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What is This?

The Influence of Ambivalence Toward a Communication Source: Media Context Priming and Persuasion Polarization

Chingching Chang[1]

Abstract

When people feel ambivalent toward an information source, their attitudes toward the endorsed information reflect the influence of contextual priming. In particular, the valence of relevant (i.e., applicable to source evaluations) and irrelevant (i.e., not applicable to source evaluates) media contexts likely exert influences through conceptual and affective priming, respectively, such that they polarize message persuasion in diverging ways. Using celebrity endorsers in ads, Experiments 1 and 3 show that valence of a relevant story about similar people triggers conceptual priming and generates context contrast effects on endorsed information among ambivalent, but not univalent, participants. In contrast, Experiments 2 and 3 show that valence of an irrelevant article triggers affective priming and generates context assimilation effects on endorsed information among ambivalent, but not univalent, participants.

Keywords

affective priming, ambivalent attitudes, assimilation effects, context priming, contrast effects, communication sources, conceptual priming, persuasion

Most people have experience with the context dependency of judgment: In one situation, we might regard a message endorser as an expert and thus likable, whereas in other situations, the same endorser could appear superficial and unlikable. According

[1]National Chengchi University, Taipei, Taiwan

Corresponding Author:
Chingching Chang, University Chair Professor, National Chengchi University, 64, Sect. 2, Zhi-nan Road, Taipei 11605, Taiwan.
Email: shenc@nccu.edu.tw

to Bless, Schwarz, and Wanke (2003), the context influences how people use accessible information as judgment inputs. To extend prior research, this study proposes that context-dependent judgments are more likely when people feel ambivalent, as opposed to univalent, toward an information source. Specifically, evaluations of a message (i.e., an advertisement) or a target (e.g., endorsed products) should vary when judgments of a communication source (i.e., an endorser) are subject to the influence of the surrounding context.

Endorsers often are celebrities in various fields who, like anyone else, are imperfect. Consumers tend to feel ambivalent toward celebrities in the entertainment, sports, and political arenas. They appreciate the celebrities' attractive appearance or talent but dislike them simultaneously because of their weaknesses in certain aspects (e.g., rude manners, poor choices). These ambivalent celebrities often endorse products or issues that appear relevant to their own strengths or talents, yet consumer responses to these endorsements has not received substantial attention in prior communication literature. Consider some modern examples: How do people who feel ambivalent toward Sarah Palin respond to her endorsement of energy independence and reform issues? She might be an effective endorser if her presence succeeds in attracting attention (Kaikati, 1987), but the degree of ambivalence people feel toward her also could affect their attitudes (negatively or positively) toward the focal issue. Such questions represent important communication issues that merit research attention.

This study specifically addresses the long-standing challenge to the idea that positive and negative evaluations are reciprocally activated and that evaluations can be described by a single, bipolar scale, from very unfavorable to very favorable (e.g., Kaplan, 1972; see also Cacioppo, Gardner, & Berntson, 1997; Priester & Petty, 1996). Perhaps positive and negative evaluations coexist independently, such that more extreme positive and negative evaluations of an object induce more ambivalent attitudes toward that object. Because conflicting attitudes about the same target create psychological discomfort (Monteith, 1996), people with ambivalent, as opposed to univalent, express polarized responses and engage in biased processing to reduce their discomfort (Bell & Esses, 2002; Hodson, Maio, & Esses, 2001; Nordgren, van Harreveld, & van der Pligt, 2006).

Some prior investigations focus on ambivalent attitudes toward an advocated target; in a communication process, people also may feel ambivalent toward the information source (Chang, 2012). Therefore, to extend prior research on issue ambivalence, this study reasons that when people feel ambivalent toward a message source, they become disoriented, in terms of how to evaluate the endorsed messages, which motivates them to try to make sense of the endorsement to reduce their discomfort. In turn, their interpretations and evaluations of the advocated message may be subject to the influence of contextual factors, which provide inputs for sense-making. Using advertising as an example, this article explores the context-dependent effects of ambivalent communication sources, with the prediction that when ads feature a celebrity endorser toward whom people feel ambivalent, their attitudes toward the endorsed brands vary as a function of the media context.

Because the media context primes different information, it can alter people's responses, generating either contrast or assimilation effects. The former implies a negative relationship between the primed information and the judgment, whereas the latter refers to a positive relationship (Schwarz & Bless, 1992). When viewing an advertisement that features ambivalent endorsers, the embedded context offers either relevant or irrelevant information. For example, stories about the endorser's talents related to the product or issue—or alternatively about his or her ethical lapses in the focal context—appear relevant and applicable, not only for evaluating the endorsers but also for making sense of the endorsement. Other topics likely seem irrelevant and inapplicable to evaluations of either the endorsers or the endorsement. Exposure to relevant information can prime positive or negative concept-related association (conceptual priming; Wyer & Srull 1981), whereas exposure to irrelevant details likely renders more affect-oriented associations more accessible (affective priming; Erber, 1991; Forgas, 1992). These activated associations have different implications for the persuasive effects of the endorsements, especially among consumers with ambivalent attitudes toward the endorsers.

Experiment 1 therefore examines the valence of *relevant* media contexts. Being exposed to positive or negative information about endorsers that is applicable for evaluating them may help people construct standards for comparison, by activating their conceptual associations (*conceptual priming*) and increasing their perceptions that such positive/negative traits are common (Tversky & Kahneman, 1982). If negative characteristics seem common, they likely garner less attention, and instead, people seek to make sense of the endorsement by focusing on positive reasons for using the focal endorser. In this case, relevant media contexts generate *context contrast effects*, and consumers rate the endorsement ad and brand more favorably after reading negative, applicable information but less favorably after reading positive information. However, univalent consumers, who experience no ambivalence or discomfort, may not be as influenced by the context, including the relevance or valence of surrounding articles.

Experiment 2 in turn explores valence in *irrelevant* media contexts. Here, exposure to positive (negative), irrelevant information may induce positive (negative) affect and prime positive (negative) associations of the target celebrity endorser. This influence is affect congruent, implying an *affective priming* process (Erber, 1991; Forgas, 1992). In other words, ambivalent consumers, who are motivated to make sense of the endorsement, likely change their attitudes toward the endorsed product or issue, in accordance with the information activated by this evoked affect, through a *context assimilation effect*. Again, univalent consumers should not generate divergent responses in different ad contexts though.

Finally, Experiment 3 replicates both experiments in one study to test the implied assumptions, namely, that successful sense-making reduces discomfort and increases the perceived diagnosticity of the ad message. By examining how people make sense of advocated messages when they feel ambivalent toward a source, as well as how the media context facilitates such sense-making, this study provides a more complete picture of source effects and their critical role in communication research.

Ambivalent Attitudes

Attitudes refer to "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Eagly & Chaiken, 1993, p. 1). This view assumes that positive and negative evaluations are reciprocal, such that evaluations can be captured on a bipolar scale from very unfavorable to very favorable. Yet positive and negative evaluations of an object instead might be independent (Kaplan, 1972), such that a continuous bipolar scale cannot distinguish those who feel equally positive and negative toward an object from those who feel neither positive nor negative toward it (Priester & Petty, 2001). The former are "ambivalent," in that they experience the simultaneous presence of positive and negative evaluations; the latter are "indifferent" (Kaplan, 1972). In still other settings, people exhibit univalent attitudes, dominated by positive or negative evaluations.

Distinguishing ambivalent from univalent or indifferent attitudes is critical for persuasion researchers (Clark, Wegener, & Fabrigar, 2008; Jonas, Diehl, & Bromer, 1997; Maio, Bell, & Esses, 1996; Petty, Tormala, Brinol, & Jarvis, 2006). Most such studies focus on ambivalent attitudes toward an issue. However, during a communication process, people may have ambivalent attitudes toward not only the issues (e.g., abortion, death penalty) or products (e.g., liquor) but also the source of the communication (e.g., politicians, entertainers). This study explores the effects of endorsement sources toward whom people have ambivalent attitudes, a topic that has drawn scarce research attention.

Ambivalence Toward Celebrity Endorsers in Advertising

In many cases, attitudes toward people and objects can be better described as ambivalent rather than univalent. For example, people feel ambivalent toward their parents, their current (former) boyfriend or girlfriend, their president (Chang, 2012; Priester & Petty, 2001), and various objects, such as watching television, studying, their universities, green products, genetically modified food, nuclear power plants, and taxes on junk food (Chang, 2011a; Clark et al., 2008; Nordgren et al., 2006; Priester & Petty, 2001). Ambivalence also marks most attitudes toward celebrities. For example, attitudes toward a singer are ambivalent if a person appreciates his great voice but finds his provocative remarks or outfits distasteful. In this sense, celebrity endorsers offer an ideal context for exploring the influence of ambivalent communication sources.

In addition, celebrity endorsers appear in approximately one quarter of all U.S. commercials (Shimp, 2000). In extant explorations of their influence, the focus usually centers on their effects when these celebrities are popular (Kamins, 1989) or when their involvement in some scandal causes them to lose popularity (Amos, Holmes, & Strutton, 2008; Miller & Laczniak, 2011). Such investigations ignore the possibility that people may feel ambivalent, rather than univalently positive or negative, toward celebrity endorsers. Advertisers avoid celebrities who have committed serious wrongdoings, toward whom people hold univalently negative attitudes, but

they likely cannot avoid celebrities toward whom some perhaps fans feel univalently positive but others express ambivalence. In an endorsement setting, celebrities also may be responsible merely to attract a target audience's attention (Kaikati, 1987). When selecting a celebrity to promote a product, advertising practitioners thus tend to rate the match between the celebrity and the target audience more important than the likability of the celebrity (Erdogan, Baker, & Tagg, 2001). This matching endorser may be one toward whom many consumers feel ambivalent. Exploring the effects of ambivalent celebrity endorsers thus adds to communication literature but also has practical value.

Ambivalence and Susceptibility to Persuasion Influences

People with highly ambivalent attitudes toward a target are more open to the influence of persuasive information about that target than are those with less ambivalent attitudes (Armitage & Conner, 2000; Hodson et al., 2001), which results in response amplification or biased processing. The explanation for this finding is that inconsistent or ambivalent attitudes cause undesirable tension (Monteith, 1996), which motivates people to alter their attitudes to reduce their discomfort (Bell & Esses, 2002).

Responding to new information offers an efficient way to reduce this discomfort. Therefore, people's attitudes diverge, depending on the direction that a persuasive message advocates (Bell & Esses, 2002; MacDonald & Zanna, 1998). For example, Hodson et al. (2001) demonstrate that people with high ambivalence toward a social issue are more likely to be influenced by messages about the issue than are those who experience less ambivalence when they receive information that indicates their peers support the message. Bell and Esses (2002) also show that response amplification effects become attenuated when people receive information that ambivalence is positive, but the effects get magnified if people are informed that ambivalence is negative. That is, response amplification appears caused by the discomfort associated with ambivalence, in support of a motivational explanation.

The impact of motives to resolve ambivalence-triggered discomfort by engaging in biased reasoning already has been documented. For example, Nordgren et al. (2006) show that ambivalent attitudes cause discomfort and encourage biased processing; ambivalence among those who engage in biased processing also decreases more than among people who do not undertake such processing. Clark et al. (2008) further demonstrate that to the degree that ambivalent participants perceive that a new message can reduce their felt ambivalence, they are more likely to elaborate on that message.

In summary, literature focused on issue attitudes suggests that response amplification or biased processing offer efficient ways to reduce the discomfort associated with feeling ambivalent toward target issues. Extending this line of reasoning, this study postulates that when people have ambivalent attitudes toward an endorser, they are uncertain of how to interpret the endorsement, which motivates them to make sense of the endorsement to reduce their discomfort. Therefore, their attitudes toward the endorsement depend more on the surrounding situational factors, which alter their sense-making.

Proposed Model: Contextual Priming

Contextual priming refers to the phenomenon by which contextual factors render certain information more accessible and thus affect target judgments (Schwarz & Bless, 1992). It is more likely to emerge when information about the target is ambiguous (Yi, 1990a, 1990b). In a similar vein, information rendered accessible by the context may be conducive for sense-making if people feel ambivalent toward the information source.

In an advertising situation, the most common contexts are the programs or editorials in which the ad is embedded. Some advertising research thus examines the influence of preceding program or editorial content on evaluations of the claims featured in subsequent ads, such as when the target can be interpreted in different ways (Yi, 1990a, 1990b) or the preceding content is applicable to claim evaluations (Shen & Chen, 2007). Another research stream focuses on the valence of context-induced affect and its influence on the evaluation and processing of subsequent ads (Goldberg & Gorn, 1987; Lord, Burnkrant, & Unnava, 2001; Martin, 2003). The former focuses on the relevance of the context; the latter pertains to the valence of the media context. By integrating these two streams of research to illustrate the context-dependent effects of ambivalent sources in a proposed model, this article suggests that the valence and relevance of the media context both influence people's evaluations of endorsed information when they feel ambivalent toward the endorser.

Specifically, when a celebrity endorses a brand in an advertisement, the ad might be embedded in a relevant editorial/program that contains applicable information for judging the endorser or in an irrelevant editorial/program that induces affect. Both types can vary in their valence. However, depending on the content, the valence of the different types of contextual information may generate either contrast or assimilation effects among people who are motivated to make sense of an endorsement offered by an ambivalent source.

Valence of Relevant Context: The Effects of Conceptual Priming

As noted previously, conceptual priming refers to the dependence of people's interpretations of information on the concepts or schemas that the context has rendered accessible (Higgins & King, 1981; Wyer & Srull, 1981). When people receive product endorsements from an ambivalent source, both positive and negative associations are accessible, leaving them uncertain of how to interpret the endorsement and perhaps somewhat uncomfortable. To reduce their discomfort, they are motivated to make sense of the endorsement. The content of preceding articles may prime information about similar concepts and enable such sense-making.

Reading articles about other people or celebrities who are similar in some way to the endorser who prompts ambivalence may aid sense-making in two ways. First, recent exposures to a similar concept likely increase the accessibility of related information (Higgins & King, 1981), which also increases frequency estimates (Tversky & Kahneman, 1982), leading to a perception that such situations are common. Second, the accessibility of such information helps establish a standard of

comparison or anchor against which the consumer can compare the focal celebrity endorser (Schwarz & Bless, 1992). For example, a negative, relevant prime should generate perceptions that the problematic traits that the target celebrity is known to have are less serious or more common, so consumers may simply exclude that information when evaluating the endorsement. In this case, contrast effects arise through a subtraction process (Schwarz & Bless, 1992). In other words, the consumer likely believes it is acceptable to ignore negative aspects of the endorser because most people seem to have similar issues. Instead, they attend to the positive characteristics and elaborate on positive reasons for the celebrity endorser's appearance in the ad (e.g., talent, charisma). In contrast, reading stories about positive qualities of other people should generate an opposite contrast effect, such that the belief that positive traits are the norm could direct people's attention more toward the negative traits of the endorsers.

Therefore, reading negative, as opposed to positive, stories about relevant topics should encourage ambivalent consumers to perceive the endorser and endorsement as more favorable and rate the endorsed brand more favorably because their sense-making is facilitated. This study accordingly proposes a *context contrast effect*. When they feel univalent toward an endorser though, people do not need to make sense of the endorsement; their evaluations of the ad and product are not subject to the influence of information provided immediately prior to their ad exposure.

> *Hypothesis 1 (H1)*: Ambivalent consumers generate more favorable attitudes toward the (a) endorsement ad and (b) endorsed brand when they read negative news about other celebrities rather than positive news. Univalent consumers' responses are not affected by the valence of such stories.

Valence of Irrelevant Context: The Effects of Affective Priming

When activated information is not applicable for evaluating a target ad, priming effects are less likely (Shen & Chen, 2007). This finding does not necessarily mean that when information is not relevant for judgments, the context does not affect ad judgments. Rather, if the information is not applicable for evaluating a celebrity, it may not prime relevant concepts, even though the valence of the irrelevant articles still elicits different emotions and influences evaluations of the endorsement, through an affective priming process. Affective priming refers to the influence of affect on the activation of congruent information and inferences (Erber, 1991). That is, positive/negative affect is more likely to activate positive/negative associations of a target and encourage judgments of the target in more positive/negative ways. Representations of information of the same valence are believed to be linked in memory (Bower, 1981). Affective states function as nodes, and the activation of an emotion node can automatically activate information associated with the same emotion. Such activation then may influence interpretations of ambiguous information (Forgas, 1992). In terms of affective priming, Erber (1991) shows that when a person can be described by both positive and negative traits (i.e.,

ambivalent), his or her mood determines which trait category gets activated and his or her subsequent evaluations. Forgas and Bower (1987) also demonstrate that when target persons are described with an equal number of positive and negative traits, happy judges form more positive impressions than do negative judges.

Because people who feel ambivalent toward the target are more likely to respond in accordance with new information (Bell & Esses, 2002; MacDonald & Zanna, 1998), Experiment 2 predicts that they are more subject to the influence of affective priming. Specifically, when people are motivated to make sense of an endorsement by an ambivalent source, the valence of irrelevant articles primes either positive or negative affect and activates affect-congruent information, altering their interpretations of the endorsement in an *assimilative* manner. As a result, irrelevant articles that induce positive affect can generate more favorable ad and brand attitudes than those that induce negative affect among people who feel ambivalent though not among people who feel univalent toward the endorser.

> *Hypothesis 2 (H2)*: When exposed to positive irrelevant stories, as opposed to negative ones, consumers with ambivalent attitudes toward a celebrity generate more favorable attitudes toward (a) the endorsement ad and (b) the endorsed product. Univalent consumers' responses are not affected by the valence of such stories.

Experiment 1

Experiment 1 tested H1 using famous celebrities to whom people felt ambivalent or univalently negative.

Design

Experiment 1 featured a $2 \times 2 \times 2$ between-subjects factorial design. The manipulated factor was the valence of the relevant story (negative versus positive) and ambivalent celebrities (celebrities A and B); the inclusion of two celebrities increased this study's generalizability. Participants were categorized as ambivalent or univalently negative toward the product endorser.

Stimuli

Ad development. The study ad, for a mobile phone, featured a celebrity endorser and product information. The stimuli in the three studies are available on request. Two pretests helped select the celebrity endorser. In the first pretest, 10 graduate students listed celebrities toward whom they felt ambivalent. The four celebrities listed most frequently entered the second pretest, which measured ambivalence using Kaplan's (1972) positive and negative items. In the second pretest ($N = 31$), college students provided separate ratings of their positive and negative attitudes toward the four celebrities (Kaplan, 1972). When entered into Thompson, Zanna, and Griffin's (1995)

Table 1. Ambivalence Scores Based on Thompson, Zanna, and Griffin's (1995) Formula: (P + N)/2—|P—N|.

Positivity Negativity	1[a]	2	3	4
1[b]	1	.5	0	−.5
2	.5	2.0	1.5	1.0
3	0	1.5	3.0	2.5
4	−.5	1.0	2.5	4.0

[a]Participants rated the following positive item: "Considering only the positive qualities of the celebrity and ignoring his/her negative qualities, please indicate how positive his/her positive qualities are on the following 4-point scale: (1) *not at all positive*; (2) *slightly positive*; (3) *quite positive*; and (4) *extremely positive*."
[b]Participants rated the following negative item: "Considering only the negative qualities of the celebrity and ignoring his/her positive qualities, please indicate how negative his/her negative qualities are on the following 4-point scale: (1) *not at all negative*; (2) *slightly negative*; (3) *quite negative*; and (4) *extremely negative*."

measure, these ratings produced an index of attitude ambivalence (see Table 1). The celebrities toward whom a roughly equal number of participants felt ambivalent and univalent were selected as the targets, namely, a variety show host (hereafter celebrity A) and a talk show host (celebrity B).

An ad for a mobile phone used a fictitious name, "ASP," that pretested as neutral and appropriate for mobile phones. The ad copy suggested that the brand had been recently imported and launched in the respondents' home market. The celebrity appeared in the center of the ad, and the ad copy suggested the celebrity endorsed the featured product. Furthermore, the ad copy addressed three attributes, as determined by a pretest ($N = 35$) in which participants rated the importance of various mobile phone attributes on a 7-point Likert-type scale. The three attributes with highest importance ratings were included: good design ($M = 5.91$, $SD = 1.10$), built-in high pixel camera ($M = 5.71$, $SD = 1.32$), and quick repair service ($M = 5.57$, $SD = 1.24$). The copy and layout of the ads remained constant across all conditions.

Valence of relevant articles. In another pretest ($N = 30$), participants gave their impressions of the two target celebrities and two filler celebrities. Their thoughts about each of the target celebrities were first categorized as positive or negative, then further analyzed in terms of content. The most common negative thought about celebrity A, a variety show host, was that he was not careful in his use of language, verbally harassed female guests, and made belittling remarks about women; the most common positive thought was that he was very humorous. For the talk show host celebrity B, the most common negative thought was that he was notorious for his outspokenness and audacity; the most common positive thought was that he had profound knowledge of politics, literature, and current affairs.

Participants assigned to the negative article condition with celebrity A as the product endorser read a magazine article about the problems of verbal sexual harassment; those assigned to the positive article condition with celebrity A read an article about

how great it is for people to have a sense of humor. Those in the negative article condition with celebrity B read a magazine article addressing the problems of outspokenness and audacity, whereas those in the positive article condition with this celebrity read an article about the benefits of having profound knowledge of diverse topics. In a pretest of the valence of the articles, participants ($N = 32$) were randomly assigned to read stories about either celebrity A or B, then rated the positive and negative articles on a semantic differential item: "The article addresses the negative consequences of being XX/positive consequences of being XX," where XX was "humorous," "using verbal harassment," "knowledgeable," or "outspoken," depending on the content. The positive and negative stories differed significantly, with all paired t tests greater than 2.52 and all p less than .02.

Participants and Procedures

One hundred seventy-one participants (46.2% men) were recruited from a university and paid for their participation. When participants signed up for the study, they were asked to complete a short online survey, indicating their subjective ambivalence toward a target celebrity (A or B), as well as other filler celebrities, and rating each of them on Kaplan's (1972) positive and negative items. In the main experiment conducted in a lab two weeks later, participants read that the research pertained to how people processed information in magazines and read magazine articles that contained ads. They read one magazine article, followed by one filler watch ad and then the target ad. All participants finally completed measures designed to assess their *attitudes* toward the ad and the advertised brands. They also indicated their *thoughts* (*open-ended responses*) about celebrities in general.

Independent Variables: Ambivalence Toward the Celebrity

Past studies have used two approaches to assess ambivalence (Priester & Petty, 2001). The most common asks participants to provide separate ratings of their positive and negative attitudes toward a target (Kaplan, 1972). The second asks participants to indicate the degree of ambivalence they feel toward a target (e.g., Sparks, Hedderley, & Shepherd, 1992; Tourangeau, Rasinski, Bradburn, & D'Andrade, 1989). This approach relates to psychological experience and aims to measure subjective ambivalence. Both measurement approaches exhibit predictive validity as indicators of ambivalence (Bargh, Chaiken, Govender, & Pratto, 1992), and the ambivalence indexes they produce are positively correlated across studies (Priester & Petty, 1996).

For Experiment 1, the subjective ambivalence measures served to categorize participants. In a preexposure online survey, on a 7-point Likert-type scale, participants rated their subjective ambivalence using Priester and Petty's (2001) items: "my attitudes toward the person are conflicted" and "my attitudes toward the person are not mixed" (reverse-scored item). Fifty-two participants joined the ambivalent group because their mean score on the two items was higher than 4; 84 participants were categorized as univalent because their averaged score was lower than 4. Because responses from 35

participants with an averaged rating of exactly 4 were removed from the analyses, the test of the hypothesis relied on responses from 136 participants.

Kaplan's (1972) positive and negative items confirmed the effectiveness of those categorizations. The ambivalence scores calculated from Kaplan's (1972) items relied on the previously noted formula (Thompson et al., 1995). The analysis of variance (ANOVA) showed that the subjective ambivalent ($M = 1.88$, $SD = 1.13$) and subjective univalent ($M = .83$, $SD = 1.20$) groups differed significantly on their Kaplan-derived ambivalence, $F(1, 134) = 25.72$, $p < .01$, $\eta_p^2 = .16$, in support of the first categorization method. Most univalent participants (94.2%) were univalently negative, such that their ratings on Kaplan's (1972) negative item were higher than their ratings on Kaplan's positive item.

Dependent Measures

The measure of ad attitudes used Escalas's (2004) scale items: "the ad is good," and "the ad is favorable" (Cronbach's $\alpha = .92$). Brand attitudes were measured using Miniard, Bhatla, Lord, Dickson, and Unnava (1991) scale: "positive," "likable," and "favorable" (Cronbach's $\alpha = .90$). Both relied on 7-point Likert-type scales.

To test the assumption that the positive and negative stories constructed different comparison standards for the target celebrity, participants were asked to list their thoughts about celebrities in general. Two graduate students, unaware of the purpose of the research, coded these listed thoughts as positive, negative, or neutral, after receiving training. The coding units were sentences. They first coded one third of the samples to establish intercoder reliability (Krippendorff's $\alpha = .88$), then split up and coded the remaining questionnaires. The valenced thought scores were created by subtracting the number of negative thoughts from the number of positive ones; greater numbers indicated more positive thoughts.

Results and Analyses

As noted previously, only data from participants categorized as ambivalent or univalent (negative) were analyzed. An ANOVA tested the assumption that ambivalent and univalent participants would generate different levels of positive, as opposed to negative, thoughts about celebrities in general, which indicated an alteration to their comparison standard. The interaction of valenced thought scores approached significant levels, $F(1, 132) = 3.76$, $p = .06$, $\eta_p^2 = .03$. For theory-based hypotheses, tests of simple effects tend to be acceptable (Winer, Brown, & Michels, 1991). Ambivalent participants generated relatively more negative cognitive responses about celebrities in general when the preceding article was negative ($M = -.89$, $SD = 3.40$) rather than positive ($M = .75$, $SD = 2.57$). However, the difference only approached significance, $F(1, 50) = 3.75$, $p = .06$, $\eta_p^2 = .07$. Univalent participants expressed similar numbers of negative thoughts about celebrities in general, $F(1, 82) = .37$, $p = .55$, $\eta_p^2 < .01$.

The ANOVA indicated a significant interaction between ambivalence and story valence on ad attitudes (see Table 2), and as expected, simple effect tests with

Table 2. ANOVA Results for Experiments 1, 2, and 3.

	Ad attitudes			Brand attitudes			Discomfort			Ad diagnosticity		
	F	p	η_p^2	F	p	η_p^2	F	p	η_p^2	F	p	η_p^2
Experiment 1												
Ambivalence (A)	.04	.85	.01	7.87	.01	.06						
Story valence (V)	.70	.40	.01	1.09	.30	.01						
A × V	6.28	.01	.05	2.33	.13	.02						
Experiment 2												
Ambivalence (A)	.28	.60	.01	3.35	.07	.02						
Story valence (V)	.97	.38	.01	1.34	.26	.01						
A × V	3.57	.03	.04	4.31	.02	.04						
Experiment 3												
Ambivalence (A)	.79	.45	.01	3.68	.03	.03	1.34	.26	.01	.70	.50	.01
Story valence (V)	.06	.81	.01	.59	.44	.01	1.67	.20	.01	.14	.71	.01
Story type (T)	.04	.85	.01	.01	.91	.01	.19	.67	.01	.34	.56	.01
A × V	1.36	.26	.01	.79	.46	.01	.08	.92	.01	3.10	.05	.03
A × T	.46	.63	.01	.19	.83	.01	2.31	.10	.02	.54	.59	.01
V × T	8.20	.21	.04	1.51	.22	.01	1.41	.24	.04	4.19	.04	.02
A × V × T	4.79	.01	.04	2.79	.06	.02	5.56	.01	.05	5.11	.01	.04

ambivalent participants revealed that negative stories generated more favorable ad attitudes (Table 3). In contrast, univalent participants expressed roughly equivalent ad attitudes, in support of Hypothesis 1a.

The interaction on brand attitudes was not significant. However, as expected, simple effects tests with ambivalent participants indicated that negative stories generated significantly more favorable brand attitudes, whereas univalent participants rated the brand similarly. Therefore, the simple effects tests supported Hypothesis 1b.

Discussion

The findings from Experiment 1 indicate a contrast effect of media context among ambivalent consumers. Negative relevant stories resulted in higher ratings of ad and brand attitudes than positive relevant stories. Reading stories about other people with similar problems apparently toned down the perceived negativity of the problems or exacerbated their perceived prevalence, which helped participants make sense of the endorsement and allowed them to find a way to reduce their discomfort with the endorsement by the ambivalent celebrity. However, story valence also could generate an assimilation effect if the content is not relevant to the celebrity endorser, which is the question examined in Experiment 2.

Experiment 2

Univalent attitudes can be positive and negative. To confirm that context-dependent effects do not emerge when people hold univalently positive or negative attitudes, Experiment 2 tested Hypothesis 2 by manipulating three types of attitudes (positive, negative, and ambivalent) toward the same celebrity.

Table 3. Simple Effect Tests for Experiments 1, 2, and 3.

Experiment 1

	Ambivalent (N = 52)					Univalent (N = 84)				
	Means					Means				
	Positive (N = 24)	Negative (N = 28)	F	p	η_p^2	Positive (N = 43)	Negative (N = 41)	F	p	η_p^2
Ad diagnosticity (H1a)	2.53 (1.11)	3.19 (1.01)	5.06	.03	.09	2.87 (1.33)	2.67 (1.30)	.50	.48	.01
Ad attitudes (H1b)	3.38 (1.14)	4.18 (1.14)	6.40	.02	.11	4.02 (1.57)	3.62 (1.37)	1.55	.22	.02
Brand attitudes (H1c)	3.99 (.98)	4.44 (.64)	4.04	.05	.08	3.76 (1.07)	3.67 (1.13)	.13	.72	.01

Experiment 2

	Ambivalent (N = 64)					Positive Univalent (N = 64)					Negative Univalent (N = 64)				
	Means					Means					Means				
	Positive (N = 32)	Negative (N = 32)	F	p	η_p^2	Positive (N = 32)	Negative (N = 32)	F	p	η_p^2	Positive (N = 32)	Negative (N = 32)	F	p	η_p^2
Ad attitudes (H2a)	4.48 (1.17)	3.86 (1.20)	4.44	.04	.07	3.92 (1.15)	4.35 (1.08)	2.39	.13	.04	3.95 (1.03)	3.89 (1.08)	.04	.84	.01
Brand attitudes (H2b)	4.44 (1.12)	3.58 (1.18)	8.99	.01	.13	4.08 (1.13)	4.35 (1.05)	.99	.32	.02	4.04 (1.04)	3.77 (1.05)	1.06	.31	.02

Experiment 3

	Ambivalent in relevant context (N = 40)					Ambivalent in irrelevant context (N = 40)				
	Means					Means				
	Positive (N = 20)	Negative (N = 20)	F	p	η_p^2	Positive (N = 20)	Negative (N = 20)	F	p	η_p^2
Ad attitudes (H1a & H2a)	2.93 (1.08)	4.15 (.98)	14.19	.01	.27	4.05 (.59)	3.20 (1.43)	6.06	.02	.14
Brand attitudes (H1b & H2b)	4.27 (1.29)	5.00 (1.03)	3.95	.05	.09	4.97 (.92)	4.38 (1.11)	3.25	.08	.08
Discomfort	3.67 (.68)	3.30 (.67)	2.95	.09	.07	3.40 (.59)	4.10 (1.16)	5.83	.02	.13
Ad diagnosticity	2.53 (1.13)	3.82 (.99)	14.60	.01	.28	3.72 (.64)	2.92 (1.47)	4.97	.03	.12

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Design

Experiment 2 featured a 3 × 2 between-subjects factorial design, including attitude ambivalence (ambivalent, positive univalent, negative univalent) and the valence of the irrelevant story (positive vs. negative).

Stimuli

Participants read a segment from a magazine that contained three parts: a story about a singer, designed to help participants formulate different types of attitudes toward her (i.e., ambivalent, univalently positive, or univalently negative); a movie review irrelevant to that celebrity; and an advertising section with one filler ad and the target ad.

The attitude manipulation story in the first part featured entertainment news about four celebrities: the target and three filler celebrities. The news about the filler celebrities remained neutral. The target celebrity was a somewhat internationally known singer, receiving increasing attention in the markets where the study was conducted. Depending on the attitude type condition, participants read a positive, negative, or mixed story about her; the stories were selected on the basis of a pretest ($N = 90$) that used Kaplan's (1972) positive and negative attitudes items (4-point scale). The second portion of the magazine contained a positive review of a well-liked movie, *Shrek*, and a negative review of a less-liked movie, *10,000* B.C. A pretest ensured that the positive review evoked more positive emotions than the negative review. The details of the pretest are available on request. Finally, the advertising section included two ads: the filler ad followed by the target ad, which featured the celebrity as the endorser. The ad referred to a brand of MP3 player that was not available in the local market; it highlighted three attributes, as determined in a pretest: sound effects, storage capacity, and user friendly.

Participants and Procedures

One hundred ninety-four participants (50.0% men) were recruited from a university and paid for their participation. The instructions indicated that the research project pertained to how people process information in magazines, that the publishers wanted to know how they liked the layout of the magazine, and that they would read a sample segment of a new magazine, *Global Entertainment*, that would be available on the market soon. After reading the entertainment news, they rated how they liked the format and their felt ambivalence toward each featured celebrity. After reading the movie review and the ads, they rated how they liked the ad and brand and how the movie made them feel.

Independent Variables

Ambivalence toward the celebrity. Participants rated Kaplan's (1972) positive and negative items. For the positive attitude item, the linear contrast was significant, t(191)

= 4.72, p = .02; $M_{\text{univalent pos.}}$ = 2.76, SD = .75; $M_{\text{ambivalent}}$ = 2.39, SD = .73; $M_{\text{univalent neg.}}$ = 2.16, SD = .70. The linear contrast also was significant for the negative attitude item, $t(191)$ = 5.35, p < .01; $M_{\text{univalent pos.}}$ = 1.80, SD = .68; $M_{\text{ambivalent}}$ = 2.27, SD = .70; $M_{\text{univalent neg.}}$ = 2.45, SD = .71. Moreover, the positive univalent article generated significantly greater positive attitudes than negative attitudes, $t(65)$ = 6.71, p < .01, and the ambivalent article generated similar degrees of positive and negative attitudes, $t(65)$ = .87, p = .39. Finally, the negative univalent article generated significantly greater negative attitudes than positive attitudes, $t(65)$ = 2.17, p = .03. The manipulation checks thus were satisfactory.

Valence of the irrelevant story prime. Participants rated the movie review on two positive items ("the article is positive" and "the author addresses positive thoughts about the movie"; Cronbach's α = .96) and two negative items ("the article is negative" and "the author addresses negative thoughts about the movie"; Cronbach's α = .98). According to the averaged ratings of the reversed negative items with the positive items, the positive article (M = 6.20, SD = .79) generated significantly higher scores than the negative one (M = 1.77, SD = .83), $F(1, 192)$ = 1446.59, p < .01, η_p^2 = .88. With regard to whether content valence induced different affect, participants rated how the article made them feel on the UWIST emotion scale (Matthews, Jones, & Chamberlain, 1990), which included six positive items ("pleased," "cheerful," "optimistic," "contented," "satisfied," and "happy") and six negative items ("low-spirited," "dissatisfied," "gloomy," "depressed," "sad," and "sorry"). The mean responses to the positive items and reversed negative items (Cronbach's α = .95) provided the manipulation checks. The positive story (M = 5.65, SD = .77) evoked significantly greater levels of positive emotion than the negative story (M = 3.87, SD = 1.01), $F(1, 192)$ = 192.73, p < .01, η_p^2 = .50.

Dependent Measures

For ad attitudes, on 7-point Likert-type scales, participants indicated the degree to which the following evaluative items from MacKenzie and Lutz (1989) applied to the ad: "I like the ad," "I react favorably to the ad," "I feel positive toward the ad," and "the ad is good" (Cronbach's α = .93). For brand attitudes, on 7-point Likert-type scales, participants indicated the degree to which the following evaluative items from Chang (2002) applied to the brand: "good," "positive," "likable," "pleasant," and "good quality" (Cronbach's α = .94).

Results and Analyses

As expected, the ANOVA showed significant two-way interactions between attitude type and story type on ad attitudes and brand attitudes (Table 2). Consistent with expectations, for ambivalent participants, the positive story generated more favorable ad and brand attitudes than the negative story (Table 2). For positive and negative

univalent participants, the influence of story valence was not significant, in full support of Hypotheses 2a and 2b.

Discussion

Experiment 2 demonstrated a context assimilation effect among only ambivalent participants. People who felt ambivalent toward the celebrity endorser rated the ad and advertised brand more favorably when they read positive as opposed to negative irrelevant stories. In contrast, those who held univalent attitudes toward the celebrity did not generate different levels of ad and brand attitudes after reading either type of story.

Discomfort Reduction

The assumption behind Hypotheses 1 and 2 is that people engage in sense-making when viewing an endorsement from an ambivalent as opposed univalent celebrity because they are motivated to reduce their discomfort in response to the endorsement. Prior ambivalence research has indicated that changing attitudes in either positive or negative directions can help reduce the discomfort triggered by ambivalent issues (Hodson et al., 2001). That is, according to issue ambivalence literature, attitude polarization in either direction might reduce the discomfort triggered by ambivalent source. Similarly, this article argues that sense-making might reduce the discomfort triggered by endorsement from an ambivalent source Study 3 tests this.

Moreover, Experiments 1 and 2 offered no evidence of sense-making; therefore, Experiment 3 probes into the sense-making process. If ambivalent people can make sense of the endorsement, they should find the endorsement meaningful and the ad diagnostic. In turn, they rate the ad as more *diagnostic*, defined as "the extent to which a given piece of information discriminates between alternative hypotheses, interpretations, or categorization" (Herr, Kardes, & Kim, 1991, p. 457). Product or ad information is diagnostic if it helps consumers assess product quality, differentiates a product from other alternatives, or facilitates decisions (Chang, 2007; Herr et al., 1991; Richardson, Dick, & Jain, 1994). To the degree that ambivalent participants can make sense of the endorsement by relying on the context information, they should rate the endorsement ad as more diagnostic.

Experiment 3

Experiment 3 extended Experiments 1 and 2 in three important ways. First, it investigated Hypotheses 1 and 2 within the same study by inducing ambivalent, positive, or negative attitudes toward a celebrity. Second, it explored the assumption that discomfort diminished when ambivalent participants could attribute the endorsement to the positive characteristics of the celebrity. Third, it tested the assumption that ambivalent participants rated information as more diagnostic if the contextual information facilitated sense-making about the endorsement.

Design

Experiment 3 featured a $3 \times 2 \times 2$ between-subjects factorial design: individual differences on attitude ambivalence (ambivalent, positive univalent, negative univalent), story valence (positive vs. negative), and story type (relevant vs. irrelevant).

Stimuli

Similar to the procedure in Experiment 2, participants read a portion of a magazine that included (1) a story designed to manipulate different types of attitudes toward the celebrity (ambivalent, univalent positive, or univalent negative), (2) a relevant or irrelevant article, and (3) two ads (filler and target). The attitude manipulation story in the first part featured entertainment news about three celebrities, the target, and two filler celebrities. The target celebrity was a somewhat internationally known television actress, who was receiving increasing attention in the markets where the study was conducted. Depending on the attitude type condition, participants viewed a positive, negative, or mixed story about her. The positive story talked about her excellent performance in a drama; the negative story suggested her acting was bland. The ambivalent attitude prime story provided both positive and negative information. The valence of the stories was determined through a pretest ($N = 58$).

In the irrelevant story condition, the second section contained the same reviews of the two movies used in Experiment 2. In the relevant story condition, it contained stories about people in the entertainment business and their performance and talents. The positive version suggested that most young stars were talented; the negative story indicated that young stars had no talent and instead relied on marketing. The third portion of the magazine segment included two ads, that is, a filler ad followed by the same target ad as in Experiment 2. The only change was that the ad featured a different endorser.

Participants and Procedures

Two hundred forty participants (50.0% men) were recruited from a university and paid for their participation. The procedures were similar to those in Experiment 2.

Independent Variables

Ambivalence toward the celebrity. Participants rated Kaplan's (1972) positive and negative items. For the positive attitude item, the linear contrast was significant, $t(239) = 4.72$, $p = .02$, $M_{\text{univalent pos.}} = 3.01$, $SD = .70$; $M_{\text{ambivalent}} = 2.55$, $SD = .67$; $M_{\text{univalent neg.}} = 1.81$, $SD = .70$. The linear contrast was also significant for the negative attitude item, $t(239) = 5.35$, $p < .01$, $M_{\text{univalent pos.}} = 2.29$, $SD = .48$; $M_{\text{ambivalent}} = 2.71$, $SD = .48$; $M_{\text{univalent neg.}} = 3.39$, $SD = .61$. Moreover, the positive prime article generated significantly greater positive than negative attitudes, $t(79) = 9.09$, $p < .01$. The ambivalent article generated similar degrees of positive and negative attitudes, $t(79) = 1.71$, $p = .09$, and

the negative prime article generated significantly greater negative than positive attitudes, $t(79) = .14.04$, $p < .01$. The manipulation checks were satisfactory.

Valence of relevant story prime. Participants rated the valence of the entertainment articles on two semantic differential items: negative-positive and critical-supportive (Cronbach's $\alpha = .92$). The positive story ($M = 4.93$, $SD = 1.14$) generated more favorable ratings than the negative story ($M = 2.14$, $SD = 1.13$), $F(1, 118) = 180.00$, $p < .01$, $\eta_p^2 = .60$.

Valence of irrelevant story prime. Participants rated the valence of the movie review articles on two semantic differential items: negative-positive and critical-supportive (Cronbach's $\alpha = .95$). The positive story ($M = 5.79$, $SD = 1.12$) generated more favorable ratings than the negative story ($M = 1.48$, $SD = .56$), $F(1, 118) = 714.82$, $p < .01$, $\eta_p^2 = .86$. The evoked affect, measured using the UWIST emotion scale (Matthews et al., 1990; Cronbach's $\alpha = .95$), showed that the positive story ($M = 5.54$, $SD = .80$) evoked significantly greater levels of positive emotion than the negative story ($M = 3.71$, $SD = .93$), $F(1, 118) = 134.25$, $p < .01$, $\eta_p^2 = .53$.

Dependent Measures

The measures of ad attitudes (Cronbach's $\alpha = .85$) were the same as in Experiment 2, and the brand attitude measures (Cronbach's $\alpha = .94$) were the same as in Experiment 1.

To test the two assumptions, participants also rated ad diagnosticity, using Chang's (2010) scale: "The ad provides me with enough information to judge the quality of the product," "The ad helps me tell the quality of the product," and "The ad makes me feel confident in terms of discriminating the quality of the product from others" (Cronbach's $\alpha = .83$). After evaluating the ad, they rated the degree of their discomfort on Monteith's (1996) discomfort scale, with items such as "I feel uncomfortable," "I feel bothered," "I feel uneasy," and "I feel tense" (Cronbach's $\alpha = .75$).

Results and Analyses

Replicating H1a and H2a: ad attitudes. An ANOVA demonstrated that the three-way interaction for ad attitudes was significant (see Table 2). For positive univalent participants, the interaction between story type and story valence was not significant, $F(1, 76) = .09$, $p = .76$. For negative univalent participants, this interaction again was not significant, $F(1, 76) = .22$, $p = .64$. For ambivalent participants though, the story type and story valence interaction was significant, $F(1, 76) = 19.15$, $p < .01$, $\eta_p^2 = .21$. Consistent with Hypothesis 1a, for a relevant, negative story, the ratings were significantly more favorable (see Table 3), and consistent with Hypothesis 2a, when the story was irrelevant, a positive story generated relatively more favorable ratings.

Replicating H1b and H2b: brand attitudes. An ANOVA demonstrated that the three-way interaction for brand attitudes approached significance. For positive uni-

valent participants, the interaction between story type and story valence was not significant, $F(1, 76) = .01$, $p = .94$. For negative univalent participants, this interaction again was not significant, $F(1, 76) = .15$, $p = .70$. For ambivalent participants though, the story type and story valence interaction was significant, $F(1, 76) = 7.20$, $p < .01$, $\eta_p^2 = .08$. Consistent with Hypothesis 1b, for a relevant, negative story, the ratings were significantly more favorable. When the story was irrelevant, even though positive stories generated relatively more favorable ratings, the difference was not significant.

Assumption Test 1: discomfort. An ANOVA indicated that the three-way interaction for discomfort was significant. For positive univalent participants, the interaction between story type and story valence was not significant, $F(1, 76) = 2.72$, $p = .10$. For negative univalent participants, this interaction again was not significant, $F(1, 76) = .71$, $p = .40$. Finally, for ambivalent participants, the story type and story valence interaction was significant, $F(1, 76) = 8.78$, $p < .01$, $\eta_p^2 = .08$. When the article was relevant, negative stories reduced discomfort though this decrease only approached significance; when the article was irrelevant, positive stories significantly reduced discomfort (see Table 2).

Assumption Test 2: ad diagosticity. An ANOVA demonstrated that the three-way interaction for ad diagnosticity was significant. For positive univalent participants, the interaction between story type and story valence was not significant, $F(1, 76) = .03$, $p = .87$, nor was it significant for negative univalent participants, $F(1, 76) = .16$, $p = .69$. But for ambivalent participants, the interaction was significant, $F(1, 76) = 17.97$, $p < .01$, $\eta_p^2 = .19$. When the article was relevant, negative stories generated more favorable ratings; when the article was irrelevant, positive stories generated higher ratings.

It is also important to note that though the positive relevant stories triggered greater positive affect than the negative relevant stories, $F(1, 118) = 56.24$, $p < .01$, $\eta_p^2 = .32$, they did not generate the congruent effects suggested by the affect priming mechanism. Probably because primed concepts were directly relevant for sense-making, the influence of conceptual priming overrode the influence of the prime-triggered affect.

Discussion

Experiment 3 replicated the findings from Experiments 1 and 2. Specifically, in accordance with Experiment 1, negative relevant stories (as opposed to positive relevant stories) improved ad and brand attitudes. Replicating Experiment 2, positive irrelevant stories (as opposed to negative irrelevant stories) generated relatively more favorable ad and brand attitudes. Moreover, likely because negative, as opposed to positive, relevant stories enabled sense-making in the expected direction, by constructing a comparison standard, ambivalent participants rated the ad as more diagnostic. Their discomfort also diminished to a relatively greater degree though not to a significant level. In contrast, perhaps because the positive, as opposed to negative, irrelevant story

facilitated sense-making to a great degree through affect priming, ambivalent participants rated the ad as more diagnostic and noted significantly reduced discomfort.

General Discussion

Contributions and Findings

This study has demonstrated the malleability of effects exerted by message sources toward which people hold ambivalent attitudes. To demonstrate that the influence of ambivalent sources on message evaluations are malleable and context dependent, the experiments included two possible scenarios that are well-situated in prior priming literature to illustrate that the same message sources can generate strikingly different effects (i.e., contrast vs. assimilation). Accordingly, this article adds to communication literature in three important ways. First, it explored the effects of ambivalent attitudes toward a communication source. Second, it demonstrated that when people feel ambivalent, as opposed to univalent, toward a communication source, the influences of the message are more subject to the influence of media contexts. Third, it noted two types of contextual priming effects, conceptual and affective, and confirmed context-contrast and context-assimilation effects on evaluations of information.

When people feel ambivalent toward a source (celebrity endorser), reading a *relevant* story about others affects their responses to the endorsed messages (endorsement ad) and the advocated issues (advertised brand). This reading task primes different associations with the source, which help construct a comparison standard and affect sense-making. Because celebrities are hired for positive reasons, reading a negative story about others who share the same problems may lower the comparison standard and facilitate sense-making in the positive direction. Therefore, it improves persuasion effects (ad and brand attitudes). Because a negative, as opposed to positive, story facilitates sense-making, ambivalent people also rate the ad as more diagnostic and report lower discomfort after their ad evaluation. In contrast, people who feel univalent toward a source are not as subject to the influence of contextual media content.

When people feel ambivalent toward a source (celebrity endorser), reading an *irrelevant* story also affects their responses, perhaps because reading a positive/negative story evokes positive/negative emotions. This emotion in turn primes more positive/negative associations and influences message interpretations. When positive affect facilitates sense-making in a positive direction, consistent with the basic rationale for endorsements, ambivalent people rate the ad as more diagnostic and sense significantly decreased discomfort. In contrast, when people feel univalent toward the source, their responses do not vary as a function of the media context.

Further Research Directions

Extant research has focused on how people engage in systematic processing and scrutinize argument quality when they feel ambivalent about particular issues (Jonas et al., 1997; Maio et al., 1996). However, this study only manipulates the content

of contextual information, not the content of the ad messages. If people who feel ambivalent toward the endorser are motivated to make sense of the endorsement and respond to the ad differently from those who feel univalent, they likely scrutinize the message to help them reduce their discomfort. Strong arguments thus may work more effectively than weak arguments among ambivalent consumers; further research should explore this possibility.

Experiment 1 featured familiar celebrities toward whom participants held ambivalent or univalent attitudes; Experiments 2 and 3 used international celebrities with whom participants may have been less familiar and manipulated their ambivalence. Despite the replication in Experiment 3 that suggested the findings were robust for familiar and unfamiliar celebrities, it is not clear whether people's motives to make sense of an ambivalent endorsement vary as a function of source familiarity. People may be accustomed to ambivalent feelings toward familiar celebrities and less motivated to engage in sense-making. Alternatively, they may feel a greater degree of discomfort in association with an ambivalent feeling toward celebrities with whom they are familiar, such that they are more likely to attempt to make sense of the endorsement. Additional research should explore both possibilities.

This study examines responses to ambivalent celebrities who endorse a product; celebrities also endorse social causes or policies. When an endorsement entails less manipulative intent and signals social responsibility (e.g., AIDS prevention), people with ambivalent feelings may respond differently. Similarly, ambivalent attitudes may pertain not just to the endorser but also to the advertised brand (e.g., Toyota) or the media in which the endorsement appears (e.g., *Playboy*). Therefore, the way consumers respond to ads for a brand or ads embedded in a media vehicle toward which they feel ambivalent are important research questions to explore too.

Prior research suggests that integral affect (i.e., triggered by the target) is more likely to influence judgments as a peripheral cue, whereas incidental affect (i.e., triggered by context factors) alters judgments through affect priming (Chang, 2011b). Similarly, the present study argues that the valence of irrelevant contextual primes affect judgments through an affect priming mechanism. However, affect triggered by irrelevant primes also could influence sense-making as a peripheral cue, such that people infer how well they like an endorsement on the basis of how they feel. Further research should determine which mechanism better explains the effects triggered by the valence of irrelevant primes.

People feel ambivalent toward a celebrity in two main situations: (1) when they have both positive and negative associations and the negative associations are not caused by truly serious misconduct and (2) when their attitudes shift from positive to negative after the disclosure of serious misconduct by the celebrity. Experiment 1 identified two ambivalent celebrities through multiple pretests, both of whom exhibited minor personality issues but not serious misconduct. Experiments 2 and 3 manipulated ambivalence toward lesser known celebrities by exposing participants to univalent or mixed information about their talents, not about serious misconduct. Thus all the ambivalent celebrities in this study fall into the first category.

According to Petty et al.'s (2006) PAST theory though, when people's attitudes toward an object shift from positive to negative (or vice versa), they may feel implicitly ambivalent toward the target, without being consciously aware of it. When scandals happen, advertisers often halt the endorsement, but some ads might persist in print media, or the celebrities could be hired later as product endorsers. Additional research should explore whether ambivalence toward such celebrities is implicit and whether the effects of these celebrity sources are subject to context-dependent effects.

In line with Jonas et al. (1997), this study exposed participants to positive, negative, or mixed information to manipulate their attitudes toward some lesser known celebrities. This attitude formulation process served as a conservative test because people are less likely to feel strong discomfort when they view an endorsement by a celebrity toward whom they have just formed ambivalent attitudes. They also should be less motivated to make sense of the endorsement and be less subject to context-dependent effects. If context-dependent effects arise in such contexts, they should be even more prevalent in other contexts that involve celebrities about whom people have long felt ambivalent. More research should compare whether newly formed and deep-rooted ambivalence are subject to different degrees of contextual influences.

Limitations and Practical Implications

The findings of this study should be interpreted with certain limitations in mind. First, Experiment 3 measured discomfort only after, not before, the ad evaluations. None of the experiments tapped participants' attitudes toward the celebrities throughout the experimental session, such as before and after ad evaluations. The lack of such measures made it difficult to establish the complete process that participants underwent. Therefore, the magnitude of discomfort reduction or attitude changes cannot be verified. Second, the ad in Experiment 1 was for a fictitious brand; those in Experiments 2 and 3 referred to unfamiliar brands. When people feel ambivalent toward a celebrity, an endorsement for a known or familiar brand could reduce the context-dependent effects. For example, existing brand attitudes could be powerful enough that attitudes toward the brand are not subject to contextual cues, even if consumers feel ambivalent toward the celebrity. Moreover, the congruency between the product and the celebrity was higher in Experiment 2, which featured a singer, than in Experiment 3, which featured an actor. Congruency thus may exert unnecessary influences. Third, the three experiments used student participants, who may be more tolerant of coexisting positive and negative evaluations of celebrities than the general public. Fourth, it is difficult for advertisers to determine editorial content, which may limit the implication value of context-dependent effects.

Despite these limitations, the findings have value for health communication, political communication, and advertising professionals who intend to develop effective persuasion campaigns with celebrities. People's attitudes toward communication sources often are ambivalent, yet prior literature has not addressed this state nor determined

whether advertisers should avoid celebrities toward whom people may feel ambivalent to endorse a product, issue, good cause, or political candidate. The findings reported herein suggest that the effectiveness of such celebrity endorsers varies; campaigners thus should seek out endorsers who arouse unanimously, univalently positive attitudes. When editorial content is not under the advertiser's control, they should use ambivalent endorsers only with great caution. In summary, the study findings shed light on the role of ambivalent attitudes toward sources in a persuasion process and offer value for both communication professionals and researchers.

Declaration of Conflicting Interests

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Author Biography

Chingching Chang (PhD, University of Wisconsin-Madison) is university chair professor at National Chengchi University in Taiwan. Her research interests include persuasion, advertising effects, and health communication. She has published in *Communication Research, Journal of Communication, Human Communication Research, Media Psychology, Communication Theory, Journal of Health Communication, Health Communication, Journal of Advertising, Journal of Advertising Research, International Journal of Advertising, Psychology & Marketing, Journal of Consumer Affairs, Journal of Business and Psychology, Political Communication, The Harvard International Journal of Press/Politics*, and *Sex Roles* as well as many Chinese journals.