I’m Not a Doctor, but I Play One on TV: 
The Effects of Context and Character Perceptions 
on Advertising Effectiveness

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This study examines how placing endorser ads in the context of entertainment content 
that also features the endorser affects responses to the endorser and to the ads. An 
experiment (N = 161) found that viewing an endorser ad in the context of entertainment 
content featuring that endorser does not affect responses to the ad; however, frequent 
viewing of such content results in more favorable perceptions of the character portrayed 
by the endorser, which in turn leads to more favorable responses to endorser and ad 
alone. Character perceptions thus are an important influence on endorser perceptions 
and ad effectiveness. Implications of the findings for advertising research are discussed.

Keywords: advertising, celebrity endorsers, priming, entertainment, character 
perception

The phrase “I am not a doctor, but I play one on TV” was spoken by the actor Chris Robinson in a 
1984 commercial for Vicks Formula 44 cough syrup. At the time, he played a doctor on the TV soap opera 
General Hospital, and the ad’s not-so-subtle message was that viewers should listen to him because he 
portrayed a doctor on TV. The ad was thus trying to link a fictitious character’s attributes to the celebrity 
endorser who portrayed him.

Although it is difficult to assess exactly what percentage of ads use celebrity endorsers, a marked 
rise in their use in the last 30 years (Erdogan, 1999) makes the study of celebrity endorsers increasingly 
pertinent. Athletes commonly appear in ads aired during broadcasts of their competitions. For example, 
Visa commercials featuring Olympic athletes Emily Cook, Michelle Kwan, and Bode Miller were aired 
prominently during the 2006 Olympic Winter Games (“Visa Launches,” 2006). More recently Danica
Patrick, Tiger Woods, Michael Phelps, and Peyton Manning have endorsed products (Simmers, Damron-Martinez, & Haytko, 2009). However, this trend is not limited to athletes. In the past, most high-profile celebrities, fearful that appearing in ads in the United States would hurt their credibility and status, appeared only in ads broadcast in Asia. Now, even high-profile celebrities like Nicole Kidman, Robert De Niro, and Halle Barry have appeared in U.S. ads for various products, including Chanel No. 5, American Express, and Revlon (Ingrassia, 2005). Moreover, the increased number of celebrity-featuring ads has allowed advertisers to place the ads within entertainment content featuring the same celebrities. To date, the effectiveness of ads using endorsers in this context has been relatively unstudied: most research dealing with entertainment content’s effects on products and brands has focused on product placement (see Galician, 2013, for overview; e.g., Panda, 2004; Russell, 2002; Van Reijmersdal, Jansz, Peters, & Van Noort, 2010). One of the few studies examining endorsers in entertainment revealed that entertainment experiences can enhance brand attitudes through engagement with celebrity endorsers (Hung, 2014), but this research did not specifically examine the context of endorser ads. The present study fills this gap by examining whether placing ads within entertainment content featuring celebrity endorsers increases the ads’ effectiveness.

**Celebrity Endorsers**

Associative learning theory suggests that both celebrities and brands act as nodes that become linked over time (Collins & Loftus, 1975; Lord & Putrevu, 2009; Till & Shimp, 1998). According to Till and Shimp (1998), "practitioners hope their target audience’s positive feelings toward a chosen celebrity will transfer to the endorsed brand or will otherwise enhance the brand’s standing" (p. 67). In their review of celebrity endorser literature, Amos, Holmes and Strutton (2008) suggest that the most important factors in a celebrity endorser’s effectiveness are the fit between the celebrity and the endorsed product, and the perceived credibility of the celebrity. Furthermore, the match-up hypothesis proposes that congruency between the product and the celebrity is requisite for the ad’s effectiveness (Kahle & Homer, 1985; Kamins, 1990; Kamins & Gupta, 1994; Till, Stanley, & Priluck, 2008). For example, Tiger Woods would be a better endorser of golf clubs than of coffee because of the congruency between his expertise as a golfer and golf clubs: his perceived expertise enhances his credibility in viewers’ minds, and celebrities who are perceived as credible are more likely to influence purchase decisions and brand attitudes (Goldsmith, Lafferty, & Newell, 2000; Hovland & Weiss, 1951).

Source credibility has been conceptualized as perceptions of a communicator’s trustworthiness, expertise, and attractiveness (Ohanian, 1990), but there is some disagreement about how these components interact to make celebrity endorsers effective. For example, perceived celebrity expertise was found to be the most important factor influencing viewers’ perceptions of brands, products, and purchase intentions (Ohanian, 1991; Premeaux, 2009). On the other hand, physical attractiveness and trustworthiness influenced attitudes but were not found to influence purchase intentions (Ohanian, 1991). However, taken together, celebrity trustworthiness, expertise, and attractiveness were the source-related factors found to most heavily influence purchase intentions and attitudes toward ads and brands (Amos et al., 2008). Furthermore, Choi and Rifon (2007) suggested that attractiveness, trustworthiness, and expertise do not stand alone in relation to celebrity credibility; rather, the meaning and history of celebrities’ backgrounds lead to their perceived credibility. Likewise, negative information about celebrities
can detrimentally affect perceptions of their credibility and thus their effectiveness as endorsers (Amos et al., 2008; Till & Shimp, 1998). Supporting this line of inquiry, Zhou and Whitla (2013) found that consumer evaluations of celebrity endorsers’ moral reputations determined reactions to those endorsers and the brands they endorsed. A celebrity endorser’s effectiveness may thus depend not only on congruency between the product and the celebrity’s expertise, but also on individuals’ overall perceptions of the celebrity.

**Character Perceptions**

The varied, extensive cultural meanings associated with a celebrity concern such things as the celebrity’s status, class, gender, age, personality, and lifestyle (Erdogan, 1999). Even meanings associated with the brands a celebrity endorses affect the celebrity’s overall image (Arsena, Silvera, & Pandeelaere, 2013). Similarly, the characters a celebrity portrays can influence perceptions of that celebrity endorser. For example, an actor who often portrays villainous or disliked characters may be perceived differently from an actor who tends to portray heroic or liked characters. Moreover, specific attributes of portrayed characters (e.g., expertise, knowledge, trustworthiness) may transfer to actors, thereby increasing or decreasing their perceived credibility. Although their research focused on animated spokes-characters (such as the Geico gecko), Kyung, Kwon, and Sung (2010) found that certain personality traits (e.g., sincerity, competence) influenced these characters’ credibility. Human character perceptions may also affect endorser perceptions. Therefore, we propose the following hypothesis:

**H1:** Perceptions of fictional characters will affect perceptions of the celebrity endorsers who portray them (when controlling for endorser familiarity and TV show viewing frequency).

Frequent viewing of a TV show featuring an endorser can affect perceptions of the endorser, as can mere familiarity with the endorser. Familiarity has been defined as “knowledge of the source through exposure” (Erdogan, 1999, p. 299), and a meta-analysis of celebrity endorser studies found source familiarity to be a significant predictor of source credibility (Amos et al., 2008). Therefore, we have controlled for TV show viewing frequency and endorser familiarity in the hypothesis above.

**Contextual Priming**

Research on priming and ad placement indicates that context is a key factor in ad effectiveness (Broach, Page, & Wilson, 1995; Dahlen, 2005). Therefore, when people watch a TV show that features a particular actor and then see an ad with the actor as an endorser, they will probably respond differently to the ad, brand, and product than they would if the ad were placed in another context.

Social psychological priming theory suggests that stimuli prime, or make accessible, certain emotions and cognitions, and that these primed emotions or cognitions affect interpretation of subsequent stimuli (see DeCoster & Claypool, 2004, for a review of literature). However, the direction of priming effects is not always predictable because priming can have either assimilation or contrast effects. Assimilation effects occur when judgments are influenced in the direction of the prime; contrast effects result from evaluations in the opposite direction of the prime. Based on their meta-analysis of priming
literature, DeCoster and Claypool (2004) suggested that contrast effects result from corrective processing, a type of processing that occurs only when individuals are aware, motivated, and possessed of mental capacity to process the primed information in this way. Therefore, as people are generally not motivated to process ads thoroughly, priming in this context will likely result in assimilation rather than contrast effects.

An ad’s context or placement within other content (e.g., TV shows, magazine articles, blogs, other ads) has been shown to affect ad and product evaluations through priming (Dahlen, 2005; Yi, 1990). For example, a banner ad that was thematically congruent with the context of a blog was rated more favorably than one that was not congruent (Segev, Wang, & Fernandes, 2014). Moreover, Yi (1990) found that magazine articles preceding an ad cognitively prime individuals to interpret ambiguous product information within the ad in a particular way. The type of medium in which an ad is placed has also been found to prime certain brand attributes. Dahlen (2005) found that placing an ad in a creative medium caused more positive brand associations to be primed, resulting in higher ad effectiveness. Similarly, Broach et al. (1995) showed that when people watch pleasant TV programs, they perceive commercials as pleasant too. Moreover, Chang (2014) found that individuals who hold ambivalent views of a celebrity endorser are more susceptible to the influence of contextual media content.

Placing an ad in the context of entertainment content featuring the ad’s celebrity endorser may prime certain endorser or character attributes, making them more accessible to audiences and thus affecting the ad’s effectiveness. For example, Dennis Haysbert, an actor who played a successful, well-liked U.S. president on Fox’s hit TV show 24, is also a spokesperson for Allstate auto insurance, for which many commercials were aired during 24 broadcasts. Therefore, Allstate may have hoped viewers would make direct associations between Dennis Haysbert’s character and Allstate insurance. Viewers who perceive a celebrity endorser as the character he or she portrays in a movie or TV show rather than the actual person he or she is may end up misperceiving the endorser’s actual level of expertise.

Contextual priming may therefore help explain people’s responses to ads featuring celebrities, particularly if the ads are broadcast or placed in a context that primes the endorser’s celebrity status or positive character qualities in people’s minds. Seeing an individual on TV, in magazine stories, or in other media may prime a celebrity heuristic that could result in more positive responses to the endorser and to an ad that features him or her. Likewise, a TV show that features an actor as a character may prime thoughts of the actor as the character he or she portrays. Placed in this context, advertising that includes the actor as a spokesperson may then be interpreted in terms of the character attributes primed by the TV show in which the actor appears. If the character the actor portrays is perceived positively, these feelings could transfer to the endorser and to the ad, brand, or product advertised by the celebrity endorser. Therefore, we propose the following hypotheses:

\[ H_2: \text{ Placing an ad with an endorser in the context of content that also features the endorser will affect perceptions of the celebrity endorser.} \]
**H3:** Placing an ad with an endorser in the context of content that also features the endorser will affect (a) memory of the ad, (b) attitude toward the ad, (c) attitude toward the advertised brand, and (d) purchase intentions.

**Priming Frequency**

Two proposed models may explain priming’s effects on evaluations: the storage bin model and the excitation transmission model. The storage bin model suggests that information becomes stacked according to when it is processed (Wyer & Srull, 1980). The most recently primed information goes on top of other information, becoming the most accessible in memory and thereby the most likely to be used in subsequent evaluations. In other words, according to this model, recency determines the accessibility of information.

However, the excitation transmission model of priming proposes that frequency of priming outweighs recency. Specifically, when a construct is primed, its mental representation becomes activated or excited. Once the representation is excited to a threshold level, the construct can be used when making judgments. Because representations are more accessible in memory when they are activated, the more often a mental representation is activated, the more likely it is to be used in subsequent evaluations. In support of this model, Higgins, Bargh, and Lombardi (1985) found that when there is a delay between the priming of information and evaluation, the most frequently primed information is more likely to be used in evaluation than the most recently primed information. Therefore, individual fans of a particular show have had certain character associations primed frequently and thus may be more influenced by these character associations than are individuals who lack previous associations with the actor in the ad.

In addition, frequent viewers of a TV show featuring an endorser are more likely to be familiar with that endorser. Frequently viewing a TV show featuring an endorser may thus affect perceptions in two ways. First, frequently priming character associations with the endorser may affect endorser perceptions and ad effectiveness. Second, seeing the actor repeatedly may make him or her more familiar, which could similarly influence responses. Therefore, endorser familiarity was added as a control variable to the following hypotheses.

**H4a:** Frequency of viewing a show featuring an endorser who also appears in an ad will affect perceptions of that endorser (when controlling for endorser familiarity).

**H4b:** Frequency of viewing a show featuring an endorser who also appears in an ad will affect memory of the ad, attitudes toward the ad and brand, and purchase intentions (when controlling for endorser familiarity).

**Method**

**Participants**

A total of 161 students participated in this study for course credit. They were recruited from various communication courses at two large U.S. universities, one in the Northeast and the other in the
West. Of the participants in the sample, 63.1% were females ranging in age from 18 to 50 ($M = 21.87$, $SD = 4.76$). Eighty-five percent of the participants reported being White, and the remainder indicated belonging to an ethnic minority group. Although not representative of the entire population, a student sample was used because most students fall within the target population for the TV shows and advertisements tested.

Participants were randomly assigned to one of two conditions (endorser present, endorser absent) in a between-subjects post-test only experiment. Random assignment was successful in that participants did not differ significantly in age (endorser present, $M = 21.56$, $SD = 5$; endorser absent, $M = 22.19$, $SD = 4.50$, $t(158) = .84$, $p = .40$), gender (endorser present, 62.2% female; endorser absent, 64.1% female, $\chi^2 = .42$, $p = .87$), ethnicity (endorser present, 85.4% White; endorser absent, 84.6% White, $\chi^2 = 1.00$, $p = .90$), or endorser familiarity (endorser present, $M = 3.86$, $SD = 1.67$; endorser absent, $M = 3.78$, $SD = 1.74$, $t(122) = -.24$, $p = .91$) between the two conditions.

**Procedure**

Participants were seated in a room with 10 to 15 other participants and informed that they would be watching a 20-minute segment of a popular TV show, either *24* or *Private Practice* (*PP*), including commercials that originally aired during the show’s TV broadcast. They were instructed to watch as they would at home. About 13 minutes into the show, five commercials, each lasting approximately 30 seconds, were shown. The third ad in the sequence featured either Dennis Haysbert in the *24* conditions or Kate Walsh in the *PP* conditions. The show then continued for another 10 minutes. After the video ended, participants were given a questionnaire that measured demographic information, memory of the ads, attitudes toward the ads and brands, purchase intentions, frequency of viewing the TV show prior to the experiment, familiarity with the endorser prior to the experiment, and character perceptions (only in the endorser present condition).

**Stimulus Materials**

Two popular TV shows, *24* and *PP*, were selected based on a lead actor’s involvement in a TV ad. Dennis Haysbert appeared in the first four seasons of the show *24* as David Palmer. The actor was also a spokesperson for Allstate and appeared in numerous ads for the insurance company. The character David Palmer was an attractive Democratic senator who became the first African-American president of the United States. He was portrayed as someone with great integrity who cared deeply about the welfare of the American people, but whose public and private life were complicated by his scheming wife.

Kate Walsh played *PP’s* lead character, Dr. Addison Montgomery, and appeared in ads for Cadillac. An attractive, world-class neonatal surgeon in her early 40s, Addison worked for a private practice in Santa Monica, California. She was portrayed as a highly competent surgeon who struggled with her private life. Many episodes centered on her desire to find a mate and have a baby.
The two selected shows were thematically distinct: 24 was about an anti-terrorism government agent; PP was about a medical practice. An episode of each show was selected and edited so that in the endorser present condition, the character portrayed by the celebrity endorser (either Kate Walsh or Dennis Haysbert) featured prominently in the episode; in the endorser absent conditions, the characters portrayed by the celebrity endorsers were completely edited out of the episode. The ads in the commercial break were selected based on their appearance on TV at the time this research was conducted. In the PP conditions, ads for Electrolux appliances, Apple iPhones, Cadillac cars, Aquafresh toothpaste, and Outback Steakhouse were included in the commercial break; in the 24 conditions, ads for Wrigley’s Doublemint gum, Allstate, Toyota cars, Verizon Wireless, and Dunkin’ Donuts were included. To mask the true nature of the study, the questionnaire included questions about three of the ads aired during the commercial break.

**Measures**

**Character perceptions.** For those in the endorser present conditions, perceptions of the characters the endorsers portrayed were measured with five items adapted from media effects research (e.g., Krakowiak & Oliver, 2012; Krakowiak & Tsay-Vogel, 2013). The items were measured on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) and averaged to create a character perception scale with higher values indicating more positive perceptions (e.g., *I would like to be friends with someone who is like the main character, I liked this character*, etc., α = .85, M = 5.26, SD = 1.14).

**Endorser perceptions.** Perceptions of the celebrity endorser were measured with six 7-point Likert-type scales (e.g., *not credible-credible, not likeable-likeable, hesitant-confident*, etc.). One of the items (i.e., *unattractive-attractive*) showed low levels of item-to-total correlations and was subsequently dropped from the scale. An endorser perception scale was created by averaging the ratings of the five remaining items, with higher values indicating more favorable attitudes (α = .87, M = 5.25, SD = 1.17).

**Memory of ads.** Memory was measured with both recall and recognition items. The recall question asked participants to list as many of the brands and products as they could remember from the ads. If participants wrote down either the product or brand name of the endorser ad, they received a 1 on the recall item; if they did not write down either the product or brand name of the endorser ad, they were given a 0 for the recall item. Two recognition questions asked participants to pick out the specific (1) product and (2) brand featured in the ad with the specific celebrity endorser (e.g., *The actor Dennis Haysbert, pictured below, appeared in an advertisement for which of the following brands? A. Allstate B. Progressive C. State Farm D. Geico E. I don’t remember*). Participants who answered both recognition questions correctly by selecting the correct product and brand received a 2 on the recognition items; those who answered only one question correctly received a 1 on the recognition items. The correct responses for the recall and recognition items were then summed for each participant to create a memory index. The lowest score of 0 indicated no correct responses on the memory questions, and the high score of 3 indicated correct responses on all memory questions (1 recall and 2 recognition items).

**Attitude toward ad.** Attitudes toward the ads were measured with seven 7-point semantic differential scales adapted from previous advertising research (e.g., *bad-good, unlikeable-likeable, not*
interesting-interesting, etc.) (Lee & Aaker, 2004; Madden, Allen, & Twible, 1988; Mitchell & Olson, 1981; Zhang & Zinkhan, 2006). One of the items (i.e., uninformative-informative) showed low levels of item-to-total correlations and was subsequently dropped from the scale. An attitude toward ad scale was created by averaging the ratings of the six remaining items, with higher values indicating more favorable attitudes ($\alpha = .83, M = 4.71, SD = 1.06$).

**Attitude toward brand.** Attitudes toward the brands featured in the ads were measured with six 7-point semantic differential scales adapted from previous research (e.g., dislike-like, negative-positive, unfavorable-favorable, etc.) (Bruner, 1998; Homer, 2006; Mitchell & Olson, 1981; Mittal, 1990; Putrevu, 2008; Zhang & Zinkhan, 2006). An attitude toward brand scale was created by averaging the ratings of the six items, with higher values indicating more favorable attitudes ($\alpha = .89, M = 4.91, SD = 1.15$).

**Purchase intentions.** Purchase intentions for the products featured in the ads were measured with four 7-point semantic differential scales adapted from previous research (e.g., unlikely-likely, improbable-probable, etc.) (Bearden, Lichtenstein, & Teel, 1984; Mitchell & Olson, 1981; Putrevu, 2008; Zhang & Zinkhan, 2006). A purchase intention scale was created by averaging the ratings of the four items, with higher values indicating more likelihood of purchasing the product ($\alpha = .93, M = 3.67, SD = 1.61$).

**Prior Viewing.** Prior viewing of the TV show was measured with one yes or no item that asked participants whether they had ever seen the TV show (either 24 or PP) before. Across conditions, 38.4% of participants had previously viewed an episode of the TV show (33.3% had seen an episode of PP; 43.6% had seen an episode of 24).

**Frequency of viewing.** Participants were asked to indicate how often they watched this TV show on a 7-point Likert-type scale ranging from 1 (very rarely) to 7 (always). Participants who answered that they had never seen the TV show on the prior viewing question were automatically assigned a zero for the frequency of viewing question ($M = 1.09, SD = 1.87$).

**Endorser familiarity.** Familiarity of the endorser was measured with an item that asked participants to “indicate how familiar you were with the actor Kate Walsh/Dennis Haysbert before today” on a scale from 1 (not familiar) to 7 (very familiar) ($M = 3.82, SD = 1.70$).

**Results**

To test the proposed effects of character perceptions on endorser perceptions, we used a multiple linear regression analysis. To test the effects of endorser presence on responses to ads, we conducted a series of factorial analyses of variance (ANOVA). Prior viewing was added as a factor in these analyses because having viewed the TV show prior to the experiment could affect responses to the endorsers and ads. Finally, we tested the relationships among frequency of TV show viewing and endorser perceptions, attitudes toward the ad, and attitudes toward the brand using a series of multiple regression analyses. In addition, we undertook a path analysis to further explore relationships among the variables.
H1 proposed that perceptions of the character played by an endorser in a TV show would affect perceptions of the endorser, controlling for viewing frequency and endorser familiarity. The analysis revealed that character perceptions were positively associated with endorser perceptions ($\beta = .39, t = 3.36, p < .001$), even when controlling for viewing frequency ($\beta = .06, t = .52, p = .61$) and endorser familiarity ($\beta = .14, t = 1.24, p = .22$). Therefore H1 was supported.

H2 predicted that placing an ad with an endorser in the context of content that featured the endorser would affect perceptions of the celebrity endorser. To test this hypothesis, a 2 (TV Show: 24, PP) X 2 (Endorser: Absent, Present) X 2 (Prior Viewing: Yes, No) analysis of variance was conducted. The analysis revealed no main effect of endorser on perceptions of the celebrity endorser, $F(1, 151) = .40, p = .53$. However, the analysis revealed a main effect for TV show, $F(1, 151) = 14.71, p < .001$, namely, participants who viewed 24 had significantly more positive perceptions of the celebrity endorser ($M = 5.67, SE = .12$) than did those who viewed PP ($M = 5.00, SE = .13$). A main effect for prior viewing was also found, $F(1, 151) = 6.55, p < .01$: participants who had never seen the TV shows had less favorable impressions of the endorsers ($M = 5.11, SE = .11$) than did those who had viewed them before ($M = 5.56, SE = .14$). These main effects should be interpreted in light of a significant TV Show X Prior Viewing interaction effect, $F(1, 151) = 5.87, p < .05$, which showed that those in the PP condition who had seen the show significantly more favorably ($M = 5.44, SE = .21$) than did those who had never seen the show before ($M = 4.56, SE = .15$), but for participants in the 24 condition, prior viewing did not affect endorser perceptions (Prior Viewing: Yes, $M = 5.68, SE = .18$; No, $M = 5.66, SE = .16$). Furthermore, those who had seen the shows before had similar perceptions of the endorsers (TV Show: 24, $M = 5.68, SE = .18$; PP, $M = 5.44, SE = .21$), but those who had never seen the shows had more favorable perceptions of the endorser in 24 ($M = 5.66, SE = .16$) than of the endorser in PP ($M = 4.56, SE = .15$) (see Table 1). Therefore, H2 was not supported in that endorser presence or absence in the show did not affect endorser perceptions. However, prior viewing had an effect on endorser perceptions for one of the TV shows (PP), but not the other (24).

| Table 1. Prior Viewing X TV Show Interaction Effect on Endorser Perceptions. |
|---------------------------------|-----------------|-----------------|
| **TV Show**                   | Prior Viewing  | **No**           | **Yes**          |
| 24                             | $M$            | 5.66$_{AB}$     | 5.68$_{AB}$     |
|                                 | $SD$           | .16             | .18             |
| PP                             | $M$            | 4.56$_{AB}$     | 5.44$_{BA}$     |
|                                 | $SD$           | .15             | .21             |

*Note. Using Holm’s sequential bonferroni post hoc comparisons, within rows, means with no lowercase subscript in common differ at $p < .05$; within columns, means with no uppercase subscript in common differ at $p < .05$. |

H3a–d predicted that placing an ad featuring a celebrity endorser in the context of content that also featured that celebrity would affect responses to the ad. Specifically, the hypotheses predicted that (a) memory of the ad, (b) attitude toward the ad, (c) attitude toward the advertised brand, and (d) purchase intentions for the advertised product would be affected. To test these hypotheses, we conducted
a series of 2 (TV Show: 24, PP) X 2 (Endorser: Absent, Present) X 2 (Prior Viewing: Yes, No) analyses of variance. The first analysis revealed no main effects of the presence or absence of the endorser, \( F(1, 159) = .18, p = .68 \), or prior viewing, \( F(1, 159) = 2.04, p = .16 \), on memory of the ads, but there was a significant effect of TV show, \( F(1, 159) = 4.44, p < .05 \), such that those in the 24 condition (\( M = 2.81, SE = .09 \)) had better memory of the ads than those in the PP condition (\( M = 2.56, SE = .09 \)).

Likewise, the second analysis revealed no main effect of endorser, \( F(1, 150) = .20, p = .66 \), or prior viewing, \( F(1, 150) = .00, p = 1.00 \), on attitudes toward the ads, but there was a significant effect of TV show, \( F(1, 150) = 11.66, p < .001 \), such that those in the 24 condition (\( M = 4.42, SE = .12 \)) had less favorable attitudes toward the ads than those in the PP condition (\( M = 5.00, SE = .12 \)). However, the main effects should be interpreted in light of the significant Prior Viewing X TV Show interaction effect, \( F(1, 150) = 5.65, p < .05 \), which showed that those who had never seen the TV shows before the experiment did not differ in their attitudes toward the ads (TV Show: 24, \( M = 4.22, SE = .18 \); PP, \( M = 4.80, SE = .14 \)), but those who had seen the shows before perceived the ads in PP (\( M = 5.20, SE = .20 \)) more favorably than the ads in 24 (\( M = 4.22, SE = .18 \)). Therefore, endorser presence or absence in the show did not affect attitudes toward the ads.

The third analysis revealed no significant main effect of endorser, \( F(1, 151) = .28, p = .60 \), TV show, \( F(1, 151) = 2.67, p = .10 \), or prior viewing, \( F(1, 151) = .01, p = .94 \), on attitudes toward the advertised brand. Lastly, whereas the analysis revealed no significant main effect of endorser, \( F(1, 151) = .37, p = .54 \), or prior viewing, \( F(1, 151) = .01, p = .94 \), on purchase intentions, there was a main effect of TV show, \( F(1, 151) = 13.60, p < .001 \), indicating that participants in the 24 condition (\( M = 4.11, SE = .18 \)) had higher purchase intentions than those in the PP condition (\( M = 3.17, SE = .18 \)). Therefore, H3 was not supported because the placement of an endorser ad in the context of content featuring the endorser did not affect memory of the ad, attitudes toward the ad, attitudes toward the advertised brand, or purchase intentions. Furthermore, prior viewing affected endorser perceptions only in the PP condition.

H4a predicted that the frequency of viewing a TV show featuring a celebrity endorser would positively affect perceptions of the endorser when controlling for endorser familiarity. To test this hypothesis, a multiple regression analysis was performed by regressing perceptions of the endorser and endorser familiarity on frequency of viewing. The analysis showed that neither the frequency of viewing the show (\( \beta = .12, t = 1.31, p = .19 \)) nor familiarity with the endorser (\( \beta = .17, t = 1.79, p = .08 \)) predicted endorser perceptions. H4a was thus not supported.

H4b predicted that frequency of viewing a TV show featuring a celebrity endorser would affect memory of the ad, attitudes toward the brand, attitudes toward the ad, and purchase intentions when controlling for endorser familiarity. This hypothesis was tested with a series of multiple regression analyses. In the first analysis, memory of the ads was regressed on viewing frequency and endorser familiarity. The analysis revealed that neither viewing frequency (\( \beta = .06, t = .63, p = .53 \)) nor familiarity with the endorser (\( \beta = .12, t = 1.25, p = .22 \)) predicted memory of the ad. Likewise, the second analysis revealed no significant effect of viewing frequency (\( \beta = -.05, t = -.39, p = .70 \)) or endorser familiarity (\( \beta = .12, t = 1.30, p = .20 \)) on attitudes toward the ad. The third analysis revealed no significant effect of viewing frequency (\( \beta = -.03, t = -.35, p = .73 \)), or endorser familiarity (\( \beta = .05, t = .57, p = .57 \)) on
attitudes toward the brand. Lastly, the fourth analysis revealed no significant effect of viewing frequency ($\beta = .02, t = .18, p = .86$) or endorser familiarity ($\beta = -.01, t = -1.15, p = .88$) on purchase intentions. Therefore, H4b was not supported.

The results thus indicated that the variable of character perceptions is the strongest predictor of endorser perceptions. To further explore these relationships, we conducted a path analysis with “viewing frequency” treated as an exogenous variable and responses to the ad (i.e., memory of the ad, attitudes toward ad, attitudes toward brand, and purchase intention) as the final variables in the path. The error terms for the responses to ad variables were allowed to correlate. The path model includes only the participants in the endorser present condition because character perceptions were measured only in that condition. The model fit was acceptable ($\chi^2 = 6.47, df = 5, p = .26; \chi^2/df$ ratio = 1.29; CFI = .99; RMSEA = .06, 90% CI = .00-.18). Figure 1 contains the model in this analysis, with all paths reporting standardized coefficients.

![Figure 1. Path analysis for viewing frequency, character perceptions, endorser perceptions, and ad responses.](image)

*Note.* *p < .05, **p < .01, ***p < .001.*
The model demonstrates that frequency of viewing a TV show was significantly positively associated with character perceptions ($\beta = .27, p < .01$), and character perceptions were positively associated with endorser perceptions ($\beta = .47, p < .001$), attitude toward the ad ($\beta = .39, p < .01$), attitude toward the brand ($\beta = .30, p < .001$), and purchase intentions ($\beta = .22, p < .05$). Endorser perceptions significantly predicted attitude toward the brand ($\beta = .20, p < .05$), purchase intentions ($\beta = .27, p < .01$), and memory of the ad ($\beta = .50, p < .001$). Bootstrapping procedures using 2,000 bootstrap samples and bias-corrected confidence intervals were employed to test the mediating role of character and endorser perceptions on the relationship between viewing frequency and ad responses, and the mediating role of endorser perceptions on the relationship between character perceptions and ad responses. This analysis revealed significant indirect effects of viewing frequency (via character perceptions) on endorser perceptions, $\beta = .13, p < .05$, and on advertising effectiveness (via character perceptions and endorser perceptions) (memory: $\beta = .05, p < .01$; attitude toward ad: $\beta = .13, p < .05$; attitude toward brand: $\beta = .11, p < .05$; and purchase intentions: $\beta = .09, p < .05$). This indicates that although viewing frequency did not directly predict responses to ads featuring celebrity endorsers, it did affect character perceptions, which in turn affected endorser perceptions; moreover, both character and endorser perceptions affected ad effectiveness. In other words, frequently viewing a TV show featuring a particular celebrity resulted in more favorable perceptions of the character the celebrity portrayed, and these favorable perceptions then led to more positive responses to the endorser and to the ad featuring the celebrity. Furthermore, the analysis showed that character perceptions indirectly affected attitudes toward the ad ($\beta = .08, p < .05$) and attitudes toward the brand ($\beta = .09, p < .05$) via endorser perceptions.

**Discussion**

The present study examined how placing endorser ads in the context of content that also featured the endorser affected responses to the ads. H1 was supported in that character perceptions were positively associated with endorser perceptions. However, H2 and H3 were not supported, as the presence or absence of the endorser in the entertainment content shown to participants affected neither endorser perceptions (H2) nor ad effectiveness, that is, (a) memory of ad, (b) attitude toward the ad, (c) attitude toward the brand, or (d) purchase intentions. Likewise, H4a and H4b were not supported because frequency of viewing the TV show was not significantly associated with endorser perceptions or ad effectiveness when controlling for endorser familiarity. However, additional analyses revealed that viewing frequency affected character perceptions, which led in turn to more favorable endorser perceptions and greater ad effectiveness. Therefore, we found that placing endorser ads within TV shows featuring the endorsers led to more positive responses to the ads, which may have enhanced the ads' potential effectiveness. However, this effect may have less to do with contextual priming, especially as explained by the storage bin model, than with character perceptions.

Somewhat surprisingly, character perceptions positively affected not only perceptions of the endorser but also the effectiveness of the advertising (except for memory of the ads). Moreover, the mediating role of endorser perceptions did not fully explain the effect of character perceptions on advertising effectiveness. In other words, liking a character portrayed by an endorser led to more
favorable attitudes toward the ad and brand, and stronger purchase intentions, independent of character perceptions’ effects on endorser perceptions. This indicates that some positive associations that individuals have of a character are transferred directly to the advertised product and brand. It is worth noting, however, that the resultant path model did not exclude the possible influence of endorser familiarity on endorser perceptions or advertising effectiveness. Moreover, because character perceptions could only be tested in the endorser present condition, the path model includes only responses from this condition.

Nevertheless, viewing an ad in the context of a show featuring the ad’s endorser did not significantly affect responses to the advertising. This finding suggests that priming individuals with the likeness of a particular endorser does not influence their responses to ads featuring that endorser. In fact, neither assimilation nor contrast effects were found. Furthermore, one-time priming of an endorser via a TV show did not affect individuals’ perceptions of the endorser. These findings suggest that endorser perceptions develop over time and that seeing an endorser in entertainment content does not immediately influence ad effectiveness.

However, prior viewing of the TV show did affect perceptions of the endorser for one of the TV show conditions (i.e., PP). Specifically, those who had already seen at least one episode of PP perceived Kate Walsh more favorably than did those who had never seen the show before the experiment. However, whether or not participants had seen an episode of 24 prior to the experiment did not affect perceptions of Dennis Haysbert. It may be that those who had never seen an episode of 24 had favorable perceptions of Dennis Haysbert regardless of what character he portrayed. Perceptions of Kate Walsh, on the other hand, may have been enhanced by the character she portrayed. The main effects of TV show on memory of the ads, attitudes toward the ads, and purchase intentions were likely the result of the different advertised products and their relevance to a student sample. For example, it makes sense that students would be more likely to purchase auto insurance than a Cadillac regardless of other factors.

Although these findings could be interpreted to mean that placing an ad with an endorser in the context of content featuring the endorser does not enhance the effectiveness of the endorser ads, other results of this study may indicate otherwise. When controlling for familiarity with the endorser, viewing frequency did not affect perceptions of the endorser or advertising effectiveness. Therefore, the findings lend scant support to the excitation transmission model of priming. However, viewing frequency did have an effect on character perceptions and thus indirectly affected endorser perceptions and advertising effectiveness. In other words, more frequent viewing of a TV show featuring an endorser resulted in more favorable perceptions of the character the endorser portrayed, which led to more favorable impressions of the ad and brand, and greater purchase intentions.

**Implications**

This study enhances understanding of the process by which character perceptions and context affect endorser perceptions and ad effectiveness. Specifically, the findings support the meaning transfer model as described by McCracken (1989) in that consumers who see an endorser ad in the context of a TV show that also features that endorser may transfer their perceptions of the character onto the endorser, the ad, and the product that features the endorser, but this may occur over time. Speaking theoretically,
it is possible that we did not find support for contextual priming because the differences between the endorser present and absent conditions were too minimal. For example, those who had never seen an episode of either TV show may nonetheless have known that the celebrity endorsers portrayed characters on these shows. If they did, then the specific TV show itself (rather than simply the endorser's presence in the selected scenes) could have primed a celebrity heuristic and affected endorser perceptions and ad effectiveness. Future research should examine this possibility, as both the meaning transfer model and contextual priming may influence endorser ad effectiveness.

From a managerial perspective, the findings offer insight into how marketers can utilize media characters to enhance perceptions of celebrity endorsers and endorser ads. Specifically, marketers should carefully consider the types of characters endorsers portray when choosing endorsers for products, especially when the ads will appear in the context of content in which the endorser plays a specific character. Amos et al. (2008) found that negative information about a celebrity strongly impacted endorser effectiveness. We found that favorable character perceptions positively affected endorser perceptions and advertising effectiveness, but the converse is also likely—that is, negative character perceptions may transfer to endorsers, and to the ads and products they endorse. Moreover, many TV characters, such as Emily Clark on Revenge, are morally ambiguous in that they have both positive and negative traits (for discussion of these character types see Krakowiak & Oliver, 2012; Krakowiak & Tsay-Vogel, 2013). Both types of traits could transfer to actors who portray such characters, thereby complicating the selection of celebrity endorsers. Interestingly, Chang (2014) found that individuals’ ambivalent views of celebrity endorsers may become more malleable under the influence of contextual priming. This suggests that the character information provided in entertainment content can be particularly influential when an endorser is perceived to have both positive and negative traits. Marketers should thus conduct a series of pretests to determine the overall valence of character associations before hiring celebrity endorsers.

Moreover, marketers should carefully examine the specific attributes of characters portrayed by endorsers. According to the match-up hypothesis (Kamins, 1990; Kamins & Gupta, 1994), endorser ads are most effective when the celebrity's perceived expertise matches the product being endorsed. The current study’s findings imply that a character's perceived expertise, knowledge, kindness, and so on may affect specific perceptions that make the endorsers more or less effective. Marketers should thus evaluate the congruence of character attributes with the endorsed products. For example, Julianna Margulies, who plays a lawyer on The Good Wife, may be a more effective endorser of luxury goods than cleaning products. In addition, other types of character involvement variables, such as identification (see Cohen, 2001, for overview), could predict endorser effectiveness and should be examined.

Although character perceptions may be transferred to a celebrity regardless of whether the endorser ad airs in the context of content featuring the endorser, the finding that frequent viewers of a TV show featuring a celebrity perceive the character portrayed by the celebrity more favorably suggests that placing ads in this context may be highly effective. This is because an ad placed within content featuring the endorser is most likely to reach the viewers who have positive perceptions of both the character and endorser. Marketers should thus consider placing ads within this context, as long as viewers have favorable perceptions of the portrayed characters.
Limitations

Although this study examined the effects of context on endorser ads in TV advertising, it is unclear whether the findings can be generalized to different media. More research is needed to understand specifically how these factors operate in ads transmitted via other media, such as radio, magazines, films, and the Internet.

It is also worth noting that preexisting attitudes about the ads, products, and brands could have affected participants’ responses. Random assignment to conditions should have equalized these variables’ effects on the dependent variables for H2 and H3, as they focused primarily on examining differences between endorser presence and absence in advertising effectiveness. Nonetheless, these variables could have affected the relationships between viewing frequency, endorser perceptions, and advertising effectiveness. Future research should thus consider the effects of these and other related variables.

Conclusion

Overall, the present study enhances understanding of the process by which character perceptions, context, and viewing frequency affect responses to endorser ads. Specifically, placing an endorser ad in the context of entertainment featuring the endorser does not alone influence responses to the ad featuring the endorser; however, frequent viewing of such content results in more favorable perceptions of the character the endorser portrays, leading in turn to more favorable responses to the endorser and the endorser ad. Therefore, character perceptions play an important role in determining the effectiveness of an ad placed within content that features the endorser.
References


