

The Effect of the Cartoonlike Style on Consumer Engagement

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Abstract

The current research offers an empirical test of the influence of cartoonlike styles on consumer engagement. Study 1 reveals that this style generates greater consumer engagement than realistic representations, due to the ability of the cartoonlike style to spark playfulness perceptions that generate psychological comfort. Study 2 tests for mediation through moderation and determines that when consumers perceive a character as playful, the effect of the cartoonlike style mitigates. In Study 3, the effect of the cartoonlike style depends on consumers' expertise with the promoted product. These detailed findings shed new light on when and why marketers should adopt cartoonlike styles in their communications.

Keywords: Cartoon, spokespeople, playfulness, psychological comfort, consumer expertise, engagement

Introduction

Many marketing messages go unnoticed or disappear nearly instantly from consumers' memory (Hsu, 2023). To overcome such issues, brands seek novel ways to attract attention and connect with their target audiences, such as by using cartoonlike styles in their messages (Ashley and Tuten, 2015). A *cartoonlike* style results from converting an existing image or depicting an action, thing, person, or animal into a comic-style illustration or animation.

Despite its popularity, research on the use of cartoonlike styles in marketing efforts is limited. Previous research identifies positive and negative behavioral outcomes towards cartoon like communication. Animated ads appear effective for increasing brand awareness, product promotion (Heiser, Sierra, and Torres, 2008), attention, recall and click through rates (Goel and Upadhyay, 2017; Li *et al.*, 2020), and even enhance taste perceptions (Roberto *et al.* 2010) if they appear on a packaging. However, cartoons may be ineffective for capturing consumer attention when they pertain to low-involvement (Rakrachakarn and Moschis, 2013) or offensive (Rakrachakarn and Moschis, 2015) products. According to such evidence the effects of cartoonlike style in advertising might be contingent to specific products and contexts. In our attempts to extend this stream of literature, we focus on how and why cartoonlike style communication influences consumer engagement toward the ad.

In the next section, we present a theoretical framework of *why* and *when* cartoonlike styles might increase consumer engagement, in line with prior research insights. We then present three studies that we use to test our hypotheses. Finally, we discuss the theoretical contributions and managerial implications of our findings.

Theoretical Background

Cartoonlike characters and consumer engagement

In research that compares human and cartoonlike spokespersons in the same advertisement, the cartoonlike characters appear to have positive effects (Heiser, Sierra, and Torres, 2008). Because the advertising narrative is driven by animated characters, consumers seemingly feel more involved with and attracted to the brand (Stafford, Stafford, and Day, 2002). The graphic features, bright colors, and entertaining scenarios that generally characterize animation also are visually engaging (Liu and Elms, 2019). Similar findings arise from other contexts, pertaining to information dissemination or education. For example, qualitative studies that seek to engage research participants in a playful way in meaning-making and dissemination processes emphasize the positive effect of cartoonlike characters (Bartlett, 2013; Gauntlet, 2007). In education settings, cartoons can introduce amusing activities that enhance both learning and student participation (Khalid, Meerah, and Halim, 2010). Because they trigger interest and foster genuine student engagement in the classroom (Liu and Elms, 2019), cartoons can change the tone or dynamics of a group setting, by imparting humor and stimulating critical thinking and discussion. Consumers who feel that a stimulus is playful are engaging in activities in an imaginative way - as opposed to the tendency to take a serious or a figurative attitude (Zhou, Su, and Mou, 2021), with positive effects on advertising effectiveness. In line with evidence from past studies, we predict that:

H1: Cartoonlike (cf. realistic) styles increase consumer engagement.

Perceived playfulness and psychological comfort

Cartoonlike characters likely engage viewers because they evoke positive feelings; comics and animated cartoons generally are explicitly designed to be playful and entertaining. Cartoons can deliver joy and pleasure (Cohen, 2011) and amuse audiences over time, especially among

viewers who have developed personally meaningful connections with this style (Ghilzai *et al.*, 2017; Parvin and Islam, 2020). Such connections tend to emerge during childhood and then extend into adulthood (Meng *et al.*, 2020), such that people identify cartoons as a significant source of laughter and pleasant memories (Habib and Soliman, 2015). This affective relationship takes place at a mostly subconscious level, so by including cartoon characters, marketers likely can stimulate positive emotions like playfulness in both children and adults (Proyer, 2012; Demirbilek *et al.*, 2004).

Playfulness also can reduce stress and lead to positive mental outcomes (Clifford *et al.*, 2022). Consumers' daily stresses can create a state of anxiety, but playfulness can provide comfort and psychological ease to anxious people (Guitard, Ferland, and Dutil, 2005). In this sense, playfulness helps them detach from stressful situations and mitigates their negative feelings of stress (Eisend, Plagemann, and Sollwedel, 2014). Psychological comfort, as a positive emotion that reflects a sense of being stress-free and at ease, beyond just feeling calm or in a good mood (Spake *et al.*, 2003), represents the opposite of anxiety, such that it evokes perceptions of safety and balance (Daniels, 2000). Research in marketing has established the importance of psychological comfort for building relationships; it is fundamental to trust-based relationships between brands and consumers for example (Radia *et al.*, 2022). In addition, feeling comfortable with an attitude object increases people's likelihood or desire to engage with it. Because a cartoonlike style likely is perceived as more playful and does not represent a situation where consumer's (identity) feels threatened, its adoption should increase engagement among viewers. We hypothesize in turn a serial mediation effect, such that psychological comfort results from the perceived playfulness triggered by a cartoonlike style. Formally stated:

H2: The effect of a cartoonlike style on consumer engagement is mediated by psychological comfort, which is driven by perceived playfulness.

Study 1: Testing Serial Mediation

We empirically test whether cartoonlike characters increase consumer engagement with the ad, in an effect driven by the effects of perceived playfulness on psychological comfort. The sample consists of 190 respondents ($M_{\text{age}} = 30.92$ years, $SD_{\text{age}} = 11.30$, 53.7% women), randomly assigned to one of two conditions (cartoonlike vs. realistic). All participants encountered an advertisement for a fictitious biscuit brand, "DolceSogno". The cartoonlike images were obtained using editing capabilities available in an app called ToonMe, that is one of the most popular viral apps that allows users to transform photos into various cartoon styles (<https://www.pho.to/toonme>). In both the conditions, the ad read: "DolceSogno supports Cocoa Horizons in building a new school in Côte d'Ivoire". Respondents rated their engagement with the message on a three-item measure (Loewenstein, Raghunathan, and Heath, 2011; "The brand campaign is engaging/attractive/enjoyable"; 1 = "strongly disagree," 7 = "strongly agree"; $\alpha = .94$), their perceptions of playfulness on a four-item scale applied in prior research (Sledgianowski and Kulviwat, 2009; "The ad communicates joy to me," "The ad is humorous," "The ad communicates happiness to me," and "The ad is funny"; 1 = "strongly disagree," 7 = "strongly agree"; $\alpha = .94$), and their psychological comfort using an eight-item, 7-point semantic differential scale (Spake *et al.*, 2003; "uncomfortable/comfortable," "very uncomfortable/very comfortable," "very tense/very relaxed," "insecure/secure," "worried/worried-free," "distressed/calm," "upset/serene," and "problems/patience"; $\alpha = .96$). Finally, respondents completed manipulation checks for the style of the ad ("Please rate the extent to which the ad you saw is ...", 1 = "cartoonlike, animation style," 7 = "realistic, real style"; $r = .96$, $p < .001$), provided their demographics, and were thanked for their participation.

Confirming our manipulation check, a t-test confirmed that the cartoonlike style was perceived as such ($M_{\text{cartoonlike}} = 2.56$; $M_{\text{realistic}} = 6.59$, $t(144.52) = 15.09$, $p < .001$).

Main effects. A predicted, cartoonlike characters increased both perceived playfulness ($M_{\text{cartoonlike}} = 4.53$, $M_{\text{realistic}} = 2.50$, $t(161.62) = 9.92$, $p < .001$) and psychological comfort ($M_{\text{cartoonlike}} = 5.47$, $M_{\text{realistic}} = 3.42$, $t(190) = 12.11$, $p < .001$). Similarly, the cartoonlike version increased engagement compared with the realistic version ($M_{\text{cartoonlike}} = 5.65$, $M_{\text{realistic}} = 3.57$, $t(194) = 10.39$, $p < .001$). Thus, our findings indicate that a cartoonlike style is effective for increasing engagement in socially relevant advertising contexts.

Serial mediation. We test for serial mediation using PROCESS model 6 (Hayes, 2018), which confirms that using cartoonlike characters increases consumers' perceived playfulness ($b = 2.04$, $SE = .20$, $t = 9.96$, $p < .001$), which increases psychological comfort ($b = .55$, $SE = .05$, $t = 12.04$, $p < .001$), which increases engagement ($b = .43$, $SE = .70$, $t = 5.68$, $p < .001$). The resulting 95% confidence interval (CI) indicates significant indirect effects for engagement ($b = .48$, 95% CI [.23, .84]). Including the mediators causes the direct effect to become non-significant ($b = .32$, 95% CI [−.01, .66]), indicating full mediation. When cartoonlike characters appear in ads, consumers perceive the ad as more playful, which generates a feeling of comfort that translates into heightened engagement.

Study 2: Testing for Mediation Through Moderation

If cartoonlike characters increase engagement because they are perceived as more playful, as we suggest, then the effect should be mitigated when the playfulness of the character is not in question. To test this possibility, in addition to manipulating cartoonlike characters, we manipulate character type (i.e., comedian vs. non-comedian). Thus, Study 2 manipulates playfulness. If our theorizing is correct, the effect of cartoonlike characters on engagement should be mitigated when the character in the ad is clearly a comedian. To increase the generalizability of our findings, we investigate a different context, pertaining to celebrity branding instead of social initiatives. The sample comprises 204 respondents ($M_{\text{age}} = 25.05$ years, $SD_{\text{age}} = 5.37$, 52% women) randomly assigned to a condition in a 2 (character: cartoonlike vs. realistic) \times 2 (character type: comedian vs. non-comedian) between-subjects design. The stimuli feature an image from a fictitious Instagram post shared by two different celebrities: Jim Carrey and Roberto Baggio, two celebrities who are popular among both older and younger consumers and who are about the same age. The captions under their images also were the same, thanking their fan bases for their support.

The dependent variables and measures were the same as in Study 1 ($\alpha_{\text{engagement}} = .95$; $\alpha_{\text{perceived playfulness}} = .95$; $r_{\text{cartoonlike_MC}} = .85$, $p < .001$; $r_{\text{character_type_MC}} = .91$). Participants provided their demographics and were thanked for their participation. Confirming the manipulation's effectiveness, a t-test indicated that the post with Jim Carrey was perceived as more comedic and less serious than the post with Roberto Baggio ($M_{\text{comedian}} = 4.62$, $M_{\text{non-comedian}} = 3.31$, $t(174.87) = 17.03$, $p < .001$). Furthermore, the cartoonlike condition was perceived as such ($M_{\text{cartoonlike}} = 2.08$, $M_{\text{realistic}} = 6.91$, $t(118.11) = -30.06$, $p < .001$).

Main effects. We first conducted a 2 \times 2 ANOVA for perceived playfulness. We identify a significant cartoonlike \times type of character interaction ($F(1, 200) = 12.82$, $p < .001$). Consistent with our theorizing, the non-comedian character increased perceived playfulness when presented in a cartoonlike style ($M_{\text{cartoonlike}} = 4.50$, $M_{\text{realistic}} = 2.12$, $F(1, 200) = 58.70$, $p < .001$). However, when a character who represents a comedian (cf. non-comedian), the difference becomes weaker, even if it is still significant ($M_{\text{cartoonlike}} = 5.03$, $M_{\text{realistic}} = 4.21$, $F(1, 200) = 7.28$, $p = .008$). In another ANOVA for consumer engagement, we again find a significant cartoonlike \times type of character interaction

($F_{(1, 200)} = 17.56, p < .001$). As we predict, the non-comedian character increases engagement when presented in a cartoonlike style ($M_{\text{cartoonlike}} = 5.28, M_{\text{realistic}} = 2.73, F_{(1, 200)} = 75.56, p < .001$), but the comedian character produces a weaker, if still significant, difference in engagement ($M_{\text{cartoonlike}} = 5.06, M_{\text{realistic}} = 4.24, F_{(1, 200)} = 7.99, p = .004$).

Moderated mediation. We conducted a moderated mediation analysis (Hayes, 2018 - PROCESS model 8; 10,000 bootstrap samples), with cartoonlike style as the independent variable, engagement as the dependent variable, playfulness as the mediator, and character type as the moderator. A significant index ($b = 1.15, SE = .34, CI_{95\%}: [.51, 1.86]$) confirms that the effect of cartoonlike style through playfulness is stronger among participants in the non-comedian condition ($b = 1.76, SE = .30, 95\% CI [1.19, 2.36]$) rather than the comedian condition ($b = .61, SE = .20, 95\% CI [.22, 1.00]$). A cartoonlike style is more effective for certain celebrity types, namely, those who are not comedians, who generally tend to be regarded as relatively less playful. In this scenario, the cartoonlike style adds playfulness to the message, unlike the case when the character already is perceived as playful.

Study 3: Product Selling Ads and Consumer Expertise

Advertising focused on promoting events with a social impact (Study 1) or celebrities' personal branding on social media (Study 2) does not actively promote a product, even though a primary characteristic of advertising is its persuasive intent to sell products to end consumers. Yet direct selling attempts and calls to action often evoke caution or suspicion among consumers, such that these messages suffer from diminished persuasiveness (Villarroel et al., 2019). Consumers even might refrain from purchasing a promoted product if the selling attempt is too obvious. In turn, we argue that when the ad message is purely commercial in its persuasive intent, consumers are less likely to engage with it if it features cartoonlike (versus realistic) characters. That is, viewers exposed to a message with a cartoonlike style that also explicitly attempts to sell them a product likely try to shield themselves and resist the playfulness of the content.

We designed Study 3 to test this prediction with an advertisement for a professional camera. The 200 respondents who participated in this study received compensation of \$.45 each. Six people did not pass an attention check and were excluded, leaving a final sample of 194 participants ($M_{\text{age}} = 42.35$ years, $SD_{\text{age}} = 13.12$, 49% women). We assigned them randomly to the two conditions (cartoonlike versus realistic), in which they viewed an ad for a camera. The advertising text read, "Launch offer \$339. Buy ZoomIn to nail your perfect moments!" highlighting the offer of a professional camera at a competitive price.

With the same items as in Studies 1 and 2, we measured respondents' engagement with the advertising message and perceived playfulness. We also asked them to rate their expertise with cameras. Participants also completed the manipulation checks and demographic items and were thanked for their participation. Consistent with our manipulation, a t-test indicated that the cartoonlike condition was perceived as such ($M_{\text{cartoonlike}} = 1.84, M_{\text{realistic}} = 6.12, t_{(192)} = -26.54, p < .001$).

Main effects. As expected, a t-test indicated that the cartoonlike style did not have an effect on perceived playfulness in this ad, which clearly exhibited a persuasive intent to sell the product ($M_{\text{cartoonlike}} = 1.84, M_{\text{realistic}} = 6.12, t_{(192)} = -26.54, p < .001$). We also confirm that, in an ad with a clear persuasive intent, the realistic style engages viewers more than the cartoonlike one ($M_{\text{cartoonlike}} = 3.19, M_{\text{realistic}} = 4.03, t_{(192)} = -3.99, p < .001$).

Moderation by consumer expertise. In a linear regression analysis that includes a continuous mean-centered index for consumer expertise, (non)cartoonlike style (cartoonlike = 1, realistic = 0), and their interaction as predictors of consumer engagement, we find a significant effect of the

cartoonlike style ($\beta = -.81, t_{(190)} = -3.92, p < .001$) and a non-significant effect of consumer expertise ($\beta = -.06, t_{(190)} = -.73, p = .47$). However, the interaction of cartoonlike style with consumer expertise is significant ($\beta = .41, t_{(190)} = 3.14, p = .002$). With a spotlight analysis, we further determine that participants with low ($\beta = -1.46, t_{(190)} = -5.00, p < .001$) or medium ($\beta = -.81, t_{(190)} = -3.92, p < .001$) expertise engaged more with an ad featuring a realistic rather than a cartoonlike style. In contrast, participants with more expertise rate the ads as equally engaging, regardless of the style ($\beta = -.15, t_{(190)} = -.52, p = .60$). We speculate that these results stem from non-experts' need to see a depiction of the real product to get a sense of its quality or features, which instead might be more difficult to infer from a cartoonlike picture. For experts who possess knowledge and have experience with the product, the ad style does not make a difference.

GENERAL DISCUSSION

We offer three contributions to the previous literature on cartoonlike communication. First, from a substantive perspective, our research contributes to literature on the creator economy. We extend previous work on cues for effective online communication (Majid *et al.*, 2018; Tellis *et al.*, 2019), by demonstrating that cartoonlike social media communication leads to higher consumer engagement. Results of the analyses of experiments in the different contexts such as organizational activities with social impact, celebrity content creation, and traditional product promotion, show that cartoonlike communication can improve consumer engagement.

Second, drawing on consumer psychology literature we argue that perceived playfulness and psychological comfort, explain the positive effect of cartoonlike communication on engagement. By comparing consumer engagement with ads presented in a cartoonlike versus realistic fashion across different marketing contexts, we explain these psychological mechanisms. Because of the playfulness triggered by cartoonlike styles, associated with fun and entertainment, consumers can enter a state of psychological comfort that translates into greater engagement with the ad.

Third, we show two boundary conditions for this process. First, when the character depicted in the ad is already playful on its own (e.g., comedian), then a cartoonlike style is less effective than when it is used for a non-playful character. Second, in an ad that is directly promoting or selling a product, a cartoonlike style loses its advantage over a realistic style. Regarding this last evidence, we show that consumers' expertise has a crucial effect, such that consumers with less expertise engage more with realistic style advertising, and we find no significant effect of either advertising style among experts. Our research thus offers nuanced insights that help expand literature pertaining to advertising strategies, social media engagement, and consumer expertise.

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