

Does It Pay to Be Real? Understanding Authenticity in TV Advertising

Maren Becker, Nico Wiegand, and Werner J. Reinartz

Abstract

Marketing managers and creatives alike believe that authenticity is an essential element for effective advertising. However, no common understanding of authenticity in advertising exists, and empirical knowledge about its impact on consumer behavior is limited. In this study, the authors use a comprehensive literature review and qualitative studies to identify four dimensions of authenticity in an advertising context. By examining 323 television ads across 67 brands and four years, they investigate these dimensions' effects on the sales performance of advertised products. Because the impact of authenticity may depend on brand or product characteristics, the authors also analyze how these effects vary with brand size or across hedonic and utilitarian products. The results suggest that authenticity influences consumer behavior in a more nuanced manner than previously recognized. For instance, whereas an ad congruent with the brand's essence has a positive effect on sales in most cases, an overly honest advertising message can actually hurt performance; the latter is true especially for hedonic products, for which consumers rely more on subjective information when making purchase decisions.

Keywords

advertising content, advertising cues, advertising effectiveness, authenticity

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Authenticity has become one of the most prevalent buzzwords in the advertising industry, with marketing managers and creatives both convinced that execution of an authentic ad is a key driver of effective advertising (Beverland, Lindgreen, and Vink 2008; Morhart et al. 2015; Poetzsch 2014). Amir Kassaei (2006), chief creative officer of DDB Communications, asserts that even if “an authentic ad might be less likely to win a Cannes Lion, it is very likely to win consumers’ hearts.” Specifically, advertisers believe that authentic advertising stimulates brand trust (Anderberg and Morris 2006), helps consumers connect with the brand (Grayson and Martinec 2004; Holmes 2015), triggers feelings of sympathy or empathy (Stern 1994), and helps overcome consumer skepticism toward ads (Darke and Ritchie 2007; Poetzsch 2014). The last is especially important in light of the increased skepticism that has resulted from information transparency in the digital age and consumers’ clearer perception of marketers’ persuasive tactics (Campbell and Kirmani 2000). However, these beliefs are based primarily on anecdotal evidence, and empirical proof of the role of authenticity is lacking. Thus, the question arises as to whether authentic execution really increases advertising effectiveness.

Along with the lack of clear evidence, no common understanding exists as to what constitutes authentic ad execution.

Although prior literature is consistent in stating that “authenticity encapsulates what is genuine, real, and/or true” (Beverland and Farrelly 2010, p. 839), both researchers and managers refer to different aspects of the execution when talking about an authentic ad. For example, some studies link ad authenticity to a spokesperson’s trustworthiness (Stern 1994), others link it to a realistic plot (Deighton, Romer, and MacQueen 1989), and still others link it to an ad’s accurate representation of the brand (Beverland, Lindgreen, and Vink 2008). Put differently, diverse aspects or dimensions of advertising execution may render an ad authentic.

In business practice, managers face the same dilemma. For instance, Markus Macioszek, head of marketing at Gerolsteiner, a mineral water business, states that “different interpretations of authentic advertising impair communication between

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managers and creatives.”¹ Furthermore, which dimensions of authenticity, if any, enhance advertising effectiveness is unclear. Guided by these issues, we consider three research questions. First, what are important dimensions of authenticity in advertising? Second, what influence do these dimensions have on advertising effectiveness? And, finally, do these effects depend on different brand or product characteristics?

We address these questions in the context of TV advertising.² We define an authentic advertisement as one that is genuine, real, and true with regard to some executional element or dimension. Thus, we treat authenticity as a multilayered concept pertaining to distinct content cues that render an advertisement authentic. To identify the relevant dimensions of advertising authenticity, we comprehensively analyzed the related academic and business literature, interviewed practitioners, and conducted two consumer surveys. As a result, we derived four dimensions: (1) preserving the brand essence, (2) honoring brand heritage, (3) showing a realistic plot, and (4) presenting a credible advertising message.

Using observations of 323 individual ads broadcasted over four years (2010–2013), we investigate to what extent each authenticity dimension influences the relationship between ad spending and sales. We also aim to shed light on their influence over time, that is, whether the dimensions have a persistent or transient sales effect. The latter would make them a suitable tactical instrument to increase short-term sales but unlikely to affect consumer brand choice in the long run. Finally, we analyze whether these effects depend on the consumption purpose (hedonic vs. utilitarian) and the brand’s size. For example, preserving the brand essence is likely to be more important for small brands than for large brands, as the former still have to create awareness and brand equity.

This study makes several contributions to the literature, in both the authenticity and advertising effectiveness domains. First, we investigate the concept of authenticity in the important but underresearched context of advertising. Authenticity as a content cue has been extensively discussed but empirically underresearched in the advertising literature. Second, the few existing studies on authenticity have focused on only one dimension, such as the brand’s heritage (Beverland, Lindgreen, and Vink 2008) or a realistic spokesperson and/or plot (Deighton, Romer, and MacQueen 1989; Stern 1994). In this study, we identify four dimensions that comprehensively convey authenticity in advertising and examine their influences in a single model. Third, we assess the effects of each dimension on actual consumer behavior (sales), extending the conceptual or qualitative approaches used in previous studies of authenticity (e.g., Beverland 2005; Grayson and Martinec 2004; Rose and Wood 2005). Fourth, we examine the extent to which

consumers’ responses to the different authenticity dimensions depend on brand and product characteristics. We thereby provide managers with more granular advice on how to improve their ad content.

Our results show that not all dimensions of authenticity enhance advertising performance. Across all brands, preserving the brand’s essence generally increases ad effectiveness, whereas honoring the brand’s heritage is not important. A realistic plot and a credible message can even exert negative effects—a finding that challenges the conventional belief that ads must be credible to persuade consumers. The magnitude of these effects also depends on the consumption purpose and the brand’s size. For instance, large brands benefit more from realistic depictions of everyday life, whereas hedonic and small brands may use unrealistic ads and puffery to draw attention. Our results thus help managers and creatives design more effective advertising, depending on the type of product they are selling.

The Concept of Authenticity

Authenticity is central to marketing as an antidote to the phoniness that seems to dominate many marketing practices (Grayson and Martinec 2004; Holt 2002). Despite widespread agreement about authenticity’s importance as a concept, no commonly accepted definition exists. Rather, “what is consistent across the literature is that authenticity encapsulates what is genuine, real, and/or true” (Beverland and Farrelly 2010, p. 839).

Previous studies on authenticity in marketing generally fall into one of two research streams. The first stream examines the evaluation and consumption of authenticity from a consumer perspective (e.g., Beverland and Farrelly 2010; Grayson and Martinec 2004). Most of these studies focus on authentic experiences, such as white-water rafting (Arnould and Price 1993), scripted reality TV (Rose and Wood 2005), or country music (Peterson 2005). These studies reveal that consumers evaluate the authenticity of an experience and/or object on the basis of two types of cues: indexical and iconic (Grayson and Martinec 2004). Indexical cues provide evidence that the object is real or original, whereas iconic cues simply resemble the real thing (Ewing, Allen, and Ewing 2012). Thus, authenticity is not necessarily inherent in an object (indexical) but can be constructed by, for instance, marketers (iconic).

The second stream focuses on authenticity in the context of brands. Authenticity is believed to be a central element of success for brands because it contributes to a unique brand image (Beverland 2005; Keller 1998). Authenticity is related to different traits, such as commitment to tradition and place (e.g., Newman and Dhar 2014), integrity (e.g., Morhart et al. 2015), stylistic and internal consistency (e.g., Leigh, Peters, and Shelton 2006), sincerity (e.g., Gilmore and Pine 2007), commitment to quality (e.g., Napoli et al. 2014), honesty (e.g., Morhart et al. 2015), and downplaying of commercial motives (e.g., Spiggle, Nguyen, and Caravella 2012). Most

¹ The statement stems from a series of interviews we conducted with managers and creatives to gather additional insights about the managerial relevance of our research. For further details, see Web Appendix W1, which presents expert interviews on the concept of authenticity in advertising.

² We focus on TV because it still holds the largest share of global advertising spending (Zenith 2017).

Table 1. Relevant Marketing Literature on Authenticity.

Study	Authenticity Context	Industry	Method	Results ^a
Brown, Kozinets, and Sherry (2003)	Brand	Retro brands	Qualitative	Consumers' search for authenticity is one of the cornerstones of contemporary marketing.
Beverland (2005)	Brand	Alcoholic beverages	Qualitative	Brand essence is highly related to authenticity.
Leigh, Peters, and Shelton (2006)	Brand	Car clubs	Qualitative	Authenticity is projected via a sincere story that involves commitment to tradition, passion for craft, and the public disavowal of the role of modern industrial attributes.
Spiggle, Nguyen, and Caravella (2012)	Brand	Brand extensions	Experiments	Authenticity takes three forms: objective, constructive, and existential authenticity.
Newman and Dhar (2014)	Brand	Consumer products	Experiments	Brand extension authenticity consists of four dimensions: maintaining brand standards, honoring brand heritage, preserving brand essence, and avoiding brand exploitation.
Morhart et al. (2015)	Brand		Survey	Brand extension authenticity is an important construct in prediction of brand extension success.
Belk and Costa (1998)	Consumption	Historical artifacts	Qualitative	Beliefs in contagion (the notion that objects may acquire a special aura or essence from their past) influence perceptions of brand authenticity for everyday consumer products.
Peñaloza (2000)	Consumption	Tourist attractions	Qualitative	Brand essence has a positive effect on perceived authenticity and value.
Grayson and Martinec (2004)	Consumption	Tourist attractions	Qualitative	Perceived brand authenticity is a multidimensional construct that consists of four dimensions: credibility, integrity, symbolism, and continuity.
Rose and Wood (2005)	Consumption	Reality TV	Qualitative	Perceived brand authenticity is influenced by indexical, iconic, and experiential cues.
Beverland and Farrelly (2010)	Consumption		Qualitative	Authenticity is not necessarily inherent in an object but can also be socially constructed.
Beverland, Lindgreen, and Vink (2008)	Advertising	Alcoholic beverage ads	Qualitative	Consumers knowingly compromise on what is authentic and inauthentic (fabricated authenticity).
Stern (1994)	Advertising	Advertising	Conceptual	Consumers knowingly compromise on what is authentic and inauthentic (fabricated authenticity).

^aResults do not necessarily reflect the main outcomes or even the focus of the research but pertain to the outcomes regarding authenticity and its dimensions.

studies in this domain are qualitative, and although they yield valuable insights on the general concept of (brand) authenticity, only a few studies have attempted to quantify the effect of authenticity on actual brand performance (e.g., Newman and Dhar 2014; Spiggle, Nguyen, and Caravella 2012). Overall, the literature supports the notion that authenticity is important to marketing and is a multilayered, polysemous concept. Table 1 summarizes related work on authenticity in marketing and outlines the main findings.

In the context of advertising, authenticity is part of an ad's executional or content cues. Thus, an authentic ad is one that is genuine, real, and true with regard to its executional elements or dimensions (e.g., its plot).³ Marketing managers and creatives are convinced that authenticity is an important

³ For further information on differences between brand and advertising authenticity, refer to Web Appendix W2.

determinant of advertising effectiveness (Morhart et al. 2015; Poetzsch 2014). Nevertheless, research examining authenticity in advertising remains sparse. The limited studies on this topic discuss authenticity in ads with regard to a specific aspect, such as the relationship between authenticity and an ad's persona or spokesperson (Stern 1994) or whether ads can reinforce a brand's authenticity claims by honoring the brand's heritage (Beverland, Lindgreen, and Vink 2008). In our study, we identify dimensions that are associated with an authentic ad execution and test which of these dimensions, if any, influence the direct effect of advertising spending on sales.⁴

Dimensions of Authenticity in Advertising

We derive these dimensions from a rigorous study of related literature through a keyword search ("authenticity," "authentic") in several academic online databases (e.g., EBSCO, Google Scholar) and by using Google and Bing to scan the internet for practitioner articles. We also manually searched leading interdisciplinary publications for academics and practitioners (e.g., the *Wall Street Journal*, *Harvard Business Review*). To identify the dimensions, we first generated a list of 65 aspects that prior literature indicates should contribute to or reflect authenticity (see Column A in Table 2).⁵ In a second step, we asked three independent consumers to group all aspects that can be summarized under the same generic authenticity term or dimension (e.g., "reflects the brand's heritage," "commits to the brand's history," and "is traditional" are summarized under the dimension "honoring brand heritage"; Column C in Table 2), and to delete any aspects of authenticity that are inapplicable to an advertising context (e.g., "being above commercial consideration," "committing to quality," or "being individualistic"; Column D in Table 2). Finally, we removed all dimensions that were not under the marketer's control (e.g., "contributing to symbolism," "helping consumers find their true self"). Four dimensions remained: (1) preserving the brand essence, (2) honoring brand heritage, (3) showing a realistic plot, and (4) presenting a credible advertising message. We discuss these dimensions in more detail next.

To test the validity of these four dimensions, we conducted three post hoc analyses. In a focus group with nine consumers, we openly discussed the concept of authenticity and checked whether the four proposed dimensions were exhaustive for our context of advertising. Furthermore, we conducted two online surveys. First, we asked 60 independent consumers to explain, in their own words, what they perceive to be an authentic ad and what ingredients make an ad authentic. Second, we had 300 consumers evaluate the overall authenticity of 15 example ads (6 ads per consumer) and code them on the four authenticity dimensions. Regression analysis showed that our proposed

dimensions captured overall advertising authenticity well ($R^2 = .68$), thus confirming their relevance in creating an authentic ad execution (refer to Web Appendix W3 for further information).

Preserving the Brand Essence

To convey authenticity within ads, marketers should preserve the brand's essence and maintain the brand's style and standards (Spiggle, Nguyen, and Caravella 2012). Brand essence refers to the "core values for which a brand stands," or the brand's "marketing DNA" (Keller 1998). Thus, we define this dimension as the degree to which the ad reflects the brand's image and personality and employs a consistent ad design (e.g., slogan, layout, ad theme, colors). An authentic ad execution should represent the brand as what it is, true to itself (Gilmore and Pine 2007; Trilling 1972). This dimension also relates closely to the "continuity" dimension of authenticity described in the branding literature (Beverland 2005; Morhart et al. 2015). In our sample, the yogurt brand Mueller Corner offers an excellent example of variations in brand essence. Its communications usually focus on funny stories and colorful images, emphasizing its hedonic positioning. While one ad in our sample is highly consistent with this positioning, featuring a conversation between yogurt ingredients, Mueller aired a less consistent, more serious ad reminding consumers of the important work of the Red Cross (see Appendix A).

Preserving the brand essence should increase ad effectiveness. First, it can create and reinforce a unique and memorable brand image for consumers (Brown, Kozinets, and Sherry 2003; Keller 1998), which helps consumers understand the brand's position. Second, communicating a consistent brand image may increase the perceived reliability and sincerity of the brand (Park, Jaworski, and MacInnis 1986). Third, when ads preserve the brand essence, consumers should be more likely to recognize the brand. This recognition is important: if consumers fail to register the advertised brand correctly or, worse, incorrectly attribute the ad to a competing brand, huge marketing investments will be wasted with no positive effect on sales (Rossiter and Bellman 2005).

On the other hand, if ads strongly deviate from the brand's essence, they might be able to better capture consumers' attention. Ads that diverge from a brand's essence and thus from consumers' expectations can increase cognitive elaboration and ad recall (Houston, Childers, and Heckler 1987; Lee 2000). They also generate surprise, which is an important goal of advertisers given the mounting ad clutter (Tellis 2004). We thus predict that both strong preservation of and strong divergence from the brand essence positively relate to advertising effectiveness.

H₁: Brand essence is related to advertising effectiveness in a U-shaped manner.

Honoring Brand Heritage

Marketing managers can evoke authenticity by referring to the brand's heritage. Branding studies show that consumers

⁴ While an authentic ad execution might also contribute to the perceived brand authenticity, this is not the focus of our paper.

⁵ Because previous literature has found that consumers evaluate the authenticity of an object or service differently from the authenticity of people, we focus on literature on the former.

Table 2. Derivation of Authenticity Dimensions.

Aspects Reflecting Authenticity (A)	Literature Examples (B)	Generic Authenticity Terms (C)	Advertising Context (D)
An authentic experience or object...			
...is aligned with brand values	Gilmore and Pine (2007)	Preserving brand essence	Preserving brand essence
...is clear on what it stands for	Faust and Householder (2009)		
...preserves the brand essence	Brown, Kozinets, and Sherry (2003); Spiggle, Nguyen, and Caravella (2012)		
...is consistent	Brown, Kozinets, and Sherry (2003)		
...is consistent in style	Beverland (2006); Brown, Kozinets, and Sherry (2003)		
...is continuous	Morhart et al. (2015)		
...is internally consistent	Spiggle, Nguyen, Caravella (2012)		
...is true to itself	Gilmore and Pine (2007); Spiggle, Nguyen, and Caravella (2012)		
...reflects the true essence of the brand	Brown, Kozinets, and Sherry (2003)		
...is transparent	Morhart et al. (2015)	Being credible	Presenting a credible advertising message
...is true	Beverland and Farrelly (2010)		
...is trustworthy	Morhart et al. (2015)		
...is what it claims to be	Gilmore and Pine (2007); Grayson and Martinec (2004)		
...is credible	Morhart et al. (2015)		
...is honest	Boyle (2003); Price, Arnould, and Tierney (1995)		
...is not the result of exaggeration	Grayson and Martinec (2004); Spiggle, Nguyen, and Caravella (2012)		
...is reliable	Bruhn et al. (2012)		
...is sincere	Beverland (2005); Fine (2003); Napoli et al. (2014)		
...is verifiable	Newman and Dhar (2014)		
...keeps its promises	Morhart et al. (2015)		
...is unspun	Boyle (2003)		
...is substantive	Ballantyne, Warren, and Nobbs (2006)		
...has a sincere story	Beverland (2005); Beverland (2006); Beverland and Luxton (2005)	Honoring brand heritage	Honoring brand heritage
...is not mechanically produced	Fine (2003)		
...is natural	Boyle (2003); Lindholm (2008)		
...commits to brand history	Beverland, Lindgreen, and Vink (2008); Peterson (2005)		
...commits to place	Beverland (2005); Beverland (2006); Newman and Dhar (2014)		
...commits to traditions and pedigree	Leigh, Peters, and Shelton (2006); Peñaloza (2000)		
...connects to cultural symbolism	Belk (1998); Holt (2002)		
...connects to the original location	Newman and Dhar (2014)		
...is rooted	Boyle (2003)		
...is traditional	Beverland (2005); Beverland (2006)		
...reflects the heritage of the brand	Brown, Kozinets, and Sherry (2003)		
...is close to reality	Grayson and Martinec (2004); Stern (1994)	Being realistic	Showing a realistic plot
...is real	Beverland and Farrelly (2010); Lindholm (2008)		
...is unaffected	Arnould and Price (2000); Fine (2003)		
...has a realistic spokesperson	Stern (1994)		
...relates to verisimilitude	Deighton, Romer, and MacQueen (1989)		
...is genuine	Beverland and Farrelly (2010); Fine (2003)		
...depicts real-life situations	Stern (1994)		
...is sustainable	Boyle (2003)	Reinforcing morality	
...is ethical	Boyle (2003)		
...is genuine in intent	Beverland, Lindgreen, and Vink (2008); Holt (2002)		
...is innocent	Fine (2003)		
...has integrity	Morhart et al. (2015)		
...is moral	Beverland and Farrelly (2010); Thompson, Rindfleisch, and Arsel (2006)		

(continued)

Table 2. (continued)

Aspects Reflecting Authenticity (A)	Literature Examples (B)	Generic Authenticity Terms (C)	Advertising Context (D)
...is an individual ...is original	Thompson, Rindfleisch, and Arsel (2006) Ballantyne, Warren, and Nobbs (2006); Fine (2003); Holt (2002)	Being individualistic	Creative plot (relates to creativity rather than authenticity)
...is unique	Fine (2003); Lindholm (2008)		
...can be identified with ...self-relevant ...offers consumers a chance for self-identification	Beverland and Farrelly (2010) Leigh, Peters, and Shelton (2006); Rose and Wood (2005) Arnould and Price (2000); Leigh, Peters, and Shelton (2006)	Contributing to symbolism	
...commits to quality	Beverland (2006); Gilmore and Pine (2007); Napoli et al. (2014)	Committing to quality	
...is above commercial consideration ...is distinct from strategic self-presentation ...is no mass market product ...is untainted by commerce ...avoids brand exploitation	Beverland (2005); Holt (2002); Beverland (2006) Fine (2003) Holt (1998) Holt (1998) Spiggle, Nguyen, and Caravella (2012)	Being above commercial consideration	
...is what it appears to be ...is prototypical ...is not a fake ...is the original ...is the real thing	Trilling (1972); Gilmore and Pine (2007) Grayson and Martinec (2004) Bruner (1994) Eco (1990); Peterson (1997) Gilmore and Pine (2007)	Being legitimate	

perceive brands that commit to their history and tradition as more authentic (e.g., Beverland 2006; Brown, Kozinets, and Sherry 2003; Spiggle, Nguyen, and Caravella 2012). To reflect heritage, advertising might establish links to the brand's traditions, history, place of origin, or traditional production methods (Beverland 2005; Spiggle, Nguyen, and Caravella 2012). We define this dimension as the degree to which the ad refers to the brand's heritage or history. A good example is Jim Beam's "Make History" ad (see Appendix B). The panel A ad honors the brand's heritage by referring to its traditional production method and long-standing history; the panel B ad does not refer to the brand's heritage.

Previous work identifies a positive effect of honoring brand heritage on advertising effectiveness (Brown, Kozinets, and Sherry 2003; Merchant and Rose 2013). Heritage helps legitimize the brand, providing evidence that it is the "original" and not a counterfeit (Newman and Dhar 2014; Peñaloza 2000). Reminding consumers of the brand's longevity also may enhance its perceived reliability and competence (Beverland 2006). In addition, heritage associations can provide brands with a special aura and increase consumers' emotional commitment to those brands (Newman and Dhar 2014), such as when historical connections in an advertisement remind consumers of their own past or stimulate their longing for earlier times (Leigh, Peters, and Shelton 2006). We therefore expect brand heritage to increase ad effectiveness.

H₂: Brand heritage is positively related to advertising effectiveness.

Showing a Realistic Plot

Advertising is perceived as authentic when it depicts a realistic plot reflecting an everyday situation, mostly presented by ordinary, nonidealized characters (e.g., Deighton, Romer, and MacQueen 1989; Stern 1994). This dimension is iconic, in the sense that the ad refers to something that may not be the "real thing" but is similar to real life (Grayson and Martinec 2004). In other words, consumers accept the ad as authentic because of its resemblance to reality, even though they know the ad is staged (Stern 1994). A realistic plot may thus be referred to as "contrived" or "staged" authenticity (Beverland 2005; Rose and Wood 2005). This dimension is defined as the degree to which the ad "conveys the illusion of the reality of ordinary life in reference to a consumption situation" (Stern 1994, p. 388). The household detergent brands Cif and Mr. Clean offer good examples of a realistic plot and an unrealistic one, respectively (see Appendix C). While the Cif ad shows an everyday situation in which a mother and her kids clean outdoor toys from the garage, the Mr. Clean ad shows two steel plates discussing their shininess.

Previous literature leaves unclear whether a realistic plot positively influences ad effectiveness. It helps consumers identify with the ad's character because the portrayed situation is

familiar and likely reflects their own experiences (Stern 1994). A realistic plot depicting a familiar situation also may increase consumers' ability to identify and correctly interpret the product benefits communicated by the ad (Warlaumont 1997). Realistic plots can evoke feelings of sympathy and empathy (Deighton, Romer, and MacQueen 1989), which could improve consumers' attitudes toward the ad (Escalas and Stern 2003). However, consumers may perceive realistic plots as boring. Given the ever-increasing ad clutter, grabbing consumers' attention, even with an unrealistic absurd plot, should be one of the main goals of advertising (Woltman Elpers, Wedel, and Pieters 2003). A highly unrealistic plot could also distract consumers from forming counterarguments, thereby reducing their resistance to persuasion. Considering both arguments, we expect ads to be most effective when they are either highly realistic or highly unrealistic.

H₃: A realistic plot is related to advertising effectiveness in a U-shaped manner.

Presenting a Credible Advertising Message

The fourth option for conveying authenticity is to promote the brand with a realistic, nonexaggerated message. Previous literature shows that consumers associate authentic brands with a high level of credibility (e.g., Brown, Kozinets, and Sherry 2003; Morhart et al. 2015). In advertising settings, credibility is "the extent to which the consumer perceives claims made about the brand in the ad to be truthful" and not exaggerated (MacKenzie and Lutz 1989, p. 51). Although in most countries advertisers must be able to substantiate their advertising messages, some forms of exaggeration remain legal and are used frequently, such as puffery, implied superiority, and vague or subjective claims. Note that we define message as the information the advertisement tries to convey. Usually, each ad contains one "main" message. Thus, message credibility is the degree to which the ad's message is perceived to be genuine and in line with the brand's performance. For example, one advertisement claims that the shampoo brand Plantur 21 strengthens hair roots—a rather credible claim. L'Oréal uses an exaggerated claim in an advertisement for its shampoo brand Elvital, stating that the shampoo completely repairs the hair structure in just 60 seconds (see Appendix D).

Message credibility is a key element of persuasion (Choi and Rifon 2002). As advertising executive Leo Burnett claimed, "The greatest thing to achieve in advertising is believability" (Atkin and Beltramini 2007). Message credibility should improve consumers' attitudes toward the ad, increase brand trust, and strengthen emotional commitment to the brand (Grayson and Martinec 2004; Morhart et al. 2015). Furthermore, credibility may help overcome marketing-savvy consumers' increasing skepticism toward ads (Calfee and Ringold 1994). However, consumers may have grown accustomed to exaggerated messages (Calfee and Ringold 1994), so that they either expect some form of overstatement or fail to even notice the exaggeration, let alone elaborate on it (Cacioppo and Petty

1984). The latter may hold true especially for low-involvement products, whose ads consumers pay little attention to. Notwithstanding these arguments, we expect an overall positive relationship between message credibility and ad effectiveness.

H₄: Message credibility is positively related to advertising effectiveness.

Differences in the Effects of Authenticity by Consumption Purpose and Brand Size

Finally, the effects of the four authenticity dimensions might depend on product or brand characteristics. To provide managers with more specific implications, we investigate two managerially important characteristics, namely the product's consumption purpose (hedonic vs. utilitarian) and the brand's size.

Consumption purpose. Consumers buy utilitarian products to solve a problem, aiming to accomplish a concrete functional or practical task (Strahilevitz and Myers 1998). The evaluation of utilitarian products is typically based on the cognitive processing of objective product information (Park and Young 1986). By contrast, consumers purchase hedonic products for their affective sensory experience, sensual pleasure, or fun. Their evaluation is mostly based on subjective product information (Hirschman and Holbrook 1982).

Showing a realistic plot should help consumers assess a product's ability to solve a problem, as product attributes and benefits are depicted in a realistic, everyday situation. This approach may be especially important for utilitarian products. For hedonic products, advertisements should trigger affective responses, which they may accomplish through entertainment by, for example, showing an unrealistic, absurd plot. In a similar vein, presenting a credible message might also be more important for utilitarian products. Because information processing is cognitively driven (Homburg and Krohmer 2006), consumers evaluate product traits and advertising claims more thoroughly. They are thus more likely to expose overstated claims. In contrast, for hedonic products, consumers consider information only superficially and respond to affective cues (Hirschman and Holbrook 1982; Maheswaran, Mackie, and Chaiken 1992). Exaggerated or vague claims might thus be less harmful for hedonic products.

H₅: The dimensions of (a) showing a realistic plot and (b) presenting a credible message are more strongly associated with advertising effectiveness for utilitarian (vs. hedonic) product categories.

Brand size. *Ceteris paribus*, consumers have different levels of knowledge of small and large brands and may therefore process their ads differently (Chandy et al. 2001). First, large brands usually have high familiarity and a distinct position in consumers' minds (Kent and Allen 1994), whereas small brands still need to build awareness and brand equity. Preserving the brand essence thus might be more important for small brands.

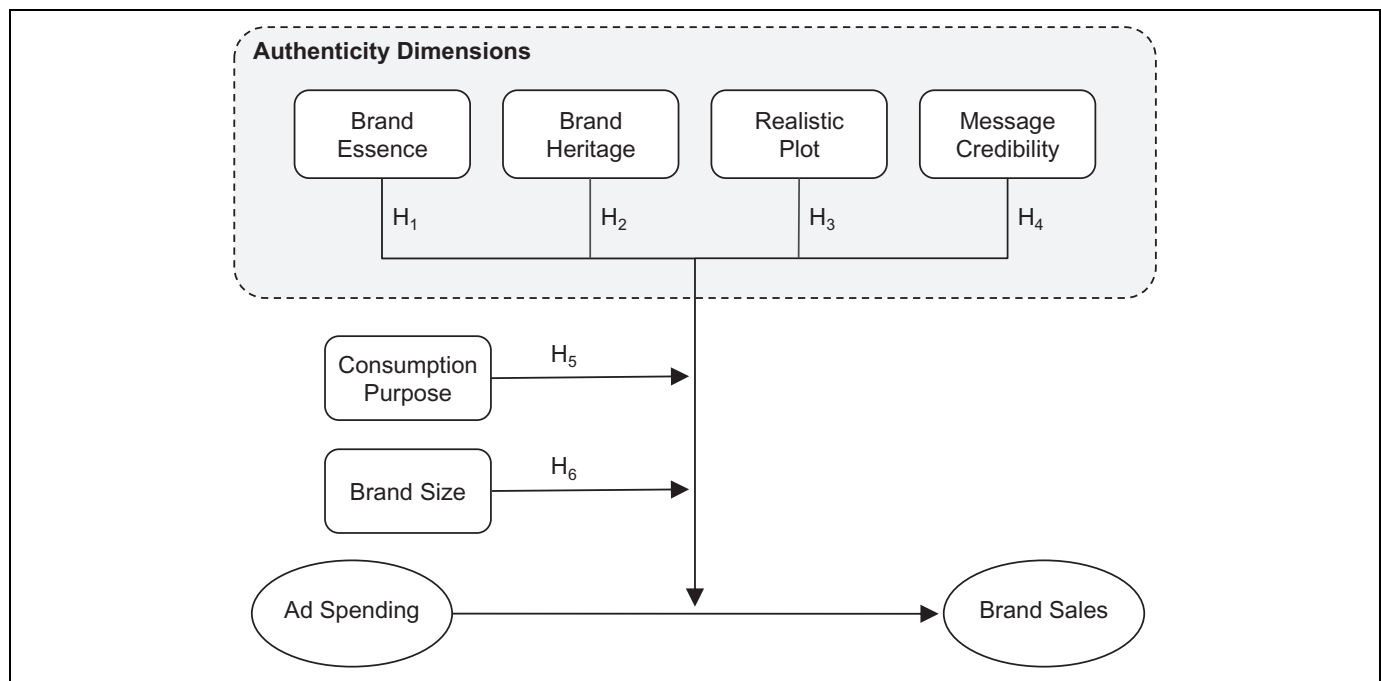


Figure 1. Conceptual framework.

Second, honoring their heritage might be more effective for small brands. Depictions of, for example, traditional manufacturing or commitments by the company's owner are more believable, whereas for large brands they may seem artificial. Because large brands are often marketed by multinational companies operating in a highly automated fashion, consumers may assess claims of heritage and traditional manufacturing as untruthful. Stressing the brand's constancy and thereby enhancing its perceived competence may also be more important for small brands (Beverland 2006).

Finally, because of the increasing ad clutter, consumers do not actively process the majority of ads (Shapiro, MacInnis, and Heckler 1997) but pay attention to them in a highly selective manner. Previous literature shows that consumers are more likely to pay attention to ads for large, well-known brands (Alba, Hutchinson, and Lynch 1991; Campbell and Keller 2003). Thus, small brands have to create ads that stand out and generate awareness. Furthermore, smaller firms might be strongly affected by competitive interference (Kent and Allen 1994). We therefore expect small brands to profit more from ad executions that maximize attention by, for example, showing an unrealistic plot or presenting an exaggerated message. Furthermore, for large brands, exaggerated claims may be easier to identify as such because consumers can readily compare them with the brand's actual performance, which supports the importance of credible messages.

H₆: The dimensions of (a) preserving the brand essence and (b) honoring brand heritage are more strongly associated with advertising effectiveness for small (vs. large) brands. The dimensions of (c) showing a realistic plot and

(d) presenting a credible message are more strongly associated with advertising effectiveness for large (vs. small) brands.

Figure 1 shows the conceptual framework summarizing our hypotheses.

Data and Identification

Market Data

To measure advertising effectiveness, we obtained an extensive set of weekly scanner, retail panel, and media data from the Nielsen Company for 67 brands and 323 ads in six fast-moving consumer goods (FMCG) categories (chocolate bars, yogurt, razors, shampoo, shower gel, and household detergent) sold on the German market. Germany is Europe's largest advertising market, with total advertising spending of €26.12 billion in 2017 (Zentralverband der deutschen Werbewirtschaft 2018). The data set contains weekly sales data for each brand and the corresponding television advertising spending, as well as information on several control variables, such as price, weighted distribution, in-store promotions, and gross spending on internet, billboard, and print advertising for a period of 200 weeks, from March 2010 to December 2013. Table 3 provides the average values per week, aggregated at the category level. Table 4 contains descriptive statistics on the advertising data.

Operationalization

Consistent with previous work (MacInnis, Rao, and Weiss 2002), a sample of independent experts evaluated all ads on

Table 3. Time Series Data.

Category	Number of Brands	Weekly Average							
		Sales Volume (kg)	Price (per kg)	Weighted Distribution	Percent Feature Promotions	Percent Display Promotions	Spending on Other Marketing Activities	Competitor Price (per kg)	Total Competitor Ad Spending
Chocolate bars	14	125,853	9.32	.80	5	10	10,948	8.79	1,915,673
Shower gel	9	142,375	6.64	.79	7	10	5,916	5.74	250,623
Yogurt	17	341,313	3.21	.59	6	0	3,697	2.86	645,843
Razors	6	18,876	6.59	.57	2	3	12,946	7.47	397,029
Shampoo	12	96,208	12.30	.81	7	7	17,148	9.08	1,066,832
Household detergent	9	122,502	3.20	.68	4	2	4,808	3.01	848,082

Notes: We only include brands that advertised within our time frame. The brands in our data set accounted for, on average, 63% of the total market share based on sales value (including store brands). Household detergents include, for example, multipurpose, anti-limescale, and glass cleaners. The "other marketing activities" category includes spending for internet, billboard, and print advertising. Prices are given in euros.

Table 4. Advertising Data.

Category	Ad Spending per Week (€)			Number of Ads per Brand		
	Average	Min	Max	Average	Min	Max
Chocolate bars	178,115	0	1,504,102	4	2	11
Shower gel	42,224	0	1,019,420	3	1	7
Yogurt	117,582	0	2,073,480	4	1	17
Razors	96,353	0	1,328,400	7	1	23
Shampoo	130,572	0	1,893,780	6	1	10
Household detergent	101,528	0	1,106,625	6	1	17

the different authenticity dimensions and further control variables to quantify the ad content.⁶ Our goal was to evaluate all ads as objectively as possible to derive clear and applicable implications for management practice. For the authenticity dimensions, we used multi-item measures with seven-point bipolar rating scales (see Table 5). With regard to the brand essence, to ensure that all experts had a consistent image, we asked them to indicate whether they were familiar with the focal brand and then briefly describe its image off the top of their heads.⁷ The experts were familiar with the brand in 88% of the cases,⁷ and the image descriptions were largely consistent across all coders. We also compared this consensus image with the image presented on each brand's website. We excluded ratings by experts who did not know the brand or who expressed substantially different perceptions of its image. With regard to message credibility, to ensure that all experts agreed on the main message, we asked them to first indicate the main message and then judge its credibility. The experts agreed on

the main message in all but three cases, and disagreement was resolved by discussion.

Previous literature cites several control variables that might influence ad effectiveness. We measured further content cues including spot length, rational appeal, emotional appeal, celebrity endorsement, brand presence, level of complexity, and whether the advertised product was new or a line extension (Chandy et al. 2001; MacInnis, Rao, and Weiss 2002; Pieters, Wedel, and Batra 2010; Tellis 2004). We also controlled for the different product categories because even with our focus on FMCG ads, effectiveness might vary across the considered categories (see Web Appendix W4 for details).

Lastly, we developed measures to analyze the potential moderation effects. To distinguish between the different consumption purposes, we conducted a survey of 401 participants representative of the German population, who evaluated the extent to which they perceived the product categories as hedonic or utilitarian. On the basis of these survey results, we classified chocolate bars, yogurt, and shower gel as hedonic and household detergent, razors, and shampoo as utilitarian (see Web Appendix W5 for details). As a proxy for brand size, we used the relative weighted retail distribution of the brand in the first week the ad aired. Specifically, we divided the weighted retail distribution of brand *b* at time *t* (first week of the ad) by the mean retail distribution of the respective category at time *t*.⁸

Coding Procedure

The experts who evaluated all authenticity dimensions and control variables were graduate students of a large German university and regular users of the advertised product categories. Groups of two to seven experts evaluated each variable, depending on the task (e.g., two coders evaluated whether the product was a line extension, but seven coders evaluated the emotional appeals). Before these evaluations, all experts

⁶ We also had a representative sample of consumers evaluate a subset of 15 advertisements to test whether consumer perceptions of authenticity deviated from expert evaluations. Means of the four authenticity dimensions do not differ significantly ($p > .1$). We thank the associate editor and an anonymous reviewer for this suggestion.

⁷ One coder was unfamiliar with eight brands; others were unfamiliar with only one or two.

⁸ We also tried market share as a proxy. Both proxies yield similar results.

Table 5. Operationalization of Authenticity Dimensions.

Variable	Operationalization	Krippendorff's Alpha	Cronbach's Alpha	Source
Brand essence	With regard to the overall brand image, the ad was: <ul style="list-style-type: none"> • unsuitable/suitable. • inconsistent/consistent. • incongruent/congruent. • a bad fit/a good fit. • not well aligned/well aligned. 	.68	.88	Roehm and Roehm (2011)
Brand heritage	Indicate to what extent you agree with the following statements: <ul style="list-style-type: none"> • The ad reflects the brand's heritage. • The ad relates to the brand's traditions. • There is a link between the ad and the brand's legacy. • The ad connects to the brand's past. • The ad creates a connection with the brand's heritage and tradition. 	.72	.96	Newman and Dhar (2014); Spiggle, Nguyen, and Caravella (2012)
Realistic plot	Indicate to what extent you agree with the following statements: <ul style="list-style-type: none"> • The story of the ad matches with reality of ordinary life. • The story of the ad showed a realistic life situation. • The story of the ad was realistic. • The story of the ad was authentic. • The story of the ad showed an everyday life activity. • The story of the ad was true to life. 	.81	.98	
Message credibility	Indicate to what extent you agree with the following statements: <ul style="list-style-type: none"> • The message of the ad was inaccurate. • The message of the ad was exaggerated. • The message of the ad was overstated. 	.68	.92	Marks and Kamins (1988)

Notes: We used the inverse of all message credibility items. "Message" is defined as the most central, important information that the advertising aims to convey.

underwent a two-day training session, in which we discussed each variable and clarified any wording problems.

After the training, we provided each expert with all ads and the coding instructions, such that they could rate the ads at their own pace at home. However, we advised them to rate no more than five ads per day and to take a break after watching two ads in a row. The experts needed between 25 minutes and two hours to code each ad on the four authenticity constructs and the different control variables.⁹ Their coding efficiency improved with the number of commercials coded. The sequence of ads differed for each expert, to avoid order biases. We assessed intercoder reliability using Krippendorff's alpha, which confirmed measurement quality (Krippendorff 1980). All constructs exceeded the critical value of .67. We also tested the discriminant validity of our authenticity dimensions in an exploratory factor analysis using Varimax rotation. The results suggest a four-factor solution that explains 94% of the total variance, with a minimum factor loading of .77. The correlations of the three constructs ranged from $-.09$ to $.14$. Thus, discriminant validity was established (Fornell and Larcker 1981). Table 6 displays some descriptive statistics and the correlations.

Table 6. Descriptive Statistics and Correlations of Authenticity Dimensions Across All Brands.

	Brand Essence	Brand Heritage	Realistic Plot	Message Credibility
Mean	4.96	1.51	3.07	5.42
Maximum	6.38	5.80	6.01	7.00
Minimum	1.13	1.00	1.00	2.90
SD	.89	.82	1.38	.85
Brand essence	1	-.09	.13	.02
Brand heritage		1	.05	.06
Realistic plot			1	.14
Message credibility				1

Note: N = 323.

Figure 2 shows the variation in each of the four authenticity dimensions, indicating that in current practice, most marketers try to sustain the brand essence and focus less on brand heritage. We observed no patterns relating to realistic plot. However, most messages are at least somewhat credible.

Methodology

To investigate the effect of the four authenticity dimensions, we follow a two-step estimated dependent variable approach

⁹ Coding some of the control variables (e.g., complexity, which required counting the number of words and scene cuts in each ad) was time consuming.

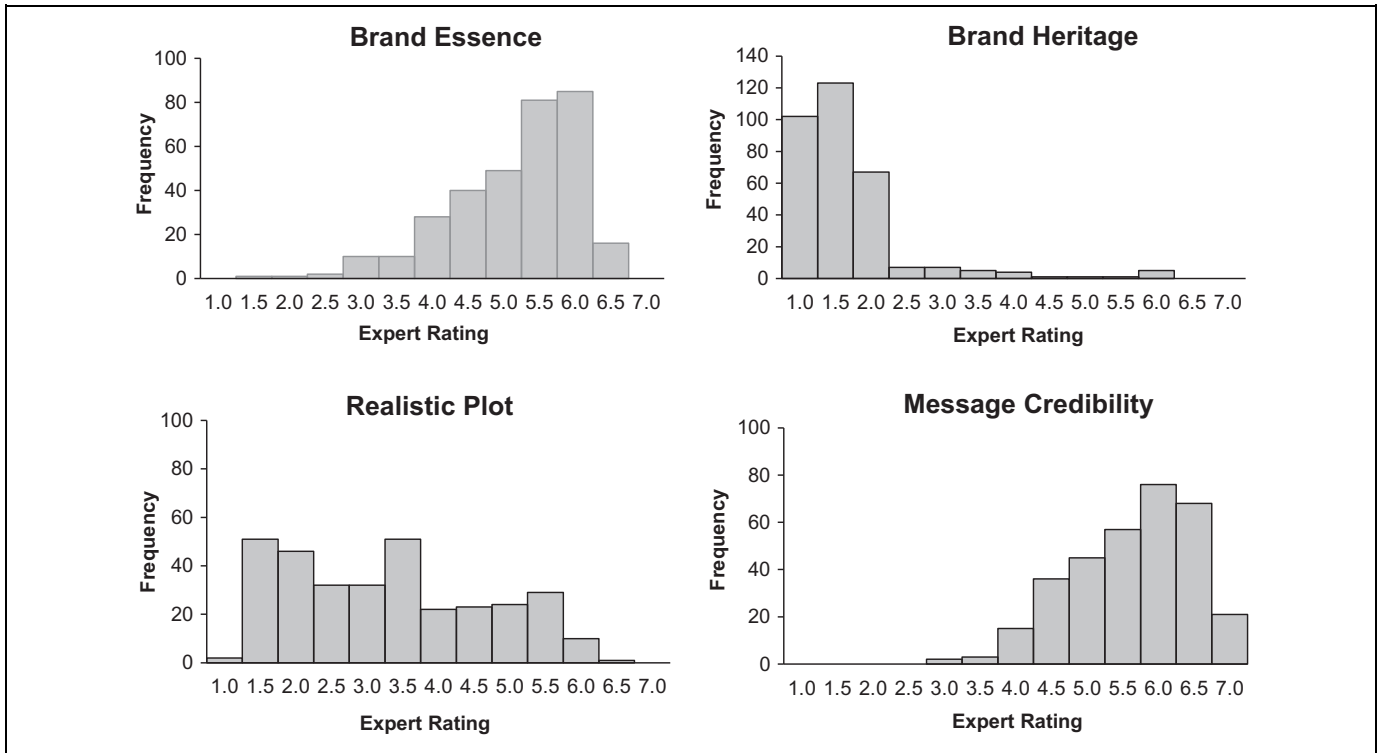


Figure 2. Distribution of authenticity dimensions.

(Chandy et al. 2001). This approach is well documented and generally yields unbiased coefficients and reliable t-statistics (Bryan and Jenkins 2016; Wooldridge 2010). The parsimonious model is ideal for our set of varying numbers of ad executions per brand and allows for the inclusion of a range of control variables. In the first step, we model the effect of each ad on brand sales while controlling for other marketing mix variables. In the second step, we regress the pooled immediate and cumulative estimated advertising coefficients on the four authenticity dimensions and other control variables. We use the estimated inverse standard errors from the first step as a weighting matrix for the generalized least squares estimation in the second step to avoid potential heteroskedasticity of the error term (Saxonhouse 1976). To increase estimation efficiency, it might be possible to combine the two steps and estimate a single reduced model. However, with our many variables, brand-specific number of ad executions, and analysis of moderated moderation effects, this kind of estimation would be difficult to execute and interpret (Greene 2003).

Step 1: Measuring Dynamic Advertising Effectiveness

To obtain brand-specific estimates, we formulated an error correction model (ECM) for each of the 67 brands (Gijsenberg 2014; Van Heerde, Srinivasan, and Dekimpe 2010; Van Heerde et al. 2013). The ECM offers four main benefits. First, it is able to provide immediate (IM) and cumulative (CML) elasticities that do not suffer from collinearity. Second, the model fits our time-series, cross-sectional data structure. Third, the response

parameters are allowed to vary across brands, as each brand might react differently to marketing mix instruments and ad campaigns. Fourth, the ECM can account for endogeneity, which may characterize some of our variables.

An important assumption of the ECM is that all data series are either cointegrated or stationary. Thus, we tested the log-transformed time-series variables for stationarity before specifying the model. On the basis of results from a Phillips–Perron test using an intercept and a trend as exogenous variables, in all but 2% of the cases we reject the null hypothesis that the individual time series has a unit root. Because previous literature suggests that unit root tests for panels have higher power than individual brand tests, we also conducted a panel unit root test (Levin, Lin, and Chu 2002). The results confirm that our time-series variables are stationary. Thus, none of the marketing mix variables exhibits a persistent effect on sales, and we are able to apply the ECM.

We use a log-log specification to obtain elasticity estimates for each independent variable, which makes the estimated coefficients comparable both within and across brands (Wittink et al. 1988). We thus specify the final model as follows:

$$\begin{aligned} \Delta \ln S_t^b = & \alpha_0^b + \sum_{c=1}^C \beta_c^{IM, b} \Delta \ln Adv_{c, t}^b + \sum_{j=1}^J \eta_j^{IM, b} \Delta \ln CV_{j, t}^b \\ & + \gamma^b \left[\ln S_{t-1}^b - \sum_{c=1}^C \beta_c^{CML, b} \ln Adv_{c, t-1}^b - \sum_{j=1}^J \eta_j^{CML, b} \ln CV_{j, t-1}^b \right] \\ & + \sum_{n=1}^{12} \sigma_n M_{n, t} + \epsilon_t^b, \end{aligned} \quad (1)$$

where

- Δ = first difference operator ($\Delta X_t = X_t - X_{t-1}$),
- $\ln S_t^b$ = log sales (in kg) of brand b in week t ,
- $\ln Adv_{ct}^b$ = log advertising gross spending in € for ad c of brand b in week t ,
- $\ln CV_{1t}^b$ = log price per kg in € for brand b in week t ,
- $\ln CV_{2t}^b$ = log weighted distribution of brand b in week t ,
- $\ln CV_{3t}^b$ = log percentage of stores with a feature promotion for brand b in week t ,¹⁰
- $\ln CV_{4t}^b$ = log percentage of stores with a display promotion for brand b in week t ,
- $\ln CV_{5t}^b$ = log gross spending for other marketing activities in € (billboard, internet, print) for brand b in week t ,
- $\ln CV_{6t}^b$ = log market share-weighted competitor price in € for brand b in week t ,
- $\ln CV_{7t}^b$ = log total competitor advertising spending in € for brand b in week t ,
- $\ln CV_{8t}^b$ = log number of working days in week t ,
- M_{nt} = dummy variable for each month,
- $\beta_c^{IM,b}$ = immediate effect of ad c on sales of brand b ,
- $\beta_c^{CML,b}$ = cumulative effect of ad c on sales of brand b ,
- $\eta_j^{IM,b}$ = immediate effect of control variable j on sales of brand b ,
- $\eta_j^{CML,b}$ = cumulative effect of control variable j on sales of brand b ,
- σ_t = effect of the monthly dummy n on sales of brand b ,
- γ^b = adjustment factor for brand b , and
- e_t^b = disturbance term for brand b in week t .

In this first step, our main goal is to identify the immediate and cumulative effectiveness of each ad in our sample. The ECM disentangles these immediate and cumulative effects into two distinct sets of parameters. Thus, $\beta_c^{IM,b}$ represents the immediate elasticity, which specifies an instant sales effect due to a temporary change in ad spending, and $\beta_c^{CML,b}$ indicates the long-term equilibrium relationship between ad spending and sales. All of our variables are stationary, so we can interpret the cumulative elasticities as a sales effect, including current (immediate) and future effects on $\ln(\text{sales})$ due to a temporary change in ad spending. The γ parameter reflects the speed with which the adjustment to the cumulative equilibrium occurs (Gijsenberg 2014). Finally, we include a broad set of control variables to avoid misspecification. In case of residual

autocorrelation, we respecified the model, adding additional lags of the differenced regressors to capture neglected dynamics. In general, adding one additional lag sufficed to render the residuals well behaved. We used White standard errors (White 1980) where heteroskedasticity persisted.

Price and advertising spending are two potential sources of endogeneity, although the case for advertising endogeneity is not strong in our data. If managers (re)allocated ads periodically on the basis of performance (e.g., sales, awareness), we could argue that ad spending is endogenous (Rossi 2017; Sethuraman, Tellis, and Briesch 2011). We conducted several interviews with brand and media managers to investigate this possibility (see Web Appendix W6 for a detailed discussion). The interviews revealed that advertising endogeneity is highly unlikely in our case of weekly data, as firms do not vary week-to-week ad content in response to observed performance shocks (Leeftang et al. 2000). In fact, most TV campaigns follow fixed media plans, rotating content much more rarely and doing so to target different consumers rather than to increase ad effectiveness. Furthermore, we used lags and leads of ad spending as instruments to test for possible endogeneity. Results of Durbin–Wu–Hausman tests do not show any indication that advertising spending is endogenous for the data at hand ($\chi_{lags}^2 = 1.800, p > .1$; $\chi_{leads}^2 = .994, p > .1$). We thus conclude that advertising endogeneity is not a major concern.

However, price endogeneity could be an issue and thus deserves further investigation. It could arise because of omitted variables or dependence on unobserved demand increases (Ma et al. 2011). In contrast to advertisements, prices can be changed on short notice, and our data set includes price promotions. The products are sold mostly in supermarkets, which use price adjustments and promotions regularly to stimulate demand (Besanko, Gupta, and Jain 1998). Therefore, prices are likely to be endogenous.

We address price endogeneity for $\Delta \ln(\text{price})$ by adopting a two-stage least squares approach using instrumental variables.¹¹ In line with Gijsenberg (2014), we use the average price of other product categories as instruments. For example, for a yogurt brand, we use the average prices of chocolate bars, shampoos, shower gels, household detergent, and razors as instrumental variables. Our model is overidentified, so we can test the strength (Angrist–Pischke multivariate F-statistic) and validity (Sargan test) of our instruments. The test results show that the instruments correlate with the endogenous variables (p -value of the F-test $< .05$) and are exogenous with the error term of the focal brand ($p > .1$).

Step 2: Measuring the Impact of Authenticity

In the second stage, we pool the immediate and cumulative coefficients for each ad and explain their variation as a function of the four authenticity dimensions and other control variables. Thus, the 323 estimated advertising effects obtained from the

¹⁰ Feature promotion indicates the percentage of stores that feature brand b in week t (number of stores featuring brand b divided by the total number of stores distributing brand b). However, because not all stores have the same consumer traffic, the percentage is weighted by store size. The same applies to display promotions.

¹¹ We do not instrument lagged variables, which are generally predetermined.

first stage represent the dependent variables in our moderated analysis ($\beta_c^{IM,b}$ and $\beta_c^{CML,b}$). We estimate two separate equations, one to explain the ads' immediate effects (Equation 2) and one to explain their cumulative effects (Equation 3). To account for measurement errors in the dependent variables and heteroskedastic errors, we weight each variable with its inverse standard error, scaled by effect size. We specify the second-step equations as follows:

$$\beta_c^{IM,b} = \phi^{IM} + \sum_{i=1}^4 \theta_i^{IM} X_i^c + \sum_{m=1}^M \lambda_m^{IM} CC_m^c + \sum_{k=1}^6 \omega_k^{IM} PC_k^c + v^{IM} \quad (2)$$

and

$$\beta_c^{CML,b} = \phi^{CML} + \sum_{i=1}^4 \theta_i^{CML} X_i^c + \sum_{m=1}^M \lambda_m^{CML} CC_m^c + \sum_{k=1}^6 \omega_k^{CML} PC_k^c + v^{CML}, \quad (3)$$

where X_i^c denotes a vector of the four authenticity dimensions and CC_m^c represents other content cues (controls) that might influence ad effectiveness (MacInnis, Rao, and Weiss 2002; Tellis 2004). Moreover, PC_k^c denotes the dummy variables (fixed effects) representing the different product categories, ϕ^{IM} and ϕ^{CML} are intercepts, and v^{IM} v^{CML} represent the error terms. We assume the error terms to be normally distributed with heteroskedastic variance. Note that we mean-centered all the explanatory variables to avoid multicollinearity.

For the moderated moderation, we used dummy variables to classify the brands into hedonic and utilitarian categories (1 = hedonic, 0 = utilitarian). We then added the interaction term between hedonic product categories and the different authenticity dimensions to our initial model¹² and tested the interactions separately for the immediate and the cumulative effects. Recall that we used the relative weighted retail distribution of the brand as a proxy for brand size. We again added the interaction term between brand size and each respective authenticity dimension to the immediate and cumulative equations.

Results and Discussion

Immediate and Cumulative Effects of Advertising on Sales (Step 1)

This study aims primarily to explain the variance in ad effectiveness due to authenticity and other content factors. Thus, we use the ad elasticities as input for Equations 2 and 3. However, to compare the consistency of the parameter estimates with

previous research, we summarize the effect sizes across all brands using Rosenthal's (1991) method of added Zs, with the results shown in Table 7. We derive standard errors for the cumulative effects of all marketing-mix variables using the delta method (Greene 2003).

The results indicate that the influence of advertising on sales, with an immediate effect of .0027 and a cumulative effect of .0042, is significant but small. Because we are analyzing mature FMCG brands, we expect minimal ad elasticities (Sethuraman, Tellis, and Briesch 2011).¹³

Our results are in line with previous findings regarding consumer products on the European market (e.g., Van Heerde et al. 2013). However, the magnitude of the individual ad elasticities differs strongly across ads, with standard deviations of .015 (immediate) and .013 (cumulative). That is, some ads are much more effective than others, regardless of the spending level, highlighting the importance of determining precisely which factors drive ad effectiveness. The adjustment and cumulative parameters enable us to determine the average duration of the influence of ads on sales by simulating an impulse response function. In our data set, the average duration of ad effectiveness is three weeks. Moreover, 64% of the cumulative effect is achieved within the first week. That is, for FMCG, the strongest effect appears in the same week in which the ad airs. The average elasticity for other marketing activities is not significant. Thus, for the FMCG brands at hand, TV still seems to be the most important advertising medium. The influence of control variables such as price and distribution is in line with previous research (Hanssens 2015).

Explaining the Magnitude of Advertising Effectiveness (Step 2)

Table 8 displays the effects of the different authenticity dimensions and control variables on the immediate and cumulative relationships between ad spending and sales. Both models are statistically significant ($F^{IM} = 16.65, p < .001$; $F^{CML} = 6.50, p < .001$) and explain considerable variation in the immediate ($R^2 = .51$) and cumulative ($R^2 = .29$) sales responses.

In line with our hypothesis, brand essence has a positively skewed, U-shaped effect on immediate and cumulative sales responses ($\theta_1^{IM}: b_{quad} = .005, p < .05$; $\theta_1^{CML}: b_{quad} = .007, p < .01$). Ads that preserve the brand essence reinforce a distinctive brand image in consumers' minds (Kelly 1998; Mee-naghan 1995). However, ads that break with the brand essence can also be beneficial because of their ability to capture consumers' attention and refresh the image of established brands (Merrilees and Miller 2008). Because a repositioning of such magnitude happens rarely, we expect the positive effect of

¹² We removed the category dummies for this analysis to avoid multicollinearity.

¹³ The low elasticities indicate that increasing ad spending would yield negative returns on investment for many of the brands at hand, which underlines the need to increase ad effectiveness by improving on content factors.

Table 7. Results of the Advertising Response Model (Step 1).

	Weighted Coefficient	Expected Sign	Number of Observations	Z-Score	p-Value Z-Score
Intercept	7.9154		67	32.67	.00
Adjustment parameter	−.5484	$0 < x < 1$	67	−42.55	.00
Price					
Immediate	−2.5249	−	67	−26.30	.00
Cumulative	−1.5801	−	67	−15.21	.00
Distribution					
Immediate	.3289	+	67	15.82	.00
Cumulative	.2829	+	67	7.24	.00
Feature promotion					
Immediate	.0143	+	65	9.58	.00
Cumulative	.0256	+	67	9.43	.00
Display promotion					
Immediate	.0122	+	63	5.80	.00
Cumulative	.0287	+	65	6.51	.00
Other marketing activities					
Immediate	.0013	+	62	.60	.28
Cumulative	.0024	+	63	.97	.17
Competitor price					
Immediate	.0392	+	67	1.44	.07
Cumulative	.1706	+	67	2.02	.02
Competitor advertising					
Immediate	.0017	−	59	4.06	.00
Cumulative	.0031	−	62	1.98	.02
Weekday					
Immediate	.4208	+	67	19.17	.00
Cumulative	.5982	+	67	9.20	.00
Advertising					
Immediate	.0027	+	323	7.10	.00
Cumulative	.0042	+	323	6.75	.00

Notes: $R^2 = .89$. Significant results are in bold. Because some categories are highly seasonal, the model includes dummy variables for each month but one; these dummy variables are not displayed in this table.

brand essence to be more relevant in most decision situations. Figure 3, Panel A, shows the immediate and cumulative effects.

Contrary to the positive prediction, brand heritage has no significant effect on immediate or cumulative sales responses, based on a 95% confidence interval. This finding contrasts with a reported positive effect of brand heritage on consumer attitudes (Merchant and Rose 2013; Newman and Dhar 2014). The difference may arise because we analyze low-involvement brands, for which brand heritage claims might be less important or even seem trivial. In addition, the positive effect of brand heritage on various mindset metrics may not translate into an actual sales effect (Bemmar 1995). Therefore, marketing managers for FMCG brands should focus on preserving the brand essence rather than creating links to a brand's heritage.

The results provide some support for our prediction that showing a realistic plot decreases ad effectiveness. We find a significant negative effect ($\theta_3^{CML} = -.004$, $p < .05$) on the cumulative sales response (see Figure 3, Panel B). The immediate effect is marginally significant ($\theta_3^{IM} = -.003$, $p < .1$). Unrealistic ads can catch consumers' attention (Arias-Bolzmann, Chakraborty, and Mowen 2000), which is especially important in cluttered advertising environments (Danaher, Bonfrer, and Dhar 2008). In contrast to our

expectation, we do not find a significant quadratic effect, which may be attributed to our sample of mostly established brands, which are more likely to benefit from unrealistic ads.

Finally, message credibility has a significant negative effect on immediate and cumulative sales responses ($\theta_4^{IM} = -.008$, $p < .001$; $\theta_4^{CML} = -.010$, $p < .05$), the opposite of the expected positive association. Thus, the more exaggerated the message, the greater the ad effectiveness (see Figure 3, Panel C). Because this result is somewhat surprising, we conducted an additional descriptive analysis comparing the mean cumulative ad elasticity for highly credible (top 30%, $M = .001$) and exaggerated (bottom 30%, $M = .007$) messages. In line with our regression findings, the result suggests that message credibility indeed hurts ad effectiveness. However, our data set does not include any highly exaggerated ads (minimum = 2.9, $M = 5.42$ on a seven-point scale; see Table 6). Thus, the results can be interpreted as revealing that *somewhat* exaggerated or vague messages are more effective.

We offer several potential reasons for this finding. First, consumers pay only limited attention to ads and may not notice or elaborate on the exaggeration. Second, consumers might expect advertising messages to be exaggerated. In our interviews, Friedrich Tomm, managing director of TryNoAgency,

Table 8. Results of Moderation Analysis (Step 2).

	Estimated Immediate Effect		Estimated Cumulative Effect	
Intercept	-.012	(.008)	-.012	(.010)
Category				
Chocolate bars ω_1	.004	(.005)	.014	(.010)
Shower gel ω_2	.009	(.005)	.029**	(.009)
Yogurt ω_3	.013**	(.005)	.016	(.010)
Razors ω_4	.037***	(.004)	.060***	(.016)
Shampoo ω_5	.006	(.004)	.002	(.005)
Authenticity dimensions				
Brand essence θ_1	.002	(.002)	.013*	(.006)
Brand essence ²	.005*	(.002)	.007**	(.003)
Brand heritage θ_2	-.001	(.003)	.008	(.006)
Realistic plot θ_3	-.003	(.001)	-.004*	(.002)
Realistic plot ²	.001	(.001)	.002	(.001)
Message credibility θ_4	-.008***	(.002)	-.010*	(.004)
Controls				
Line extension λ_1	.008*	(.003)	.002	(.004)
Rational appeal λ_2	-.001	(.002)	.004	(.004)
Emotional appeal λ_3	-.001	(.001)	-.001	(.002)
Brand presence λ_4	.025	(.017)	.034	(.021)
Complexity λ_5	-.014	(.013)	.011	(.019)
Complexity ²	-.203**	(.075)	-.464***	(.136)
Celebrity λ_6	-.008	(.004)	-.013	(.009)
Spot length λ_7	.000	(.000)	.001	(.001)
R ²	.511		.290	

* $p < .05$.** $p < .01$.*** $p < .001$.Notes: Standard errors are in parentheses. Category baseline = household detergent ω_6 . $N = 323$.

points out that “advertising cannot belie that it is still advertising—and consumers know that.” Rather than neglecting overstated messages, consumers simply discount them. Despite this discounting, however, exaggerated messages can have a positive effect on product evaluations because consumers accept claims before they discredit them, which affects their memory (Cowley 2006). Similarly, deceptive advertising can be successful in shaping consumer beliefs about a product, even if consumers are aware of the deception (Olson and Dover 1978). Third, consumers might choose to believe an overstated message that appeals to their “ideal self” (Malär et al. 2011). That is, exaggerated ads communicate consumers’ aspirations of who they want to be (e.g., more beautiful), promising them a simple and fast means of self-improvement. As Charles Revson, the founder of Revlon, tellingly put it, “In the factory we make cosmetics. In the drugstore we sell hope.” (Revlon 2018).

Explaining Differences by Brand Size and Consumption Purpose (Moderated Moderation)

Thus far, we have focused on findings aggregated across all brands. However, the effects of the authenticity dimensions

could vary by consumption purpose or brand size. Table 9 summarizes the results of this moderated moderation analysis. Sample size issues require us to conduct the two analyses separately.

An immediate, significant interaction arises between realistic plot and hedonic product categories. Given that the cumulative effect is not significant, this result only partially supports H_{5a} . The interaction shows a positive quadratic term ($\kappa_{3/\text{Hedonic}}^{\text{IM}} : b_{\text{quad}} = .005, p < .05$), which means that for the hedonic product categories at hand, a less realistic plot is associated with higher ad effectiveness within a reasonable range around the mean. Unrealistic plots help hedonic brands because they rely less on sober facts but try to sell fun and entertainment. For utilitarian product categories, greater realism increases ad effectiveness only to a certain point. Overly realistic depictions of everyday life may seem staged and induce resistance because “consumers still know that it is advertising and do not want to be taken for fools” (Expert 5, Web Appendix W1).

Hedonic product categories also moderate the effect of message credibility, in support of H_{5b} ($\kappa_{4/\text{Hedonic}}^{\text{CML}} = -.029, p < .001$). More credible messages decrease (increase) effectiveness for hedonic (utilitarian) products, a finding that is somewhat expected because consumers tend to rely more on subjective (objective) information to assess hedonic (utilitarian) product benefits (Park and Young 1986). Furthermore, performance claims for utilitarian products are often easier to verify, as they pertain to concrete results (e.g., “dissolves dirt”) rather than abstract promises (e.g., “makes your skin feel young”). In fact, many hedonic brands have had enormous success with overstated claims, such as Kellogg’s UK (“Stay young and beautiful”), Coke (“Open happiness”), or Milka chocolate (“The most tender temptation since chocolate”). Brand managers of hedonic categories thus are likely to benefit from exaggeration, while the opposite is true for managers of utilitarian categories.

Consistent with H_{6a} , the influence of brand essence depends on the brand’s size ($\kappa_{1/\text{BrandSize}}^{\text{CML}} : b_{\text{quad}} = -.028, p < .01$). Preserving the brand essence is especially important for smaller, less familiar brands that have yet to build a unique brand image (Park, Jaworski, and MacInnis 1986). On the other hand, it may also be beneficial for them to break with their brand essence occasionally to surprise consumers and increase awareness. For large brands, brand essence is not strongly associated with ad effectiveness, possibly because consumers are already well aware of the brands’ values and personality.

While preserving brand heritage has no measurable effect across all ads in our sample, it shows significant interactions with the brand’s size ($\kappa_{2/\text{BrandSize}}^{\text{CML}} = -.025, p < .05$), in support of H_{6b} . For small (large) brands, stressing their roots increases (decreases) ad effectiveness. This finding can be explained by the believability of claims about brand heritage. For small brands, depictions of, for example, traditional manufacturing or commitments by the company’s owner are believable, whereas for large brands they may seem artificial. For instance, if Ferrero suggests that its snack Hanuta is handmade

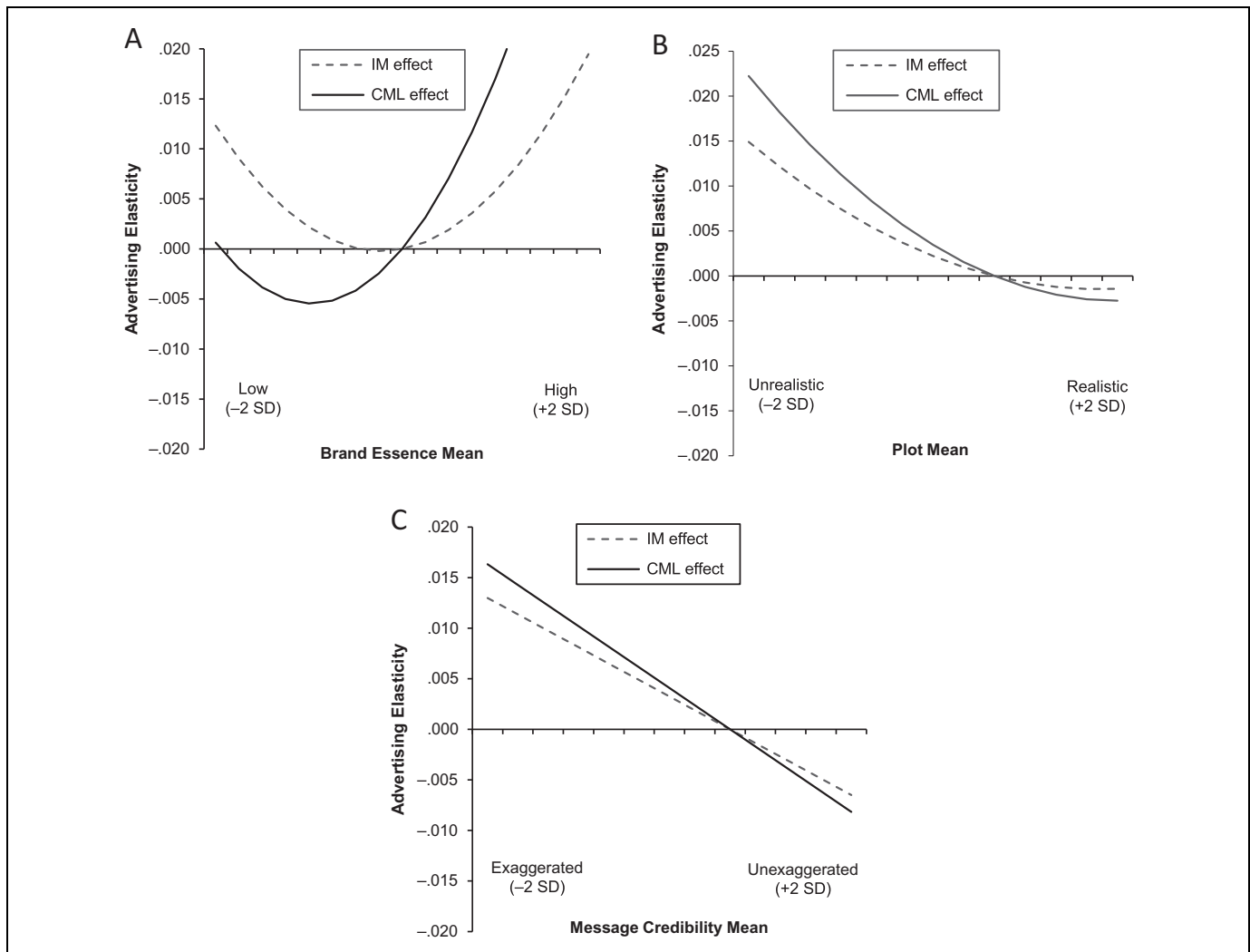


Figure 3. Effects of authenticity dimensions on immediate and cumulative ad elasticities.

Notes: The x-axis covers the respective authenticity dimension (mean \pm 2 SD).

in an old-fashioned bakery as it was 50 years ago, consumers may be reluctant to buy into this claim.

A significant quadratic interaction arises between realistic plot and brand size ($\kappa_{4/BrandSize}^{CML} : b_{quad} = .014, p < .01$). However, the effect does not support H_{6c} . The results generally indicate that both large and small brands benefit from attention-grabbing, less realistic plots. Unrealistic plots may help brands to break through the ever-increasing ad clutter, but in the case of small brands, lower realism increases ad effectiveness only to a certain degree. Possibly, extremely unrealistic plots might overwhelm consumers, thus overshadowing the product presentation, because they require too many cognitive resources and thus limit consumers' ability to process brand information (Campbell and Keller 2003). In this case, higher attention may conflict with the goal of strengthening brand knowledge.

Finally, the influence of message credibility also depends on brand size ($\kappa_{4/BrandSize}^{CML} = .024, p < .05$). As hypothesized for small brands, a less credible message is associated with higher ad effectiveness. Lesser-known brands can stimulate awareness

by using an exaggerated claim, as it might help them stand out and overcome competitive interference. In contrast, for large brands, consumers are more familiar with product attributes and thus more likely to detect overstatements. Here, we do not find a strong association between message credibility and advertising effectiveness.

Robustness and Validity

We investigate whether our findings are robust for different measurements of the four authenticity dimensions by measuring each authenticity dimension with an alternative operationalization. To increase the reliability of this task, we solicited the help of experts other than those who participated in the main study. For brand essence, we measure the extent to which an ad's style is consistent with previous ads because previous research argues that consistency is strongly related to authenticity and brand essence (Beverland 2005; Morhart et al. 2015). For brand heritage, we use a dummy variable that indicates

Table 9. Moderated Moderation.

	Immediate				Cumulative			
	Hedonic Categories		Large Brand		Hedonic Categories		Large Brand	
Intercept	.002	(.008)	-.007	(.006)	.005	(.016)	-.018	(.012)
Category								
Chocolate bars ω_1			.005	(.004)			.010	(.008)
Shower gel ω_2			.008	(.006)			.026**	(.009)
Yogurt ω_3			.012**	(.004)			.021*	(.008)
Razors ω_4			.029***	(.004)			.065***	(.008)
Shampoo ω_5			.004	(.004)			.008	(.007)
Authenticity dimensions								
Brand essence θ_1	-.001	(.003)	.002	(.002)	.003	(.007)	.008*	(.003)
Brand essence ²	.004*	(.002)	.002	(.001)	.004	(.004)	.007***	(.002)
Brand heritage θ_2	-.002	(.002)	-.002	(.002)	.005	(.005)	-.006	(.004)
Realistic plot θ_3	-.003	(.002)	-.001	(.001)	-.003	(.003)	-.004*	(.002)
Realistic plot ²	-.003*	(.002)	.000	(.001)	-.004	(.003)	.000	(.002)
Message credibility θ_4	.008***	(.002)	-.006***	(.002)	.015**	(.005)	-.010**	(.003)
Controls								
Line extension λ_1	.004	(.004)	.008***	(.002)	-.004	(.006)	.000	(.005)
Rational appeal λ_2	-.003	(.002)	.000	(.002)	.003	(.004)	.004	(.003)
Emotional appeal λ_3	-.002	(.002)	-.003*	(.001)	.000	(.002)	-.001	(.002)
Brand presence λ_4	.055**	(.018)	.004	(.011)	.080**	(.030)	.027	(.002)
Complexity λ_5	-.025	(.019)	-.038***	(.011)	.016	(.025)	-.003	(.022)
Complexity ²	-.199*	(.087)	-.198***	(.058)	-.412**	(.148)	-.388**	(.119)
Celebrity λ_6	-.013*	(.005)	-.003	(.002)	-.011	(.011)	-.018**	(.006)
Spot length λ_7	.001***	(.000)	.000	(.000)	.001*	(.001)	.001	(.001)
Moderator								
Hedonic categories	-.015*	(.007)			-.004	(.011)		
Large brand			-.006	(.007)			-.044**	(.014)
Interaction terms								
Moderator \times Brand essence κ_1			-.007	(.006)			-.019	(.011)
Moderator \times Brand essence ²			-.006	(.005)			-.028**	(.001)
Moderator \times Brand heritage κ_2			-.016***	(.005)			-.025*	(.001)
Moderator \times Realistic plot κ_3	.000	(.003)	-.008**	(.003)	-.004	(.005)	-.005	(.007)
Moderator \times Realistic plot ²	.005*	(.002)	.005	(.003)	.006	(.004)	.014**	(.005)
Moderator \times Message credibility κ_4	-.017***	(.004)	.011*	(.005)	-.029***	(.007)	.024*	(.011)
R ²	.402	.562	.194	.408				

* $p < .05$.** $p < .01$.*** $p < .001$.

Notes: Standard errors are in parentheses. Category baseline = household detergent ω_6 . The baselines for the moderation effects are utilitarian categories and small brands, respectively. N = 323.

whether the ad establishes a link to the brand's traditions, history, place of origin, or traditional production method (Beverland 2005; Spiggle, Nguyen, and Caravella 2012). The inverse of absurdity offers the alternative measurement for our third authenticity dimension because unrealistic plots should be perceived as more absurd. We use an established believability scale to test message credibility. Using the alternative measures yields similar results.

Further, we aim to validate our findings and support their generalizability. To this end, we apply the model to a second, entirely unrelated data set. We were able to obtain data on advertising spending from the Nielsen Company and data on brand sales from GfK Germany, with the same weekly structure for 16 brands from three product categories not used in the main study (facial cream, coffee, soft drinks). Depending on

the brand, these data encompass up to 248 consecutive weeks. We trained five new experts with the same procedure as in the original study. They then coded 103 ads with respect to the original items. Applying the same two-step estimation approach, we find effects similar to those of our main model. Naturally, the lower sample size (103 ads in this step vs. 323 ads in the original study) may have a detrimental impact on coefficient significance. We find that the cumulative effects of brand essence and message credibility remain stable. Consistent with the main analysis, showing a realistic plot has a negative impact on ad effectiveness. However, this effect does not reach significance. Finally, references to the brand's heritage remain nonsignificant. We detail both the robustness checks with alternative measures and the validation analysis in Web Appendix W7.

Conclusion and Managerial Implications

A common belief is that authenticity is “a major driver of advertising success” (Expert 4, Web Appendix W1). However, the truthfulness of this claim has not been empirically verified. This research presents an initial attempt to shed light on the concept of authenticity in advertising and its impact on brand sales.

What constitutes authentic advertising? We identify four relevant dimensions of authenticity in advertising, namely (1) preserving the brand essence, (2) honoring brand heritage, (3) showing a realistic plot, and (4) presenting a credible message. The presence of four dimensions implies that the term “authenticity” should not be used as a catchall phrase. To ensure mutual understanding, managers need to precisely specify which authenticity dimension(s) they mean in their internal as well as external communications, for example, when working with agencies. In our interviews, brand managers often point out that reaching a common understanding is challenging because agencies’ perception of the term “authenticity” may differ. Our research thus helps create the basis for more fruitful and targeted communications.

What influence do these four authenticity dimensions have on advertising effectiveness? Do the effects depend on different brand and product characteristics? Contrary to popular belief, an authentic ad does not generally enhance performance. Our research provides four concrete implications for optimizing ad executions, which we summarize together with indications of nuanced impacts in Table 10. First, we find support for the notion that preserving the brand essence is generally important to increase ad effectiveness. The responsibility to guard the brand essence lies entirely with the brand owner—it is the brand manager’s duty to protect the brand’s positioning in external communications. Relegating this task to an agency may be detrimental. Moreover, managers must provide clear guidelines to their partners and carefully communicate their brand’s values, image, and style. This recommendation of course does not preclude the notion that intentionally breaking with the brand’s essence may help grab consumers’ attention (Lodish et al. 1995) and can be used to reposition a brand or add a communicative edge. Our practitioner interviews confirm that a “well-designed change in perspective” (Expert 1, Web Appendix W1) may help refresh the brand image and increase awareness.

Second, only managers of small brands benefit from stressing their brand’s heritage in advertisements. This finding is in contrast to the branding literature, which has strongly emphasized heritage and tradition (e.g., Beverland 2005). However, the pattern in our data is consistent: explained variance in the authenticity construct, practitioner interviews, and model findings all indicate that heritage has a subordinate and rather selective effect on authenticity in advertising. It is thus important for brand managers to carefully examine whether references to their brand’s heritage may help or hurt performance.

Third, we caution that managers should not blindly follow the recent mantra that ads must be close to real life. Contrary to

popular belief, realistic plots are not a panacea; rather, managers may find value in seeking entertainment with plots that are far from real life and that amuse and enchant the consumer. Managers thus should not be afraid to take risks and should encourage agencies to be creative.

Fourth, for utilitarian brands, we show that consumers are unforgiving when claims about the product’s performance are not true. In contrast, for hedonic categories or small brands, puffery may not be such a bad thing. In fact, brand managers should be self-confident in using vague, subjective, or even inflated claims (e.g., “This shower gel provides your skin with all essential vitamins”). Our interviews support this finding: “For hedonic products, it is easier to create ‘big worlds’ with bold claims to create awareness. Here, overstated advertising can be successful because these claims are not as easily verifiable by the consumer” (Expert 2, Web Appendix W1). In this sense, our findings present good news for marketers and ad agencies because they provide more room for differentiation and freedom in ad design.

Economic Impact

Does it pay to be real? To assess the economic impact of authenticity in advertising, we analyzed how improvements in brand essence, realistic plot, and message credibility would have affected revenues in our sample of 323 ad executions. On average, an improvement of .5 standard deviations on all three dimensions increases yearly revenues by 1.6% (Table 11). To illustrate the variability of this effect, we also examined a random subset of brands, one for each product category. The increases range from 1.23% to 2.19%, depending on the advertising budget, the ads’ baseline effectiveness, and the consumption purpose. The potential economic impact of authenticity is thus substantial. In contrast to budget increases, authenticity translates directly into profits. This finding underscores the importance of designing ads so that the brand’s characteristics correspond with the arrangement of the authenticity dimensions.

Limitations and Future Research

We note some limitations of this study with regard to advertising and price endogeneity, the heritage dimension, and the classification into hedonic versus utilitarian categories. To test for possible advertising endogeneity, we used lags and leads as instruments. We had to aggregate ad spending across ad spots to obtain valid instruments because individual ads are not aired every week. Conducting the test on the spot level would have resulted in too many zeros and low correlations between instruments and the original variables. We used different product classes as instruments for price, following the reasoning of Hausman (1997). One could argue that costs might have been the better choice. Because cost information was unavailable to us (and may suffer from other limitations, such as low variation; see Rossi 2017), our instrumental variables represented the best attainable option. Furthermore, the heritage dimension

Table 10. Summarized Results and Managerial Implications.

	Hedonic Categories		Utilitarian Categories		Small Brands		Large Brands	
	Key Effect	Implications	Key Effect	Implications	Key Effect	Implications	Key Effect	Implications
Impact of the authenticity dimensions on advertising effectiveness	Brand essence (+)	<ul style="list-style-type: none"> Generally, preserve brand essence: carefully communicate brand's style, standards, and values to agency, and keep ad design constant. However, if needed, deviate to draw attention. 	(+)	<ul style="list-style-type: none"> Generally, preserve brand essence: carefully communicate brand's style, standards, and values to agency, and keep ad design constant. However, if needed, deviate to draw attention. 	(+)	<ul style="list-style-type: none"> Generally, preserve brand essence: carefully communicate brand's style, standards, and values to agency, and keep ad design constant. However, if needed, deviate to draw attention. 		
Revenue impact Brand heritage	2.21%		2.21%		2.87% (+)	<ul style="list-style-type: none"> Use heritage claims or show traditional production methods Effect not as pronounced as for large brands 	(-)	<ul style="list-style-type: none"> Refrain from heritage claims as they may be perceived as untrue and silly
Revenue impact Realistic plot	(-)IM	<ul style="list-style-type: none"> Use unrealistic, creative plots to draw attention in the short run. Highlight hedonic elements (fun, sensual experience, enjoyment). 	(-)IM	<ul style="list-style-type: none"> Use somewhat unrealistic, creative plots to draw attention in the short run. Do not use plots that are too unrealistic. 	.66% (-)	<ul style="list-style-type: none"> Draw attention and stick in consumers' minds by showing somewhat unrealistic plots. Use copy tests to ensure that the plot does not overshadow the brand information. 	(-)	<ul style="list-style-type: none"> Draw attention and stick in consumers' minds by showing unrealistic plots.
Revenue impact Message credibility	.98% (-)	<ul style="list-style-type: none"> Use vague claims and puffery to highlight hedonic benefits. Exaggerate to draw attention. 	.92% (+)	<ul style="list-style-type: none"> Use credible and objective claims to inform consumers about product performance. 	.71% (-)	<ul style="list-style-type: none"> Use vague claims and puffery to stick out. Make rather bold promises to appeal to consumers' ideal self-image. 	1.63%	
Revenue impact	2.43%		2.49%		3.44%			

Notes: IM = immediate effect. To simplify interpretability, we state only the direction of linear effects and include details on curvilinear effects in the specific implications; cells are left blank where no significant effect was found. Revenue impacts state that for an average brand, the expected annual effect of improving advertisements on the authenticity dimensions from an unfavorable execution (e.g., low brand essence) to a favorable execution (e.g., high brand essence) is within a range of one standard deviation around the respective mean.

Table 11. Sales Optimization.

Category	Brand	Avg. Yearly Revenues (€)	Optimization (€)			
			Brand Essence	Realistic Plot	Message Credibility	Total Effect
Chocolate bars	1	41,463,449	324,395	159,933	306,347	790,675 (1.91%)
Shower gel	2	39,169,010	308,738	152,212	195,035	655,985 (1.67%)
Yogurt	3	21,228,538	155,965	76,903	231,828	464,696 (2.19%)
Razors	4	4,900,587	31,804	15,685	12,946	60,435 (1.23%)
Shampoo	5	78,892,742	600,783	296,213	239,692	1,136,689 (1.44%)
Household detergent	6	23,902,942	181,333	89,406	72,347	343,085 (1.44%)
Average for all brands	All	37,112,140	284,426	140,505	164,521	359,552 (1.59%)

Notes: Optimization is based on cumulative elasticities and pertains to improvement of .5 standard deviations on the respective authenticity dimension. Example brand simulations for message credibility are based on the moderation by consumption purpose; percentage changes are in parentheses.

showed low variation, which could be one reason for the non-significant main effect. Another reason, as indicated by our results, may be that the effects for large and small brands canceled each other out. This dimension may benefit from further investigation. Moreover, most product categories have both hedonic and utilitarian aspects, and we classified them into one of these two groups depending on where they scored higher (Kushwaha and Shankar 2013). These scores differed significantly for all categories except shower gel and shampoo. Our model yields qualitatively identical results when these two categories are left out.

A few additional limitations suggest directions for future research. First, our findings are based on data from mostly established FMCG brands. It would be interesting to investigate whether the effects of authenticity generalize to other product categories. For example, message credibility might be more important for products with high financial risk (e.g.,

cars). Second, future research might examine authenticity for advertising channels other than TV. The increasing importance of online and mobile advertising raises the question of whether these channels play by different rules. For instance, social media and influencer marketing may face additional challenges during the creation of authenticity campaigns, but managers also have the means to render ads more realistic than is feasible on TV. Third, our model could be expanded by adding wear-in and wear-out effects. This approach would require time-varying content cues that change on a weekly basis. Accounting for wear-in/out effects would be especially fruitful in the context of online advertising, for which content usually changes frequently.¹⁴ Finally, it would be worthwhile to investigate whether a brand's status as new versus established influences the effects of authenticity. For example, message credibility might be more important for new brands because of consumers' lack of experience with them.

¹⁴ We thank an anonymous reviewer for this suggestion.

A: Mueller Corner Yogurt Ad Consistent with Brand Essence



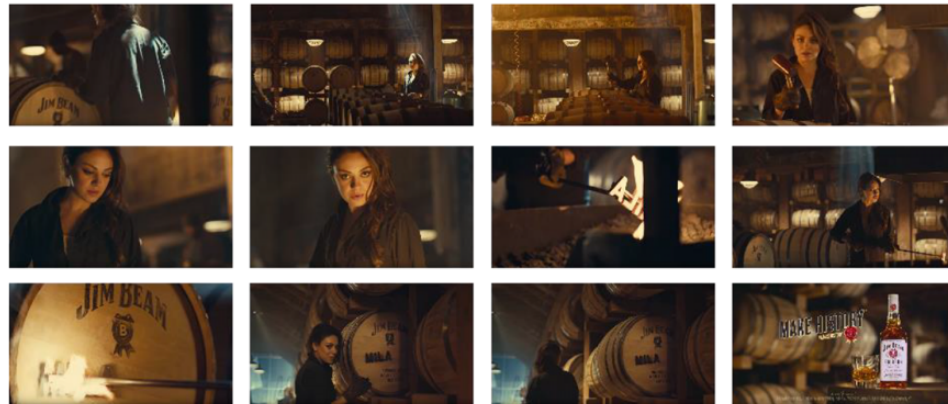
B: Mueller Corner Yogurt Ad Inconsistent with Brand Essence



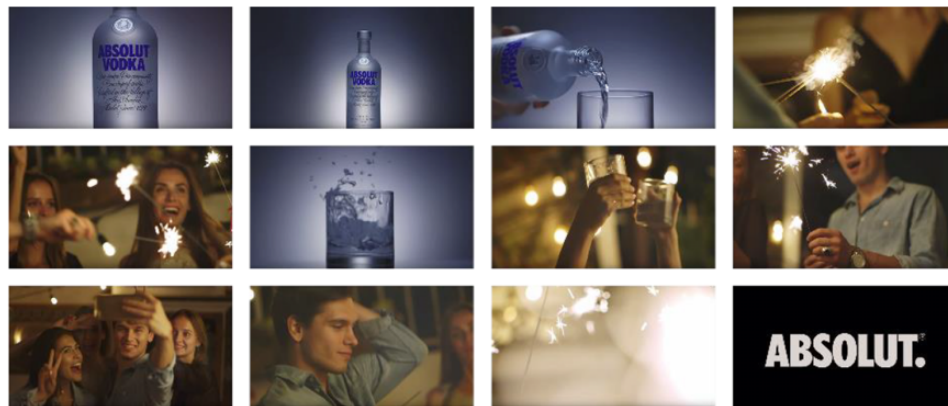
Appendix A. Brand essence.

Notes: In Panel A, the hedonic and fun yogurt brand Mueller Corner shows a funny ad about the yogurts' ingredients. Most ads by Mueller show personalized ingredients or products consistent with the brand. In Panel B, The hedonic and fun yogurt brand Mueller Corner shows a serious ad about the Red Cross and its helpers, which is less consistent with the brand.

A: Jim Beam Whiskey Ad Reflecting Brand Heritage



B: Absolut Vodka Ad Not Reflecting Brand Heritage



Appendix B. Brand heritage.

Notes: In Panel A, the ad refers to the traditional production method and history of Jim Beam's whiskey. In Panel B, the ad shows friends celebrating with Absolut Vodka. The ad does not refer to the brand's heritage or traditions.

A: Cif Abrasive Cleaner Ad with a Realistic Plot



B: Mr. Clean Abrasive Cleaner Ad with an Unrealistic Plot



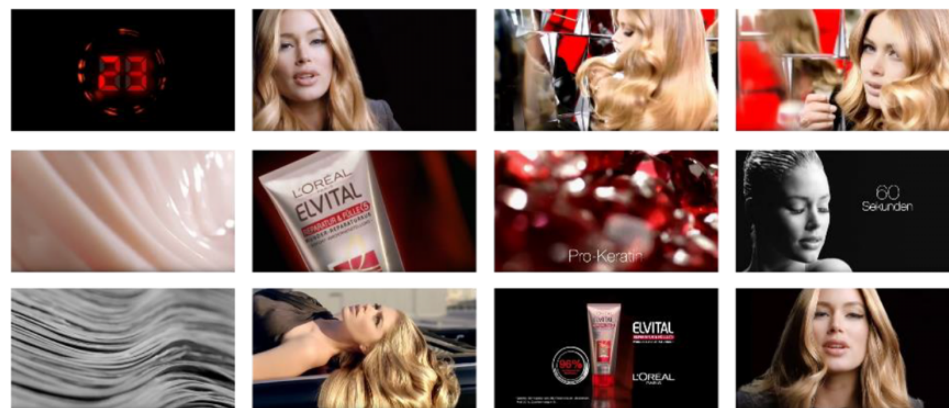
Appendix C. Realistic plot.

Notes: In Panel A, the plot of the ad is as follows: It is springtime, and a mother and her kids fetch outdoor toys from the garage. Having been in the garage for the last few months, the toys are dirty. The mother cleans the toys using Cif (note that in Germany, Cif is referred to as "Viss"). In Panel B, the plot of the ad is as follows: Two stainless steel plates complain about being tarnished when a third steel plate and Mr. Clean arrive. Mr. Clean polishes the first two steel plates to restore their shine (note that in Germany, Mr. Clean is referred to as "Meister Proper").

A: Plantur 21 Shampoo Ad with a Credible Message



B: Elvital Shampoo Ad with an Exaggerated Message



Appendix D. Credible message.

Notes: In Panel A, the ad message is that the caffeine shampoo Plantur 21 strengthens hair roots. In Panel B, the ad message is that Elvital Repair completely repairs hair within just one minute.

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