, and Mahzarin R. Banaji (2001), "Implicit Attitude Measures: Consistency, Stability, and Convergent Validity," *Psychological Science*, 121 (2), 163–70.

Forgas, Joseph P. (1995), "Mood and Judgment: The Affect Infusion Model (Aim)," *Psychological Bulletin*, 117 (1), 39–66.

Forgas, Joseph P. and Stephanie Moylan (1987), "After the Movies: Transient Mood and Social Judgments," *Personality and Social Psychology Bulletin*, 13 (4), 467–77.

Freiden, Jon B. (1984), "Advertising Spokesperson Effects: An Examination of Endorser Type and Gender on Two Audiences," *Journal of Advertising Research*, 24 (5), 33–41.

Greenwald, Anthony G. and Mahzarin R. Banaji (1995), "Implicit Social Cognition: Attitudes, Self-Esteem, and Stereotypes," *Psychological Review*, 102 (1), 4–27.

Greenwald, Anthony G. and Shelly D. Farnham (2000), "Using the Implicit Association Test to Measure Self-Esteem and Self-Concept," *Journal of Personality and Social Psychology*, 79 (6), 1022–38.

Greenwald, Anthony G., Debbie E. McGhee, and Jordan L. K. Schwartz (1998), "Measuring Individual Differences in Implicit Cognition: The Implicit Association Test," *Journal of Personality and Social Psychology*, 74 (6), 1464–80.

Heath, Timothy B., Michael S. McCarthy, and David L. Mothersbaugh (1994), "Spokesperson Fame and Vividness Effects in the Context of Issue-Relevant Thinking: The Moderating Role of Competitive Setting," *Journal of Consumer Research*, 20 (4), 520–34.

Hovland, Carl I. and Walter Weiss (1951), "The Influence of Source Credibility on Communication Effectiveness," *Public Opinion Quarterly*, 15 (4), 635–50.

Janiszewski, Chris (1988), "Preconscious Processing Effects: The Independence of Attitude Formation and Conscious Thought," *Journal of Consumer Research*, 15 (2), 199–209.

——— (1993), "Preattentive Mere Exposure Effects," *Journal of Consumer Research*, 20 (3), 376–92.

Janiszewski, Chris and Tom Meyvis (2001), "Effects of Brand Logo Complexity, Repetition, and Spacing on Processing Fluency and Judgment," *Journal of Consumer Research*, 28 (1), 18–32.

Kamins, Michael A. (1990), "An Investigation into the 'Match-up' Hypothesis in Celebrity Advertising: When Beauty May Be Only Skin Deep," *Journal of Advertising*, 19 (1), 4–13.

Kamins, Michael A. and Kamal Gupta (1994), "Congruence between Spokesperson and Product Type: A Matchup Hypothesis Perspective," *Psychology and Marketing*, 11 (6), 569–86.

Kelman, Herbert C. (1961), "Processes of Opinion Change," *Public Opinion Quarterly*, 25 (1), 57–78.

Klinger, Mark R. and Anthony G. Greenwald (1995), "Unconscious Priming of Association Judgments," *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 21 (3), 569–81.

Lombardi, Wendy J., E. Tory Higgins, and John A. Bargh (1987), "The Role of Consciousness in Priming Effects on Categorization: Assimilation versus Contrast as a Function of Awareness of the Priming Task," *Personality and Social Psychology Bulletin*, 13 (3), 411–29.

Martin, Leonard L. (1986), "Set/Reset: Use and Disuse of Concepts in Impression Formation," *Journal of Personality and Social Psychology*, 51 (3), 493–504.

Martin, Leonard L., Thomas F. Harlow, and Fritz Strack (1992), "The Role of Bodily Sensations in the Evaluation of Social Events," *Personality and Social Psychology Bulletin*, 18 (4), 412–19.

Martin, Leonard L., John J. Seta, and Rick A. Crelia (1990), "Assimilation and Contrast as a Function of People's Willingness and Ability to Expend Effort in Forming an Impression," *Journal of Personality and Social Psychology*, 59 (1), 27–37.

Meyers-Levy, Joan and Brian Sternthal (1993), "A Two-Factor Explanation of Assimilation and Contrast Effects," *Journal of Marketing Research*, 30 (3), 359–68.

Meyers-Levy, Joan and Alice M. Tybout (1997), "Context Effects at Encoding and Judgment in Consumption Settings: The Role of Cognitive Resources," *Journal of Consumer Research*, 24 (1), 1–14.

Mussweiler, Thomas (2003), "Comparison Processes in Social Judgment: Mechanisms and Consequences," *Psychological Review*, 110 (3), 472–89.

Petty, Richard E. and John T. Cacioppo (1981), *Attitudes and Persuasion: Classic and Contemporary Approaches*, Dubuque, IA: Brown.

Schwarz, Norbert and Gerald L. Clore (1983), "Mood, Misattribution, and Judgments of Well-Being: Informative and Directive Functions of Affective States," *Journal of Personality and Social Psychology*, 45 (3), 513–23.

Shapiro, Stewart (1999), "When an Ad's Influence Is beyond Our Conscious Control: Perceptual and Conceptual Fluency Effects Caused by Incidental Ad Exposure," *Journal of Consumer Research*, 26 (1), 16–36.

Stouffer, Samuel A. (1950), "Some Observations on Study Design," *American Journal of Sociology*, 55 (4), 355–61.