# How Sensory Language Shapes Influencer's Impact

# GIOVANNI LUCA CASCIO RIZZO JONAH BERGER MATTEO DE ANGELIS RUMEN POZHARLIEV

Influencer marketing has become big business. But while influencers have the potential to spread marketing messages and drive purchase, some posts get lots of engagement and boost sales, while others do not. What makes some posts more impactful? This work examines how sensory language (e.g., words like "crumble" and "juicy" that engage the senses) shapes consumer responses to influencer-sponsored content. A multimethod investigation, combining controlled experiments with automated text, image, and video analysis of thousands of sponsored social media posts, demonstrates that sensory language increases engagement and willingness to buy the sponsored product. Furthermore, the studies illustrate that these effects are driven by perceived authenticity. Sensory language leads consumers to infer that influencers actually use the product they are endorsing, which increases perceived authenticity, and thus engagement and purchase. These findings shed light on how language shapes responses to influencer-sponsored content, deepen understanding of the drivers of authenticity, and sugges how to develop more impactful social media campaigns.

Keywords: influencer marketing, sensory language, authenticity, product use, engagement

I nfluencer marketing has become a huge business, with marketers increasingly leveraging social media influencers to connect with consumers and achieve marketing

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goals. Rather than using traditional advertising, or posting on social media themselves, having influencers post about a brand can generate awareness, increase engagement, and drive sales (Lee and Junquè De Fortuny 2022; Leung, Gu, and Palmatier 2022b). This strategy has become extremely popular, and spending on influencer marketing is expected to reach \$16.4 billion in 2022 (Influencer Marketing Hub 2022).

But while influencers have received lots of attention, their effectiveness depends on what they post. Furthermore, given the multitude of platforms and posts, "cutting through the content clutter" has become even more difficult (Villarroel Ordenes et al. 2019). Some posts engage consumers and boost sales, while others do not. What makes some posts more impactful?

We examine whether a subtle linguistic shift can shape influencers' impact by affecting how authentic they seem. In particular, we focus on sensory language (i.e., language that engages consumers' senses). Influencers can promote food, for example, by saying it is "good" (i.e., a nonsensory word) or "tasty" (i.e., a sensory word). We suggest

© The Author(s) 2023. Published by Oxford University Press on behalf of Journal of Consumer Research, Inc. All rights reserved. For permissions, please e-mail: journals.permissions@oup.com • Vol. 50 • 2023 https://doi.org/10.1093/jcr/ucad017 that sensory language can boost engagement and purchase because it increases the perception that influencers actually use the product they are promoting. This, in turn, should make the influencer seem more authentic, which should increase likes, comments, and willingness to purchase.

A multimethod investigation, combining controlled experiments with textual analysis of thousands of sponsored posts, tests these possibilities. Five studies demonstrate that sensory language increases impact and illustrate that perceived authenticity underlies these effects. Along the way, we integrate disparate streams of research on sensory marketing, authenticity, and language to deepen the understanding of how these aspects combine to shape consumer behavior.

This work makes five main contributions. First, we contribute to research on influencer marketing. While work has investigated some predictors of engagement (Karagür et al. 2022; Valsesia, Proserpio, and Nunes 2020; Wies, Bleier, and Edeling 2022), less is known about language (Hughes, Swaminathan, and Brooks 2019; Leung et al. 2022a). This is a particularly important topic, though, as it is easy for companies (and influencers) to change.

Second, we deepen understanding of how language shapes consumer responses to marketing communications. While a burgeoning stream of research has begun to examine language in online communication (Berger and Milkman 2012; Moore 2012; Moore and Lafreniere 2020; Pogacar, Shrum, and Lowrey 2018; see Berger et al. 2020; Packard and Berger 2024 for reviews), little is known about how sensory language affects consumer responses to online advertising. We demonstrate the role of sensory language and an underlying process that drives its impact.

Third, we contribute to the literature on sensory marketing. While research has examined how stimuli that engage the senses influence consumer attitudes and behaviors (Krishna 2012; Krishna, Cian, and Sokolova 2016; Krishna and Schwarz 2014), there has been less attention to the role of language in driving these effects. Furthermore, while work has studied sensory appeals in ads and products (Elder and Krishna 2010, 2022; Krishna and Schwarz 2014), less is known about whether sensory cues might shape how message senders are perceived. We showcase how sensory language can impact whether influencers seem authentic, and the downstream consequences for consumer behavior.

Fourth, and along these lines, we advance knowledge on the drivers and consequences of authenticity. While previous work has shown that brand authenticity impacts outcomes like sales and word-of-mouth (Morhart et al. 2015; Nunes, Ordanini, and Giambastiani 2021), there has been less attention to how it might impact social media engagement. We extend research on influencer authenticity (Gerrath and Usrey 2021), highlighting the role of perceptions that influencers actually use the products they endorse. Finally, our findings have clear practical implications for marketers, influencers, and other marketplace actors. While working with influencers can help brands to boost their reach and increase sales, the effectiveness of this strategy depends on what influencers post. Our results suggest that small shifts in the language influencers use can have an important impact on both engagement and willingness to purchase. An additional sensory word in a post, for example, is associated with around 50 additional likes or comments on Instagram and 11,000 on TikTok.

## **INFLUENCER MARKETING**

The rise of social media has led to increased interest in influencers. Influencer marketing is "a strategy in which a firm selects and incentivizes online influencers to engage their followers on social media in an attempt to leverage these influencers' unique resources to promote the firm's offerings" (Leung et al. 2022b, 1). Said another way, it usually involves paying influencers (or providing free stuff) in exchange for influencers saying positive things about products and services to their online followers.

Given the shift from traditional media (e.g., television) to social media, and the mounting skepticism toward traditional advertising, brands are looking for ways to communicate their messages, where consumers are, in ways that will have more impact. Consumers trust other people more than they trust ads (Hughes et al. 2019), and so sponsored influencer posts provide a way for brands to increase their reach while hopefully making their messages more persuasive. Indeed, over 75% of marketers now invest a portion of their communication budget in influencer marketing (Influencer Marketing Hub 2022).

But while many companies now use influencer marketing, not all posts are effective. Consumers may not resonate with what was shared, or feel like the influencers only endorse the product because they got paid. Consequently, in addition to working with influencers that have a large following, companies pay attention to engagement, or how many likes and comments a post receives. More likes and comments not only suggest more consumers saw a post (i.e., reach), but that it resonated with more people, which should increase liking and purchase of the sponsored product or service (Liadeli, Sotgiu, and Verlegh 2022).

Given its importance, research has begun to examine drivers of engagement (Hughes et al. 2019; Leung et al. 2022a; Valsesia et al. 2020). Disclosing a post as advertising increases engagement, for example, because it makes the influencer seem more trustworthy (Karagür et al. 2022). Similarly, conditional on having many followers, following fewer people is linked to higher engagement because it signals that the influencer is less susceptible to outside influence (Valsesia et al. 2020). Follower count, sponsor salience, and influencer characteristics are also linked to engagement (Hughes et al. 2019; Leung et al. 2022a).

But while it is clear that disclosure, audience characteristics, or influencer characteristics may shape engagement, less is known about the content posted. While some topics (e.g., new high-tech products) might get more engagement than others (e.g., toilet paper), might the language influencers use increase the impact of their posts?

# SENSORY LANGUAGE

We suggest that sensory language should impact consumer responses to sponsored posts. Cognitive processes are grounded in bodily states (Barsalou 2008) and, as a result, consumer experiences are based on the integration of sensory inputs (Krishna 2012). Along these lines, research has examined how elements of vision, touch, audition, smell, and taste shape consumers' responses. Haptic elements (e.g., a brochure including a soft, enjoyable touch element), for example, make messages more persuasive (Peck and Wiggins 2006), adding scents (e.g., to direct mail) boosts memory (Krishna, Lwin, and Morrin 2010), and familiar music can increase brand choice (Anglada-Tort et al. 2021).

But while research on sensory marketing has examined traditional advertising outcomes (e.g., memory or choice), there has been less attention to how sensory marketing might impact consumer engagement with online posts. Furthermore, while research has investigated visual aesthetics, haptic elements, scents, or music on consumer responses, less is known about the potential effects of sensory language.

Following prior work (Krishna 2012), we define sensory language as language that engages consumers' senses. Influencers can say that a food product is "good" (i.e., a non-sensory word), for example, or "tasty" (i.e., a sensory word). Similarly, they can promote a body cream by encouraging followers to "put" (e.g., a non-sensory word) or "rub" (i.e., a sensory word) it on their skin.

We suggest that sensory language will shape consumer responses to influencer-sponsored content. Specifically, using sensory language should boost engagement (e.g., likes and comments) and purchase because it makes the influencer seem more authentic.

## AUTHENTICITY

Authenticity is "one of the cornerstones of contemporary marketing" (Brown, Kozinets, and Sherry 2003, 21) and is conceptualized as "what is genuine, real, and/or true" (Beverland and Farrelly 2010, 839). In the context of influencer marketing, authenticity often refers to perceived genuineness. Do influencers genuinely like whatever they are recommending, or are they recommending it simply because they were compensated? This relates to the integrity dimension of authenticity, or "the extent to which a provider is perceived as being intrinsically motivated, not acting out of its own financial interest, while acting autonomously and consistently over time" (Nunes et al. 2021, 3).

Various cues impact perceived authenticity. Selfdisclosing intrinsic motives (e.g., an influencer's interest in a product), for example, can make influencers seem less driven by economic incentives (Gerrath and Usrey 2021). Increased transparency (i.e., providing truthful representations of brand partnerships) can have similar effects (Audrezet, de Kerviler, and Moulard 2020).

We suggest that sensory language should boost perceived authenticity because it suggests direct experience (i.e., the influencer actually used the product they are posting about). Anyone can say that a cookie is good, but unless they are lying, saying a cookie is tasty requires actually having taken a bite. Similarly, while words like "great" or "wonderful" suggest positive attitudes or attributes, sensory words like "juicy" or "fragrant" suggest direct experience. Someone actually tasted, touched, or smelled whatever they are talking about.

Believing that someone used whatever they are talking about, in turn, should increase perceived authenticity. After all, if influencers actually use a shampoo, or rely on a software package, it signals that they like it enough to use it themselves. It is less likely that they recommended it simply because someone paid them and more likely that they recommended it because they think it is good.

## THE CURRENT RESEARCH

Overall then, we suggest that sensory language should increase the impact of sponsored posts. We suggest that this is driven by sensory language's effects on perceived authenticity. Sensory language should increase beliefs that the influencer actually uses the product, which should increase perceived authenticity, and, in turn, should boost engagement and willingness to purchase (figure 1).

A multimethod approach tests these possibilities. The first two studies use natural language processing of field data. Study 1 examines whether Instagram posts that use more sensory language receive more engagement. Study 2 tests whether the results of study 1 generalize to spoken (rather than written) language and a different platform (i.e., TikTok).

To demonstrate sensory language's causal impact, and test the hypothesized underlying process, the next three studies use experiments. Study 3 manipulates sensory language, testing whether sensory language boosts engagement and purchase by signaling that the influencer really uses the product, which enhances perceived authenticity. Studies 4 and 5 test the process through moderation. If the

#### FIGURE 1



effects are driven by perceived authenticity, as we suggest, then they should be mitigated when authenticity is in less doubt, either because the influencer has few followers (study 4), or when they explicitly say that they have used the product (study 5). Ancillary studies (web appendix) further underscore the hypothesized process through both mediation (study 3A) and moderation (study 4A, by whether it is clear that the influencer was paid).<sup>1</sup>

# STUDY 1: SENSORY LANGUAGE ON INSTAGRAM

To provide an initial test of the relationship between sensory language and engagement, study 1 turns to the field. We used automated textual analysis to measure sensory language in almost 7,000 sponsored Instagram posts, testing whether posts that use more sensory language receive more engagement.

## Method

We worked with a large influencer marketing agency to acquire a sample of 6,938 sponsored Instagram posts from 385 influencers between October 16, 2019, and October 29, 2021. The posts cover products and services and include a range of industries (i.e., beauty, food, fashion and lifestyle, gaming, and travel; table A1).

Natural language processing was used to measure sensory language. Following prior work (Elder et al. 2017), we use Linguistic Inquiry and Word Count's (LIWC; Pennebaker et al. 2015) "perceptual" measure. This includes 433 words associated with the senses (e.g., look, hear, feel, smell, and savor) and is strongly correlated with human perceptions.<sup>2</sup>

Following prior research (Herhausen et al. 2019; Lee, Hosanagar, and Nair 2018), engagement was measured through likes and comments. On average, posts received 3,574 likes (SD = 5,112, ranging from 25 to 73,406) and 115 comments (SD = 287, ranging from 0 to 8,248). See table A2 for descriptive statistics and correlations.

Finally, we examined the relationship between sensory language and engagement. Given the dependent variable is a count, and the outcome variable is overdispersed (p < .001, likelihood ratio test), a negative binomial regression was used. Given that the different variables do not share similar scales, all continuous variables were standardized (*z*-scored). Unstandardized results do not differ in sign or significance.

## Results

As predicted, when influencers' posts used more sensory language, they received more engagement (IRR = 1.039; SE = 0.007, t = 5.39; p < .001; table 1, model 1).

*Control Variables.* While this initial relationship is intriguing, one could wonder whether the results are driven by some other factor. Consequently, we include various variables to test alternative explanations and robustness (see table A3 for more details).

Aspects of the Influencer. Rather than being driven by sensory language, one could argue that the results are driven by the person posting the content. If an influencer has more followers, for example, or a verified account, this

<sup>1</sup> Note that while our work relates to existing work on sensory marketing and sensory metaphors in language, it differs in some important ways. While Akpinar and Berger (2015) examined how sensory metaphors' (e.g., "bright future") greater memorability makes authors more likely to use them in books, for example, we focus on the *consequences* of sensory language (rather than the drivers of its use) and a completely different mechanism (i.e., how sensory language can shape perceptions of poster authenticity). Furthermore, while Rossi et al. (2017) found that food names that mimic ingestion make food taste better, and Elder et al. (2017) found that reviews are seen as more helpful when sensory experiences are described using congruent linguistic cues (i.e., present tense), we explore completely different domains, mechanisms, and outcomes.

Two coders (blinded to hypotheses) were given a definition of sensory language (i.e., "language that engages senses. For example, the phrase 'spreading on' involves the senses more than 'putting on,' and 'relishing' involves the senses more than 'drinking''') and rated a random sample of 100 posts on how sensory the language was (1 = not at all, 7 = very much, r = 0.79). The automated measure was strongly related to human perceptions (r = 0.66), confirming its validity.

#### TABLE 1

SENSORY LANGUAGE AND ENGAGEMENT

	(1)	(2)
IV: sensory	1.039** (0.007)	1.032** (0.009)
Controls	· · · ·	( )
Influencer		
Follower number		2.101** (0.112)
If verified		1.156 (Ò.198)
Influencer FE		Included
Category FE		Included
Text		
Topic discussed		Included
# of questions		0.998 (0.006)
# of hashtags		1.007 (0.011)
Words count		1.035** (0.011)
# of Emojis		1.007 (0.009)
Arousal		0.995 (0.007)
Complexity		1.009 (0.008)
Valence		0.997 (0.007)
# of mentions		0.988 (0.007)
If promotional post		1.001 (0.013)
Concreteness		0.989 (0.010)
Word sophistication		1.010 (0.007)
Image		
Image (vs. video)		1.474** (0.034)
if face present		1.148 (0.149)
Joy		0.970** (0.011)
Anger		0.989 (0.033)
Sorrow		1.020 (0.052)
Surprise		0.962* (0.017)
Color dominance		0.996 (0.007)
Color saturation		0.978** (0.006)
Additional		
I Ime FE		Included
Intercept	3,677^ (47.2)	4,288^^ (807.2)
Log likelinooa	-63,586	-56,699
N	6,908	6,908

Note: Standard errors are in parentheses.

\**p* < .05.

\*\**p* < .01.

may increase engagement (Valsesia et al. 2020). Consequently, we control for both aspects.<sup>3</sup>

More generally, different influencers might be better or worse at garnering engagement; therefore, we control for this using fixed effects.

Finally, influencers tend to post about particular product categories, and some categories (e.g., beauty products) may generate more engagement than others (e.g., snack food); therefore, we control for the product category discussed (provided by the marketing agency).

Aspects of the Text. Beyond the person posting, we also controlled for aspects of the message itself. First, one could wonder whether some topics or themes get more engagement, and this, rather than sensory language, is driving the effect. Consequently, we use topic modeling to

control for the topics or themes discussed in each post. While Latent Dirichlet Allocation (LDA) is often used for larger bodies of text, it can exhibit weak coherence and efficacy on short messy texts like social media posts (Mehrotra et al. 2013); therefore, we use Empath's (Fast, Chen, and Bernstein 2016) 194 built-in, pre-validated categories (e.g., friends, eating, and technology). To reduce dimensionality, we then used factor analysis with varimax rotation to identify 63 overarching topics.

Second, one could wonder whether language sophistication is driving the effect. Consequently, following prior work (Kuperman et al. 2014), we controlled for word-level sophistication using the SUBTLEXus corpus from Brysbaert and New (2009) available through TAALES (Kyle, Crossley, and Berger 2018).<sup>4</sup>

Third, we also control for 10 other textual features that might also increase engagement. This includes questions (Villarroel Ordenes et al. 2019), hashtags (Valsesia et al. 2020), post length (Berger and Milkman 2012), number of emojis (Luangrath, Xu, and Wang 2023), arousal (Herhausen et al. 2019), text complexity (Pancer et al. 2019), valence (Berger and Milkman 2012), number of mentions (Leung et al. 2022a), whether the post is sales promotional (Jalali and Papatla 2019), and concreteness (Packard and Berger 2021).

Aspects of the Image. Beyond who posts, or the post's text, the accompanying image or video may also impact engagement; therefore, we controlled for this as well. First, images and videos might encourage different levels of engagement (Borah et al. 2020; Tellis et al. 2019); therefore, we controlled for post type (image or video).<sup>5</sup>

Second, human faces may receive heightened attention; therefore, we controlled for whether a post features a face. To do so, following prior work in marketing (Klostermann et al. 2018; Li and Xie 2020), we used Google's Cloud Vision API. In addition, we also used this API to control for the emotional state of faces when they appeared (i.e., joy, sorrow, anger, and surprise). The face detection service assigns to each human face a score for each emotion on a 5-point scale. Posts can feature multiple images, and each image may contain multiple faces; therefore, we averaged emotion scores across them.

Third, color dominance and saturation consistently enhance viewers' attention (Finn 1988) and can increase engagement (Li and Xie 2020); therefore, we measured

<sup>3</sup> Our data set includes the follower count an influencer had at the time the post was published.

<sup>4</sup> One might wonder whether sensory language and word sophistication are highly correlated. They are moderately correlated (r = -0.27). Sensory language is also low correlated with word familiarity (r = -0.08) or age of acquisition (r = 0.07), and using these alternative measures of word sophistication finds\*\* the same results.

<sup>5</sup> About 11% of the visuals accompanying an Instagram post in our data were videos. Accordingly, we created a scraping tool to extract the first screenshot of an image that appears in each video. To account for the difference between images and videos, we dummy coded the post type variable (0 = video, 1 = image).

these features in the images using the Python's *Image* module from PIL and included them as controls.

Additional Controls. Finally, we controlled for time fixed effects. To control for seasonality, we included the year and month. We also included fixed effects for week-days and time of the day (Kanuri, Chen, and Sridhar 2018).

*Results Including Controls.* Even after accounting for all these controls, however, posts that included more sensory language still received more engagement (IRR = 1.032; SE = 0.009; t=3.83; p < .001; table 1, model 2). A one SD increase in sensory language is associated with a 3.2% increase in engagement (see figure A1 for margin analysis). Said another way, an additional sensory word is associated with 49 additional likes or comments.<sup>6</sup>

## Robustness

We also ran several additional robustness tests. First, one could wonder whether the results are somehow driven by the sensory language measure used. To explore this possibility, we used an alternative measure (i.e., list of sensory adjectives developed by Akpinar and Berger 2015). Results remain the same (IRR = 1.017; SE = 0.008; t = 2.23; p = .026; table A4, column 1).

Second, one could wonder whether the results are somehow driven by the modeling approach used. In particular, one could argue that the ranges of the data (i.e., engagement ranges from 32 to 74,279) make count distributions less appropriate. Consequently, we re-ran the analysis using an ordinary least squares regression with log-transformed dependent variable. Results are the same (b = 0.022; SE = 0.009; t = 2.50; p = .012; table A4, column 4).

Third, given the relationship between wordcount and engagement, we also tested the effect of sensory language as the proportion of total words. Results remain the same (IRR = 1.018; SE = 0.007; t = 4.72; p < .001; table A4, column 3).

Fourth, while we focused on sensory language, one could argue that emojis can also express sensory experiences (e.g., "" expresses bodily touch, Luangrath, Peck, and Barger 2017). To explore this possibility, we calculated a sensory score for more than a thousand emojis and included emojis in our main analysis (see web appendix for more details). Results remain the same (IRR = 1.038; SE = 0.009; t = 4.32; p < .001; table A4, column 2).

Fifth, one could wonder whether the effects could be driven by ease of imagining consumption or perceived ownership. Mental imagery of ownership increases valuation (Peck and Shu 2009); therefore, if sensory language makes it easier for consumers to imagine themselves consuming the product, maybe this, rather than perceptions of influencer authenticity, is driving the effect. To test this possibility, we explored the moderating role of product presence. If the effects are driven by ease of imagination, sensory language's effects should be weaker when the product is present (which should make it easier to imagine consumption). They were not. Following prior work (Li and Xie 2020), we used the Google Cloud Vision's API to detect and retrieve brand logos in images and dummy coded its presence in the image. Including sensory  $\times$  product presence in the full model yielded a non-significant interaction (IRR = 1.011; SE = 0.012; t = 0.93; p = .350), casting doubt on the notion that ease of imagination might explain sensory language's effects.

Sixth, one could wonder whether the use of sensory language might be driven by unobservable factors. Consequently, to accommodate this potential source of endogeneity, we adopted a control function approach (Petrin and Train 2010). Furthermore, the number of likes and comments influencers receive on their last post might influence the visibility of the next post; therefore, we also controlled for potential carryover effects (including the lagged dependent variable engagement<sub>t-1</sub> in the predictor set). Even accounting for these endogeneity corrections, however, results remained similar (IRR = 1.145; SE = 0.080; t = 1.95; p = .051; table A4, column 5, and see web appendix for more details).

Seventh, while engagement is often measured as the combined number of likes and comments, the results remain similar when each is examined separately (highly significant for likes IRR = 1.035; SE = 0.009; t = 4.11; p < .001; table A4, column 6; and marginally significant for comments IRR = 1.010; SE = 0.006; t = 1.71; p = .088; table A4, column 7).

#### Discussion

Study 1 provides preliminary support for our theorizing. Analyzing nearly 7,000 sponsored influencer posts demonstrates that posts with more sensory language receive greater engagement. This is robust to a variety of controls and model specifications.

# **BEGINNING TO TEST THE HYPOTHESIZED PROCESS**

Study 3 explores the hypothesized mechanism in more detail, but we also perform several tests in the study 1 data to provide preliminary insights.

#### Measuring Authenticity

If sensory language increases engagement because it makes the consumer think that the influencer is more

<sup>6</sup> The result is estimated based on the intercept value of the regression excluding time fixed effects, which considers the average number of likes and comments a post received over time, keeping all the other variables at their mean. Furthermore, one might wonder whether sensory language has a quadratic effect;\*\* it does not (IRR = 0.997, p = .422).

authentic, as we suggest, then one might expect greater discussion of authenticity in comments of posts that use sensory language.

To test this possibility, we create a dictionary of 17 words related to authenticity (e.g., authentic, genuine, and sincere; see web appendix for full list and operationalization) and measured discussion of authenticity in the 137,407 followers' comments.<sup>7</sup> Consistent with our theorizing, when posts use more sensory language, followers' comments talk more about authenticity (b = 0.012; SE = 0.006; t = 2.07; p = .038; table A5).

## Moderating Role of Follower Number

We also test the hypothesized process through moderation. If sensory language increases engagement because it makes the poster seem more authentic, as we suggest, then the effect should be stronger when authenticity is in more doubt. To test this possibility, we explored the moderating role of follower number (study 4 tests this idea experimentally). While "micro-influencers" (i.e., those who have fewer followers but strong connection to them) tend to be seen as trusted sources of information (Valsesia et al. 2020), "macro influencers" (i.e., celebrities with many followers) are commonly paid to sponsor things and hence are often seen as less credible (Karagür et al. 2022). Consequently, if our theorizing about the role of authenticity is correct, sensory language should have a larger effect among influencers with more followers, who tend to be seen as less credible otherwise.

As predicted, including a sensory  $\times$  follower number in the full model (including main effects) found a significant interaction (IRR = 1.018; SE = 0.007; t = 2.58; p = .010). Specifically, consistent with the notion that these effects are driven by authenticity, sensory language has a more positive relationship with engagement for influencers whose credibility is in more doubt (i.e., who have more followers).

## Moderating Role of Prior Use

As another process test, if sensory language increases engagement because it makes consumers think that the influencer is more authentic, as we suggest, then the effect should be mitigated when the influencer mentions that they used the product previously. While we test this more directly in study 5, we also test it here using past tense. Past tense usage suggests prior use. If someone describes a book by saying "it *was* magical," for example, rather than "it *is* (or *will be*) magical," it suggests that they have read that book. Such indicators of prior experience, in turn, should reduce the impact of sensory language, because it already suggests usage occurred. To test this possibility, following prior work (Weingarten and Berger 2017), we measured past tense usage through LIWC's "past focus" measure (i.e., words that refer to the past). We selected past tense words (i.e., 334 words) and dummy coded prior use (0 if no past tense usage, 1 if past tense usage). Then, we examined the sensory language  $\times$  prior use interaction on engagement.

As predicted, results revealed a significant sensory language × prior use interaction (IRR = 0.956; SE = 0.015; t = -2.86; p = .004). Consistent with our theorizing about the role of past usage, prior use cues (i.e., past tense) mitigated the effect of sensory language on engagement.

## Discussion

Consistent with our theorizing, these three tests provide preliminary evidence of the role of authenticity in the observed effects.

# STUDY 2: SENSORY LANGUAGE ON TIKTOK

Results of study 1 are consistent with our theorizing and cast doubt on various alternative explanations, but one could still wonder whether the effects are somehow restricted to the particular platform used. Furthermore, one could wonder whether they are somehow restricted to written communication.<sup>8</sup> Consequently, to test whether the effects extend to a different platform, and cases where sensory language is spoken, we examine a video-based platform (i.e., TikTok).

#### Method

We worked with a leading influencer marketing agency to identify a broad range of TikTok influencers. The agency selected all influencers they work with who had published at least 2 sponsored posts in the last 2 years. Data include 654 TikTok posts from 172 influencers between January 23, 2020, and October 30, 2021 (table A7).

TikTok is a video-sharing social network and, as a result, engagement is driven by the content of the videos. Consequently, rather than focusing on posts' text (which are often just a title and hashtags), we focused on what influencers say in their videos. Professionals transcribed the videos, and we measured sensory language using the approach from study 1.

As in study 1, engagement was operationalized as the sum of likes and comments. On average, posts received

<sup>7</sup> Our data include the first 24 comments per post. Given the excess of zeros in the dependent variable, OLS was used.

<sup>8</sup> Analyzing the spoken language in study 1 shows similar effects. Professionals transcribed the 742 Instagram videos in the study 1 data set, and even in spoken language, posts with more sensory language received more engagement (IRR = 1.170; SE = 0.082; t = 2.24; p = .025; table A6).

#### TABLE 2

SENSORY LANGUAGE AND ENGAGEMENT

IV: sensory	1.182* (0.098)
Controis	
	0.005** (0.450)
Follower number	2.685*** (0.456)
	Included
Category FE	Included
Speech	/
If present	0.595 (0.301)
Topic discussed	Included
# of questions	0.964 (0.057)
Word count	0.845 (0.100)
Arousal	0.482* (0.152)
Complexity	0.681** (0.080)
Valence	1.382 (0.393)
# of mentions	0.758 (0.195)
Promotional post	0.936 (0.152)
Concreteness	3.074** (0.946)
Word sophistication	1.036 (0.068)
Video	
Face present	0.954 (0.076)
Jov	1.215** (0.061)
Anger	1.015 (0.040)
Sorrow	1.101* (0.052)
Surprise	1.008 (0.047)
Color dominance	1.009 (0.038)
Color saturation	0.940 (0.033)
Additional	
Time FE	Included
Intercept	341,902** (177,989)
l og likelihood	-7.001)
N	654)
	,

Note: Standard errors are in parentheses.

\**p* < .05.

\*\**p* < .01.

137,603 likes (SD = 483,608, ranging from 31 to 5,700,000) and 2,319 comments (SD = 20,953, ranging from 0 to 461,600; see table A8 for descriptive statistics and correlations).

We included similar controls to study 1 (table 2) and used the approach from study 1 to test the relationship between sensory language and engagement.<sup>9</sup> To extract video features, we employed an open-source video mining tool from Schwenzow et al. (2021).

## Results

As predicted, influencer posts that used more sensory language received more engagement (IRR = 1.182; SE = 0.098; t = 2.02; p = .044; table 2).<sup>10</sup> A one SD increase in

sensory language is associated with a 18% increase in engagement. Said another way, an additional sensory word is associated with 11,030 additional likes or comments.

## Discussion

Results of study 2 underscore the relationship between sensory language and engagement in the field. When TikTok influencers used more sensory language, they received more engagement. This holds controlling for a range of alternative explanations. Finding the same effect using a different social media platform, and spoken (rather than written) language, speaks to the robustness and generalizability of the effect.

Furthermore, consistent with study 1, and our suggestion about the underlying role of authenticity, ancillary analyses revealed a significant sensory language × follower number interaction (IRR = 1.121; SE = 0.063; t = 2.03; p = .042, even when the main effects are included), indicating that sensory language is more beneficial for influencers with more followers. We more deeply explore the hypothesized process in studies 3–5.

## STUDY 3: MANIPULATING SENSORY LANGUAGE

Study 3 has three main goals. First, while results of the first two studies suggest that using sensory language boosts engagement, one could still wonder whether the relationship is truly causal. Maybe products and services that attract more engagement somehow also require more sensory words in the posts. While we included various controls to test alternative explanations, an even stronger test would be to manipulate sensory language and measure its corresponding impact on engagement. Study 3 does this.

Second, we examine whether the results extend to purchase likelihood.

Third, we further test the hypothesized process. We suggest that sensory language increases engagement and purchase because it makes influencers seem like they have actually used the product they are promoting. This, in turn, makes influencers seem more authentic, which increases consumer engagement and willingness to purchase. Study 3 tests this.

#### Method

Following the preregistration (https://aspredicted.org/ BXW\_KXY), the final sample consists of 291 people randomly assigned to a condition in a 2 (sensory language: low vs. high) between-subjects design. See web appendix for exclusions and demographics as well as power analyses for all experiments.

Everyone was shown a fictitious influencer's Instagram post sponsoring a brand of peanut butter. The only

<sup>9</sup> All influencers in our dataset were verified, so this variable was not included, and speech does not include hashtags and emojis, so these were not included either. Approximately 60% of videos featured a speech. To account for the difference between a video with a speech and a video without, we dummy coded the speech presence variable (0 = no speech, 1 = speech).

Examining likes separately finds the same results (IRR = 1.182; SE = 0.098; t = 2.02; p = .044).

difference between conditions was the degree of sensory language used. In the low [high] sensory condition, the post read: "#ad Try @betterbutter!! *Put* [*Spread*] it on bread, *add* [*crumble*] coconut flakes on top, or *drink* [*relish*] in a smoothie. Makes for a *great* [*juicy*] meal!" Confirming the manipulation's effectiveness, a pretest indicated that the high sensory language condition was seen as involving more sensory language ( $M_{high} = 4.87$  vs.  $M_{low} = 3.55$ , F(1, 78) = 15.03, p < .001,  $\eta^2 = 0.161$ ).<sup>11</sup>

Next, we collected process measures. Participants rated the degree to which they believed the influencer actually uses the sponsored product in their everyday life (1 = "Not at all," 7 = "Very much"). Furthermore, they rated perceptions of influencer authenticity using a 3-item scale from prior work (Beverland and Farrelly 2010; "She is genuine," "She seems a real user," "She is authentic," 1 = Strongly disagree, 7 = Strongly agree;  $\alpha = 0.96$ ).

Then, we measured the dependent variables. Participants were asked how likely they would be to engage with the post (i.e., like or comment on it, adapted from Valsesia et al. 2020; 1 = "Not at all likely" and 9 = "Very likely"). To explore whether sensory language also impacts purchase, they were asked how likely they would be to buy the sponsored product (3-item scale adapted from Bearden, Lichtenstein, and Teel 1984; "Unlikely to Likely," "Uncertain to Certain," and "Definitely not to Definitely";  $\alpha = 0.86$ ).

Finally, participants completed a manipulation check, ancillary measures to test alternative explanations (i.e., memorability, typicality, concreteness, and fluency, see more details below), an attention check, and demographics.

#### Results

Dependent Variables. As predicted, and consistent with the first two studies, sensory language increased engagement ( $M_{high} = 2.85$  vs.  $M_{low} = 2.06$ , F(1, 289) = 8.89, p = .003,  $\eta^2 = 0.030$ ). Sensory language also increased purchase likelihood ( $M_{high} = 3.51$  vs.  $M_{low} = 2.88$ , F(1, 289) = 7.38, p = .007,  $\eta^2 = 0.025$ ).

Actual Use. In addition, consistent with our theorizing, sensory language increased beliefs that the influencer actually uses the product ( $M_{\text{high}} = 4.46$  vs.  $M_{\text{low}} = 3.75$ , F(1, 289) = 7.48, p = .007,  $\eta^2 = 0.025$ ).

Authenticity. Sensory language also made the influencer seem more authentic ( $M_{high} = 3.70$  vs.  $M_{low} = 3.30$ , F(1, 289) = 5.00, p = .026,  $\eta^2 = 0.017$ ).

*Mediation.* Finally, as expected, serial mediation (PROCESS model 6; Hayes 2018) found that using more sensory language increased consumers' belief that the influencer actually uses the product (b = 0.70, SE = 0.26, t = 2.70, p = .007), which made the influencer seem more authentic (b = 0.50, SE = 0.03, t = 17.87, p < .001), which increased both engagement (b = 0.55, SE = 0.10, t = 5.68, p < .001) and purchase likelihood (b = 0.51, SE = 0.08, t = 6.18, p < .001). The resulting 95% CI indicated significant indirect effects for both engagement (b = 0.18, 95% CI = 0.04, 0.34), and including these mediators led the direct effect to be reduced to non-significance (with engagement: b = 0.34, 95% CI = -0.06, 0.74; with purchase: b = 0.23, 95% CI = -0.11, 0.57), indicating "full" mediation.<sup>12</sup>

## Discussion

Study 3 provides direct causal support for our theorizing. Consistent with the first two studies, sensory language increased engagement. Furthermore, it also increased purchase likelihood. Consumers were more likely to like and comment on an influencer post, and buy the sponsored product, when the post used more sensory language.

Ancillary analyses on the comments data from study 1 further suggest that sensory language increases purchase intent.<sup>13</sup> Posts that used more sensory language received marginally more comments expressing purchase intent (IRR = 1.033; SE = 0.020; t = 1.73; p = .083).<sup>14</sup>

Second, study 3 provides direct evidence for the process underlying this effect. As predicted, using sensory language made influencers seem like they really used the product, which made them seem more authentic, which increased engagement and purchase.

Alternative Explanations. Ancillary measures also cast doubt on a number of alternative explanations. First, maybe the high sensory language was somehow more memorable and that drove the effects. To test this possibility, we adapted a two-item measure of memorability from Packard and Berger (2021) ("memorable," "easily memorable," r = 0.80). Memorability did not vary by condition ( $F(1, 289) = 0.04, p = .851, \eta^2 = 0.001$ ), however, casting doubt on this alternative explanation.

Second, maybe the high sensory language somehow seemed more typical, and this drove the effect. To test this

<sup>11</sup> Participants (N = 80) were shown one of the two stimuli and asked, "How sensory was the influencer's language?" (1 = not at all, 7 = very much). They were given a definition that read, "By sensory we mean a language that engages one or more senses (e.g., taste, sight, touch). For example, the word 'rub' involves the senses more than 'use,' and 'smooth' involves the senses more than 'comfortable.""

<sup>12</sup> When included by themselves, both actual use and authenticity mediate the effects (see web appendix).

<sup>13</sup> To test whether more sensory language (in influencer posts) is linked to followers\*\* being more interested in purchasing the item discussed, we used the RoBERTa-based machine learning algorithm from Hartmann et al. (2021), which detects whether a follower's comment expresses purchase intent (e.g., "now I also want one!" or "where can I buy it?"; coded 1) or not (coded 0).

<sup>14</sup> Results are significant when considering the proportion of comments (b = 0.003, SE = 0.006, t = 2.26, p = .024).

possibility, we used a three-item measure of linguistic typicality (Kronrod, Grinstein, and Wathieu 2012;  $\alpha = 0.85$ ). Typicality did not vary by condition (*F*(1, 289) = 0.18, p = .674,  $\eta^2 = 0.001$ ), however, casting doubt on this alternative explanation.

Third, rather than being driven by sensory language, one could wonder whether the results are driven by concreteness. While study 1 casts doubt on this possibility, to further explore it, we adapted Packard and Berger's (2021) measure ("How concrete was the influencer's language?" 1 = "Not at all concrete," 7 = "Very much concrete"). Concreteness was actually non-significantly higher in the low sensory language condition ( $M_{high} = 4.27$  vs.  $M_{low} = 4.57$ , F(1, 289) = 2.71, p = .101,  $\eta^2 = 0.009$ ), however, casting doubt on this alternative explanation. Further, it did not mediate the effects (engagement indirect effect = -0.06, 95% CI = -0.18, 0.01; purchase likelihood indirect effect = -0.07, 95% CI = -0.19, 0.01).

Fourth, perhaps more sensory language is more fluent, and this drove the effect. To test this possibility, we adapted Lee and Aaker's (2004) two-item measure of processing fluency ("How easy was it to process the influencer's message?," "How easy was it to understand the influencer's message?," r = 0.86). Fluency was actually marginally higher in the high sensory language condition ( $M_{\text{high}} = 5.73 \text{ vs. } M_{\text{low}} = 6.00, F(1, 289) = 3.83, p = .051,$  $\eta^2 = 0.013$ ) but it did not mediate the effects (engagement indirect effect = 0.03, 95% CI = -0.04, 0.12; purchase likelihood indirect effect = 0.01, 95% CI = -0.06, 0.09), however, casting doubt on this alternative explanation.

Taken together, these analyses cast doubt on the possibility that memorability, typicality, concreteness, or fluency are driving the effects.

Additional Study. Study 3A (web appendix) demonstrates that the results are robust to a different product category and different language.

# STUDY 4: PROCESS BY MODERATION (FOLLOWER COUNT)

Study 4 has three main goals. First, to further test the hypothesized process, in addition to manipulating sensory language, we manipulate influencer's follower count. If sensory language increases engagement and purchase by making the influencer seem more authentic, as we suggest, then it should have a stronger effect when authenticity is in doubt (i.e., when an influencer has lots of followers, as shown in the study 1 ancillary analysis). If authenticity is less questionable (i.e., the influencer has a few followers), however, sensory language should have a weaker effect.

Second, to further test robustness, we consider an alternative measure of authenticity and test whether it mediates the effect.

#### Method

Following the preregistration (https://aspredicted.org/ NKC\_65F), the final sample consists of 280 people randomly assigned to a condition in a 2 (sensory language: low vs. high)  $\times$  2 (follower number: low vs. high) between-subjects design.

In addition to manipulating sensory language, using the design from study 3, we also manipulated how many followers the influencer had. Before viewing the post, participants read that the influencer had lots of followers (i.e., 750,000) or relatively few (i.e., 25,000). These numbers were selected because they are between the 5th and 10th percentiles and 90th and 95th percentiles of follower counts in study 1.

Dependent variables were the same as in study 3. Process measures were similar, but to test the robustness of different authenticity measures, we also used two items adapted from Nunes et al.'s (2021) authenticity scale ("she seems to be intrinsically motivated, not acting out her own financial interest, while acting autonomously and consistently over time," "she seems transparent in how she represents herself, and reliable in terms of what she conveys to followers," r = 0.61).<sup>15</sup>

Participants then completed manipulation checks, tests of alternative explanations (i.e., perceived ownership and ease of imagination, see below), and attention checks.

## Results

*Engagement.* A main effect of sensory language (*F*(1, 278) = 4.51, p = .034,  $\eta^2 = 0.016$ ) was qualified by the predicted sensory language × follower count interaction (*F*(3, 276) = 5.59, p = .001,  $\eta p^2 = 0.038$ ). Consistent with our theorizing, and the ancillary results of study 1, when influencers had a high number of followers, sensory language increased engagement ( $M_{high} = 2.97$  vs.  $M_{low} = 1.67$ , *F*(1, 143) = 13.54, p < .001,  $\eta^2 = 0.086$ ). When the influencer had a low follower count, however, this difference disappeared ( $M_{high} = 1.94$  vs.  $M_{low} = 2.24$ , *F*(1, 133) = 0.83, p = .365,  $\eta^2 = 0.006$ ).

*Purchase Likelihood.* The predicted sensory language × follower count interaction also held for purchase likelihood (F(3, 276) = 5.83, p = .001,  $\eta p^2 = 0.038$ ). As predicted, when influencers had many followers, sensory language increased purchase likelihood ( $M_{high} = 3.60$  vs.  $M_{low} = 2.47$ , F(1, 143) = 12.74, p < .001,  $\eta^2 = 0.082$ ). When the influencer had a low follower count, however, this

<sup>15</sup> The other measures (i.e., originality, connectedness, legitimacy, and proficiency) did not seem as relevant in our context, so we did not measure them. This measure is highly correlated (r = 0.71) with the one from study 3.

difference disappeared ( $M_{\text{high}} = 2.54$  vs.  $M_{\text{low}} = 2.85$ , F(1, 135) = 1.05, p = .308,  $\eta^2 = 0.008$ ).

Actual Use. A main effect of sensory language (*F*(1, 278) = 10.27, p = .002,  $\eta^2 = 0.036$ ) was qualified by the predicted sensory language × follower count interaction (*F*(3, 276) = 5.99, p = .017,  $\eta p^2 = 0.020$ ). Consistent with our theorizing, when the influencer had a high number of followers, sensory language increased perceived actual use ( $M_{\text{high}} = 4.61$  vs.  $M_{\text{low}} = 3.28$ , *F*(1, 143) = 15.87, p < .001,  $\eta^2 = 0.100$ ). When the influencer had a low follower count, however, this difference disappeared ( $M_{\text{high}} = 3.75$  vs.  $M_{\text{low}} = 3.56$ , *F*(1, 133) = 0.32, p = .575,  $\eta^2 = 0.002$ ).

Authenticity. A 2 × 2 ANOVA revealed the predicted sensory language × follower count interaction ( $F(3, 276) = 2.00, p = .045, \eta p^2 = 0.014$ ). Consistent with our theorizing, when the influencer had many followers, sensory language increased perceived authenticity ( $M_{high} = 3.46$  vs.  $M_{low} = 2.95, F(1, 143) = 6.04, p = .015, \eta^2 = 0.040$ ). When the influencer had a low follower count, however, this difference disappeared ( $M_{high} = 3.14$  vs.  $M_{low} = 3.25, F(1, 133) = 0.22, p = .638, \eta^2 = 0.002$ ).

Serial Moderated Mediation. A moderated serial mediation analysis (PROCESS model 83; Hayes 2018), incorporating follower count as a moderator of sensory language's effects on actual use and authenticity, found significant moderated mediation on both engagement (b = 0.17, 95%CI = 0.03, 0.39) and purchase (b = 0.24, 95% CI = 0.32, 0.54). As expected, when the influencer had a large number of followers, the effect of sensory language was sequentially driven by actual use and authenticity on both engagement (b = 0.20, 95% CI = 0.07, 0.38) and purchase likelihood (b = 0.28, 95% CI = 0.10, 0.51). Sensory language made it seem like the influencer actually used the product (b = 1.32, SE = 0.33, t = 4.03, p < .001), which made them seem more authentic (b = 0.37, SE = 0.03,t = 11.95, p < .001), which increased both engagement (b = 0.41, SE = 0.10, t = 3.90, p < .001) and purchase likelihood (b = 0.56, SE = 0.13, t = 4.22, p < .001). When the influencer had a small number of followers, however, using more sensory language no longer impacted perceived use (b=0.19, SE=0.34, t=0.55, p = .580), and the serial mediation was no longer significant on either engagement (b = 0.03, 95% CI = -0.08, 0.13) or purchase likelihood  $(b = 0.04, 95\% \text{ CI} = -0.11, 0.18).^{16}$ 

## Discussion

Study 4 provides further support for the underlying role of authenticity through both mediation and moderation. Using sensory language made it seem like the influencer actually uses the product they sponsored, which boosts perceived authenticity and engagement and purchase. Furthermore, consistent with the notion that this was driven by authenticity, it was stronger when authenticity was in doubt (i.e., the influencer had lots of followers) and weaker when that authenticity was less in question (i.e., they had few).

Alternative Explanations. Ancillary analyses cast doubt on alternative explanations. Given that sensory language was only expected to have an effect when the influencer had a large number of followers, we focus analyses there.

First, to further test whether perceptions of product ownership could drive the effects, participants completed a three-item measure of perceived ownership adapted from Peck and Shu (2009) ("I feel like this is my BetterButter [the name of the brand]," "I feel a very high degree of personal ownership of the BetterButter," "I feel like I own this BetterButter"; 1 = Strongly disagree, 7 = Strongly agree,  $\alpha = 0.93$ ). There was no effect of condition, however, on perceived ownership ( $M_{high} = 1.87$  vs.  $M_{low} = 1.59$ , F(1, 143) = 2.52, p = .114,  $\eta^2 = 0.017$ ).

Second, maybe ease of imagining is driving the effect. To test this possibility, participants completed a three-item measure of mental simulation adapted from Elder and Krishna (2012) ("I had images of that peanut butter coming to my mind," "I experienced images of using that peanut butter," "I could image using that peanut butter"; 1 = Not at all, 7 = To a great extent,  $\alpha = 0.92$ ). There was no effect of condition on ease of imagining ( $M_{high} = 3.05$  vs.  $M_{low} = 2.87$ , F(1, 143) = 0.50, p = .482,  $\eta^2 = 0.003$ ), however, casting doubt on the notion that this alternative can explain the effects.

Third, we also tested whether memorability, typicality, concreteness, or fluency could explain the effects, using the same measures as study 3. There was no effect of condition on any of these factors (memorability: F(1, 143) = 0.01, p = .968,  $\eta^2 = 0.001$ ; typicality: F(1, 143) = 0.51, p = .474,  $\eta^2 = 0.004$ ; concreteness: F(1, 143) = 0.49, p = .622,  $\eta^2 = 0.002$ ; or fluency: F(1, 143) = 1.71, p = .193,  $\eta^2 = 0.012$ ).

Additional Study. Study 4A further tests the process by examining the moderating role of awareness that the influencer was paid to post. If our theorizing about the underlying role of authenticity is correct, explicitly telling participants the influencer was not paid to post should mitigate the effect of sensory language because authenticity is no longer in doubt. That is what we find (web appendix).

## STUDY 5: PROCESS BY MODERATION (PRIOR USE)

Study 5 further tests the hypothesized process through both mediation and moderation. If sensory language

<sup>16</sup> Both actual use and authenticity individually mediate the effects (web appendix).

increases engagement by making it seem like the influencer has actually used the product, as we suggest, then the effect should be mitigated in the presence of other usage cues. To test this possibility, in addition to manipulating sensory language, for half the participants, we include additional content suggesting the influencer has used the product. If our theorizing is correct, sensory language should have less of an effect when it already seems like the influencer commonly uses the product.

## Method

Following the preregistration (https://aspredicted.org/ L68\_Z12), the final sample consists of 292 people randomly assigned to condition in a 2 (sensory language: low vs. high)  $\times$  2 (product use: baseline [no use] vs. use) between-subjects design.

The baseline condition was the same as in study 3. To make it clear that the influencer used the product, the product use condition added a brief sentence at the beginning of the post indicating the influencer's prior use (i.e., "Here's how I do it").

Dependent variables and process measures were the same as in studies 3 and 4. Participants then completed a manipulation check, tests of alternative explanations (see below), attention checks from study 4, and demographics.

## Results

Engagement. A main effect of sensory language (*F*(1, 290) = 8.80, p = .003,  $\eta^2 = 0.029$ ) was qualified by the predicted sensory language × prior use interaction (*F*(3, 288) = 9.60, p = .019,  $\eta p^2 = 0.019$ ). Consistent with our prior experiments, in the baseline condition, sensory language increased engagement ( $M_{\text{high}} = 3.88$  vs.  $M_{\text{low}} = 2.47$ , *F*(1, 145) = 11.71, p = .001,  $\eta^2 = 0.075$ ). Consistent with the hypothesized underlying role of prior experience, however, when the influencer mentioned that she had previously used the product, this difference disappeared ( $M_{\text{high}} = 2.25$  vs.  $M_{\text{low}} = 2.06$ , *F*(1, 143) = 0.37, p = .543,  $\eta^2 = 0.003$ ).

Purchase Likelihood. Similar effects were observed on purchase likelihood. A main effect of sensory language  $(F(1, 290) = 6.79, p = .010, \eta^2 = 0.023)$  was qualified by the predicted sensory language × prior use interaction  $(F(3, 288) = 8.80, p = .006, \eta p^2 = 0.026)$ . Consistent with our prior experiments, in the baseline condition, sensory language increased purchase likelihood  $(M_{high} = 4.47 \text{ vs.}$  $M_{low} = 3.18, F(1, 145) = 12.51, p = .001, \eta^2 = 0.079)$ . Consistent with the hypothesized underlying role of prior experience, however, when the influencer mentioned that she had previously used the product, this difference disappeared  $(M_{high} = 2.97 \text{ vs.} M_{low} = 2.98, F(1, 143) = 0.01,$  $p = .966, \eta^2 = 0.001)$ . Actual Use. A 2 × 2 ANOVA revealed the predicted sensory language × prior use interaction (F(3, 288) = 3.46, p = .007,  $\eta p^2 = 0.025$ ). Consistent with study 3, in the baseline condition, sensory language increased perceived actual use ( $M_{high} = 5.11$  vs.  $M_{low} = 4.11$ , F(1, 145) = 6.57, p = .011,  $\eta^2 = 0.043$ ). As expected, however, when the influencer mentioned that she had previously used the product, this difference disappeared ( $M_{high} = 4.03$  vs.  $M_{low} = 4.41$ , F(1, 143) = 1.33, p = .251,  $\eta^2 = 0.009$ ).

Authenticity. A 2 × 2 ANOVA revealed the predicted sensory language × prior use interaction ( $F(3, 288) = 3.59, p = .033, \eta p^2 = 0.016$ ). Consistent with study 3, in the baseline condition, sensory language increased perceived authenticity ( $M_{high} = 4.19$  vs.  $M_{low} = 3.50, F(1, 145) = 6.08, p = .015, \eta^2 = 0.040$ ). As expected, however, when the influencer mentioned that she had previously used the product, this difference disappeared ( $M_{high} = 3.40$  vs.  $M_{low} = 3.51, F(1, 143) = 0.19, p = .662, \eta^2 = 0.001$ ).

Serial Moderated Mediation. A moderated serial mediation analysis (PROCESS model 83; Hayes 2018), incorporating product use as a moderator of sensory language's effects on actual use and authenticity, found significant moderated mediation on both engagement (b = -0.47, 95% CI = -0.90, -0.11) and purchase (b = -0.40, 95% CI = -0.77, -0.10). As in study 3, in the baseline conditions, the effect of sensory language was sequentially driven by actual use and authenticity on both engagement (b = 0.34, 95% CI = 0.06, 0.67) and purchase likelihood (b = 0.29, 0.29)95% CI = 0.05, 0.58). Sensory language made it seem like the influencer actually used the product (b=0.99,SE = 0.36, t = 2.77, p = .006), which made them seem more authentic (b = 0.55, SE = 0.03, t = 19.78, p < .001), which increased both engagement (b = 0.63, SE = 0.10, t = 6.48, p < .001) and purchase likelihood (b = 0.53, SE = 0.09, t = 6.14, p < .001). When the influencer mentioned prior use, however, using more sensory language no longer impacted perceived use (b = -0.38, SE = 0.36, SE = 0.3t = -1.05, p = .293), and the serial mediation was no longer significant on either engagement (b = -0.13, 95%CI = -0.37, 0.10) or purchase likelihood (b = -0.11, 95%CI = -0.32, 0.08).<sup>17</sup>

## Discussion

Results of study 5 underscore sensory language's impact on engagement and purchase and the hypothesized process underlying these effects. First, consistent with the first four studies, sensory language increased engagement and willingness to purchase. Consumers were more likely to like and comment on an influencer post, and buy the sponsored product, when the post used more sensory language.

<sup>17</sup> Results also revealed moderated mediation with actual use and authenticity individually (web appendix).

Second, the results reinforce the role of authenticity in driving these effects through both mediation and moderation. Using more sensory language made consumers think that the influencer was more likely to have actually used the product, which made them think that the influencer was more authentic, which increased both engagement and purchase. That said, consistent with the role of authenticity and prior use, when other cues made it clear that the influencer was mitigated.<sup>18</sup>

## **GENERAL DISCUSSION**

While there has been a great deal of interest in influencer marketing, less is known about how companies (and influencers) can increase the impact of this emerging marketing strategy. Furthermore, consumers often question influencer's authenticity; therefore, influencers are striving to understand how to seem more authentic.

The present research investigates both these aspects, and whether the words influencers use can help. In particular, a multimethod investigation, combining field data and controlled experiments, demonstrates the impact of sensory language, and the process underlying these effects.

First, automated text, image, and video analysis of thousands of Instagram and TikTok posts demonstrates that posts using sensory language receive more engagement (studies 1 and 2). Experiments underscore sensory language's causal impact, illustrating that it boosts engagement and willingness to purchase the sponsored product (studies 3–5, 3A, and 4A).

Second, results shed light on the underlying process through both mediation and moderation (studies 1–5). Sensory language increases engagement and purchase because it makes influencers seem like they actually use the product, which makes them seem more authentic (studies 3, 4, 4A, and 5). Furthermore, consistent with the notion that the effects are driven by authenticity, they are mitigated when authenticity is in less doubt, either because the poster has few followers (studies 1, 2, and 4), were not paid (study 4A), or used the product previously (studies 1 and 5).

Third, the studies cast doubt on numerous alternative explanations. The effects persisted in the field even controlling for aspects of the influencer, text, visual (i.e., image or video), and other features. Experimental evidence also finds that linguistic concreteness, processing fluency, memorability, typicality, ease of imagining, and perceived ownership have difficulty explaining the pattern of results.

## **Contributions and Implications**

This research makes several contributions. First, while research on engagement with influencer content has begun to explore things like disclosure, audience characteristics, and influencer characteristics, there has been less attention to the *language* used. We contribute to this emerging area, demonstrating that sensory language can have an important effect. Given that companies select influencers, in part, based on engagement rates (Hughes et al. 2019; Leung et al. 2022b), boosting engagement is particularly important.

Second, we contribute to the literature on sensory marketing. While prior research has studied the effect of sensory cues like visual aesthetics, haptic elements, scent, or music, we complement this work by demonstrating how sensory language shapes consumer behavior. In particular, we explore the role of sensory language in influencer posts. In doing so, this work contributes to the growing literature on how subtle linguistic devices shape information processing, perceptions, and behavior (Berger, Moe, and Schweidel 2023; Pogacar et al. 2018; see Berger et al. 2020; Packard and Berger 2024 for a review).

Third, we advance knowledge on the social function of language (Packard and Berger 2017, 2021; Schellekens, Verlegh, and Smidts 2010), revealing that sensory language shapes recipients' perceptions about the message sender. Specifically, we demonstrate that sensory language cues lead to inferences about product usage, and thus authenticity. In doing so, we deepen understanding on what drives influencer authenticity (Gerrath and Usrey 2021).

Fourth, these results have clear practical implications. More than 75% of brand marketers use influencer marketing and 68% of marketers plan to increase their influencer marketing spend (Influencer Marketing Hub 2022). Engaging consumers with sponsored content is often challenging, however, due to concerns that influencers do not actually use the products they endorse (Influence 2022). Our findings suggest that sensory language can help. Rather than saying "put it on the bread," for example, saying "spread it on the bread" should increase perceived authenticity, engagement, and purchase. See table 3 for other examples of simple shifts toward sensory language.

## Limitations and Directions for Future Research

As with any early investigation, this work suggests a range of potential directions for future research. One is whether the effects of sensory language are moderated by parts of speech (e.g., verbs, adjectives, and nouns). In the two field studies, for example, we account for sensory

<sup>18</sup> Ancillary analyses using the measures from study 3 further test alternative explanations. Given we only expected sensory language to impact things in the baseline condition, we focus the analyses there. There were no effects of condition or memorability (F(1, 145) = 1.72, p = .192), typicality (F(1, 145) = 1.21, p = .274), concreteness (F(1, 145) = 0.45, p = .504), or fluency (F(1, 145) =1.27, p = .262).

#### TABLE 3

#### SHIFTS TO SENSORY LANGUAGE

Sense	Regular (sensory) word
Touch	Are you looking for great (soft) slippers?
	Such an effective (smooth) hand cream!
Sight	These lamps are efficient (illuminating).
	No words to describe the beauty (sleekness) of this bag
Smell	Try (savor) its fragrance
	Nice (airy) smell!
Hearing	This playlist is (sounds) so good.
	What nice (clear) sound with these headphones!
Taste	Eat (munch on) these cookies for a nice snack
	Energize (refresh) yourself with this shake

language of verbs (e.g., caressing), adjectives (e.g., gently), and nouns (e.g., flavor), but one could argue that they may have differing effects. Given their respective linguistic roles, sensory verbs (e.g., rubbing or hearing) may be more important for shaping perceptions of usage, while sensory adjectives and nouns may be more important for shaping perceptions about product attributes (e.g., smooth or silent). These relationships may also depend on context. Sensory verbs could be more important for products or services that are related to motion (e.g., running shoes or travel services). Adjectives might have stronger effects for products that do not involve motion (e.g., an aromatic candle).

It would be also interesting to examine individual differences. People vary in their need for sensory or bodily experience (e.g., need-for-touch scale; Peck and Childers 2003) and one could argue that such differences might moderate sensory language's effects. Need for sensory interaction might amplify sensory language's effect by allowing consumers to acquire the sensory information needed for action. There may also be individual differences in other sensory inputs (e.g., taste, smell, vision, and hearing), and future research might investigate whether individuals who score higher on such scales are more affected by sensory language.

Many more interesting questions remain. Marketers have begun to use virtual influencers (i.e., artificial Computer-Generated Imagery people with realistic human features), for example, to promote products and services (Appel et al. 2020). Given these virtual influencers cannot actually use products, though, would sensory language still have benefits in this context? Similarly, we focused on language, but future research could examine images. Prior research on sensory marketing (Cian, Krishna, and Elder 2014; Elder and Krishna 2012) has shown how object orientation or dynamic imagery facilitates mental stimulation of interacting with the product. Influencers can post pictures showing the product, themselves with the product, or themselves using the product. Someone posting about a moisturizer, for example, could show themselves holding the bottle, or spreading it on their hands. The latter might be more likely to evoke the senses and thus have a greater impact. Research is increasingly demonstrating the value of image data for marketing insights (Hartmann et al. 2021; Li and Xie 2020), and thus it is a fruitful area to explore further. Work might also examine whether certain sub-types of sensory language (i.e., more or less commonly used) might have different effects and whether the effects demonstrated here extend to sales in the field.

In conclusion, this work demonstrates that a subtle shift in how influencers endorse products can have important consequences for consumer perceptions and behavior. In doing so, it deepens our understanding of language effects in the marketplace, and on consumer behavior more broadly.

## DATA COLLECTION INFORMATION

The first author collected the field data used in studies 1 and 2 in late 2021 in Italy. Studies 3, 4, 4A, and 5 were conducted by the third author in the spring and fall of 2022, and study 3A was conducted by the fourth author in the spring of 2022. Experiments 3, 3A, 4, 4A, and 5 used Prolific participants located in the USA. Analysis of all studies was performed by the first author. The data are currently stored in a project directory on the Open Science Framework.

## REFERENCES

- Anglada-Tort, Manuel, Steve Keller, Jochen Steffens, and Daniel Müllensiefen (2021), "The Impact of Source Effects on the Evaluation of Music for Advertising: Are There Differences in How Advertising Professionals and Consumers Judge Music?," *Journal of Advertising Research*, 61 (1), 95–109.
- Akpinar, Ezgi and Jonah Berger (2015), "Drivers of Cultural Success: The Case of Sensory Metaphors," *Journal of Personality and Social Psychology*, 109 (1), 20–34.
- Appel, Gil, Lauren Grewal, Rhonda Hadi, and Andrew T. Stephen (2020), "The Future of Social Media in Marketing," *Journal* of the Academy of Marketing Science, 48 (1), 79–95.
- Audrezet, Alice, Gwarlann de Kerviler, and Julie G. Moulard (2020), "Authenticity Under Threat: When Social Media Influencers Need To Go Beyond Self-Presentation," *Journal* of," Journal of Business Research, 117, 557–69.
- Barsalou, Lawrence W. (2008), "Grounded Cognition," Annual Review of Psychology, 59 (1), 617–45.
- Bearden, William O., Donald R. Lichtenstein, and Jesse E. Teel (1984), "Comparison Price, Coupon, and Brand Effects on Consumer Reactions to Retail Newspaper Advertisements," *Journal of Retailing*, 60 (2), 11–36.
- Berger, Jonah, Ashlee Humphreys, Stephan Ludwig, Wendy W. Moe, Oded Netzer, and David A. Schweidel (2020), "Uniting the Tribes: Using Text for Marketing Insight," *Journal of Marketing*, 84 (1), 1–25.
- Berger, Jonah and Katherine L. Milkman (2012), "What Makes Online Content Viral?," *Journal of Marketing Research*, 49 (2), 192–205.
- Berger, Jonah, W. Wendy Moe, and David A. Schweidel (2023), "What Holds Attention? Linguistic Drivers of Engagement," *Journal of Marketing*, 00222429231152880.

- Beverland, Michael B. and Francis J. Farrelly (2010), "The Quest for Authenticity in Consumption: Consumers' Purposive Choice of Authentic Cues to Shape Experienced Outcomes," *Journal of Consumer Research*, 36 (5), 838–56.
- Borah, Abhishek, Sourindra Banerjee, Yu-Ting Lin, Apurv Jain, and Andreas B. Eisingerich (2020), "Improvised Marketing Interventions in Social Media," *Journal of Marketing*, 84 (2), 69–91.
- Brown, Stephen, Robert V. Kozinets, and John F. Sherry (2003), "Teaching Old Brands New Tricks: Retro Branding and the Revival of Brand Meaning," *Journal of Marketing*, 67 (3), 19–33.
- Brysbaert, Marc and Boris New (2009), "Moving beyond Kučera and Francis: A Critical Evaluation of Current Word Frequency Norms and the Introduction of a New and Improved Word Frequency Measure for American English," *Behavior Research Methods*, 41 (4), 977–90.
- Cian, Luca, Aradhna Krishna, and Ryan S. Elder (2014), "This Logo Moves Me: Dynamic Imagery from Static Images," *Journal of Marketing Research*, 51 (2), 184–97.
- Elder, Ryan S. and Aradhna Krishna (2010), "The Effects of Advertising Copy on Sensory Thoughts and Perceived Taste," *Journal of Consumer Research*, 36 (5), 748–56.
- (2022), "A Review of Sensory Imagery for Consumer Psychology," Journal of Consumer Psychology, 32 (2), 293–315.
- Elder, Ryan S., Ann E. Schlosser, Morgan Poor, and Lidan Xu (2017), "So Close I Can Almost Sense It: The Interplay Between Sensory Imagery and Psychological Distance," *Journal of Consumer Research*, 44 (4), 877–94.
- Fast, Ethan, Binbin Chen, and Michael S. Bernstein (2016), "Empath: Understanding Topic Signals in Large-Scale Text," in Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, 4647–4657.
- Finn, Adam (1988), "Print Ad Recognition Readership Scores: An Information Processing Perspective," *Journal of Marketing Research*, 25 (2), 168–77.
- Gerrath, Maximilian H. E. E. and Bryan Usrey (2021), "The Impact of Influencer Motives and Commonness Perceptions on Follower Reactions Toward Incentivized Reviews," *International Journal of Research in Marketing*, 38 (3), 531–48.
- Hartmann, Jochen, Mark Heitmann, Christina Schamp, and Oded Netzer (2021), "The Power of Brand Selfies," *Journal of Marketing Research*, 58 (6), 1159–77.
- Hayes, Andrew F. (2018), "Partial, Conditional, and Moderated Moderated Mediation: Quantification, Inference, and Interpretation," *Communication Monographs*, 85 (1), 4–40.
- Herhausen, Dennis, Stephan Ludwig, Dhruv Grewal, Jochen Wulf, and Marcus Schoegel (2019), "Detecting, Preventing, and Mitigating Online Firestorms in Brand Communities," *Journal of Marketing*, 83 (3), 1–21.
- Hughes, Christian, Vanitha Swaminathan, and Gillian Brooks (2019), "Driving Brand Engagement Through Online Social Influencers: An Empirical Investigation of Sponsored Blogging Campaigns," *Journal of Marketing*, 83 (5), 78–96.
- Influence (2022), "Ethics & Influencers: Exploring Influencers and the Ethics Behind Their Sharing," Last Accessed April 15, 2022. https://influence.co/go/content/influencer-ethics.
- Influencer Marketing Hub (2022), "The State of Influencer Marketing 2021: Benchmark Report," Last Accessed April 22, 2022. https://influencermarketinghub.com/influencermarketing-benchmark-report-2021/.

- Jalali, Nima Y. and Purushottam Papatla (2019), "Composing Tweets to Increase Retweets," *International Journal of Research in Marketing*, 36 (4), 647–68.
- Kanuri, Vamsi K., Yixing Chen, and Shirhari Sridhar (2018), "Scheduling Content on Social Media: Theory, Evidence, and Application," *Journal of Marketing*, 82 (6), 89–108.
- Karagür, Zeynep, Jan-Michael M. Becker, Kristina Klein, and Alexander Edeling (2022), "How, Why, and When Disclosure Type Matters for Influencer Marketing," *International Journal of Research in Marketing*, 39 (2), 313–35.
- Klostermann, Jan, Anja Plumeyer, Daniel Böger, and Reinhold Decker (2018), "Extracting Brand Information From Social Networks: Integrating Image, Text, and Social Tagging Data," *International Journal of Research in Marketing*, 35 (4), 538–56.
- Krishna, Aradhna (2012), "An Integrative Review of Sensory Marketing: Engaging the Senses to Affect Perception, Judgment and Behavior," *Journal of Consumer Psychology*, 22 (3), 332–51.
- Krishna, Aradhna, Luca Cian, and Tatiana Sokolova (2016), "The Power of Sensory Marketing in Advertising," *Current Opinion in Psychology*, 10, 142–7.
- Krishna, Aradhna, May O. Lwin, and Maureen Morrin (2010), "Product Scent and Memory," *Journal of Consumer Research*, 37 (1), 57–67.
- Krishna, Aradhna and Norbert Schwarz (2014), "Sensory Marketing, Embodiment, and Grounded Cognition: A Review and Introduction," *Journal of Consumer Psychology*, 24 (2), 159–68.
- Kronrod, Ann, Amir Grinstein, and Luc Wathieu (2012), "Go Green! Should Environmental Messages Be So Assertive?," *Journal of Marketing*, 76 (1), 95–102.
- Kuperman, Victor, Zachary Estes, Marc Brysbaert, and Amy B. Warriner (2014), "Emotion and Language: Valence and Arousal Affect Word Recognition," *Journal of Experimental Psychology. General*, 143 (3), 1065–81.
- Kyle, Kristopher, Scott Crossley, and Cynthia Berger (2018), "The Tool for the Automatic Analysis of Lexical Sophistication (TAALES): Version 2.0," *Behavior Research Methods*, 50 (3), 1030–46.
- Lee, Angela Y. and Jennifer L. Aaker (2004), "Bringing the Frame Into Focus: The Influence of Regulatory Fit on Processing Fluency and Persuasion," *Journal of Personality and Social Psychology*, 86 (2), 205–18.
- Lee, Dokyun, Kartik Hosanagar, and Harikesh S. Nair (2018), "Advertising Content and Consumer Engagement on Social Media: Evidence from Facebook," *Management Science*, 64 (11), 5105–31.
- Lee, Jeffrey K. and Enric Junqué De Fortuny (2022), "Influencer-Generated Reference Groups," *Journal of Consumer Research*, 49 (1), 25–45.
- Leung, Fine F., Flora F. Gu, Yiwei Li, Jonathan Z. Zhang, and Robert W. Palmatier (2022a), "Influencer Marketing Effectiveness," *Journal of Marketing*, 86 (6), 93–115.
- Leung, Fine F., Flora F. Gu, and Robert W. Palmatier (2022b), "Online Influencer Marketing," *Journal of the Academy of Marketing Science*, 50 (2), 226–51.
- Li, Yiyi and Ying Xie (2020), "Is a Picture Worth a Thousand Words? An Empirical Study of Image Content and Social Media Engagement," *Journal of Marketing Research*, 57 (1), 1–19.
- Liadeli, Georgia, Francesca Sotgiu, and Peeter W. Verlegh (2022), "A Meta-Analysis of the Effects of Brand Owned Social

Media on Social Media Engagement and Sales," *Journal of Marketing*, 00222429221123250.

- Luangrath, Andrea W., Joann Peck, and Victor A. Barger (2017), "Textual Paralanguage and Its Implications for Marketing Communications," *Journal of Consumer Psychology*, 27 (1), 98–107.
- Luangrath, Andrea Webb, Yixiang Xu, and Tong Wang (2023), "Paralanguage Classifier (Para): An Algorithm for Automatic Coding of Paralinguistic Nonverbal Parts of Speech in Text," *Journal of Marketing Research*, 60 (2), 388–408.
- Mehrotra, Rishabh, Scott Sanner, Wray Buntine, and Lexing Xie (2013), "Improving LDA Topic Models for Microblogs via Tweet Pooling and Automatic Labeling," in Proceedings of the 36th International ACM SIGIR Conference on Research and Development in Information Retrieval, 889–892.
- Moore, Sarah G. (2012), "Some Things Are Better Left Unsaid: How Word of Mouth Influences the Storyteller," *Journal of Consumer Research*, 38 (6), 1140–54.
- Moore, Sarah G. and Katherine C. Lafreniere (2020), "How Online Word-of-Mouth Impacts Receivers," *Consumer Psychology Review*, 3 (1), 34–59.
- Morhart, Felicitas, Lucia Malär, Amélie Guèvremont, Florent Girardin, and Bianca Grohmann (2015), "Brand Authenticity: An Integrative Framework and Measurement Scale," *Journal of Consumer Psychology*, 25 (2), 200–18.
- Nunes, Joseph C., Andrea Ordanini, and Gaia Giambastiani (2021), "The Concept of Authenticity: What It Means to Consumers," *Journal of Marketing*, 85 (4), 1–20.
- Packard, Grant and Jonah Berger (2017), "How Language Shapes Word of Mouth's Impact," *Journal of Marketing Research*, 54 (4), 572–88.
- (2021), "How Concrete Language Shapes Customer Satisfaction," Journal of Consumer Research, 47 (5), 787–806.
- (2024), "The Emergence and Evolution of Consumer Language Research," *Journal of Consumer Research*, forthcoming, doi: 10.1093/jcr/ucad013.
- Pancer, Ethan, Vincent Chandler, Maxwell Poole, and Theodore J. Noseworthy (2019), "How Readability Shapes Social Media Engagement," *Journal of Consumer Psychology*, 29 (2), 262–70.
- Peck, Joann and Terry L. Childers (2003), "Individual Differences in Haptic Information Processing: The "Need for Touch" Scale," *Journal of Consumer Research*, 30 (3), 430–42.
- Peck, Joann and Jennifer Wiggins (2006), "It Just Feels Good: Customers' Affective Response to Touch and Its Influence on Persuasion," *Journal of Marketing*, 70 (4), 56–69.
- Peck, Joann and Suzanne B. Shu (2009), "The Effect of Mere Touch on Perceived Ownership," *Journal of consumer Research*, 36 (3), 434–47.

- Pennebaker, James W., Ryan L. Boyd, Kayla Jordan, and Kate Blackburn (2015), "The Development and Psychometric Properties of LIWC2015," Last Accessed April 3, 2022. https://repositories.lib.utexas.edu/bitstream/handle/2152/ 31333/LIWC2015\_LanguageManual.pdf.
- Petrin, Amil and Kenneth Train (2010), "A Control Function Approach to Endogeneity in Consumer Choice Models," *Journal of Marketing Research*, 47 (1), 3–13.
- Pogacar, Ruth, L. J. Shrum, and Tina M. Lowrey (2018), "The Effects of Linguistic Devices on Consumer Information Processing and Persuasion: A Language Complexity × Processing Mode Framework," *Journal of Consumer Psychology*, 28 (4), 689–711.
- Rossi, Patricia, Felipe Pantoja, Adilson Borges, and Carolina O. C. Werle (2017), "What a Delicious Name! Articulatory Movement Effects on Food Perception and Consumption," *Journal of the Association for Consumer Research*, 2 (4), 392–401.
- Schellekens, Gaby A. C., Peeter W. J. Verlegh, and Ale Smidts (2010), "Language Abstraction in Word of Mouth," *Journal* of Consumer Research, 37 (2), 207–23.
- Schwenzow, Jasper, Jochen Hartmann, Amos Schikowsky, and Mark Heitmann (2021), "Understanding Videos at Scale: How to Extract Insights for Business Research," *Journal of Business Research*, 123, 367–79.
- Tellis, Gerard J., Deborah J. MacInnis, Seshadri Tirunillai, and Yanwei Zhang (2019), "What Drives Virality (Sharing) of Online Digital Content? The Critical Role of Information, Emotion, and Brand Prominence," *Journal of Marketing*, 83 (4), 1–20.
- Valsesia, Francesca, Davide Proserpio, and Joseph C. Nunes (2020), "The Positive Effect of Not Following Others on Social Media," *Journal of Marketing Research*, 57 (6), 1152–68.
- Villarroel Ordenes, Francisco, Dhruv Grewal, Stephan Ludwig, Ko De Ruyter, Dominik Mahr, and Martin Wetzels (2019), "Cutting Through Content Clutter: How Speech and Image Acts Drive Consumer Sharing of Social Media Brand Messages," *Journal of Consumer Research*, 45 (5), 988–1012.
- Weingarten, Evan and Jonah Berger (2017), "Fired Up for the Future: How Time Shapes Sharing," *Journal of Consumer Research*, 44 (2), 432–47.
- Wies, Simone, Alexander Bleier, and Alexander Edeling (2022), "Finding Goldilocks Influencers: How Follower Count Drives Social Media Engagement," *Journal of Marketing*, 00222429221125131.

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