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How Readability Shapes Social Media Engagement

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We suggest that text readability plays an important role in driving consumer engagement on social media. Consistent with a processing fluency account, we find that easy-to-read posts are more liked, commented on, and shared on social media. We analyze over 4,000 Facebook posts from *Humans of New York*, a popular photography blog on social media, over a 3-year period to see how readability shapes social media engagement. The results hold when controlling for photo features, story valence, and other content-related characteristics. Experimental findings further demonstrate the causal impact of readability and the processing fluency mechanism in the context of a fictitious brand community. This research articulates the impact of processing fluency on brief word-of-mouth transmissions in the real world while empirically demonstrating that readability as a message feature matters. It also extends the impact of processing fluency to a novel behavioral outcome: commenting and sharing actions.

Keywords Social media; Processing fluency; Readability; Commenting; Sharing

Users are inundated with information on social media. The average Facebook user logs 50 min daily and consumes over 300 posts (Luckerson, 2015; Stewart, 2016). As a result, consumers often spend a matter of seconds on any given post, suggesting it needs to be interesting to garner online interactions (i.e., likes, comments, or shares). In this context, "interesting" is often synonymous with novelty—messages that are unusual or violate expectations are often more effective at generating conversation (Hughes, 2005; Knox, 2010; Rosen, 2008). While novelty in online content can elicit a positive response (Berger & Milkman, 2012; Moldovan, Goldenberg, & Chattopadhyay, 2011), the impact of writing style and readability in a social media context is lesser known.

Readability is broadly defined as "the ease of understanding or comprehension due to writing style" (Klare, 1963, p. 1). The construct has primarily been examined in the domains of education, literacy, and psycholinguistics (Chall & Dale, 1995; Dale & Chall, 1948; DuBay, 2004; Thorndike, 1921). The measurement of readability often consists of two variables: word complexity and syntactic complexity (see DuBay, 2004 for a review). Word complexity is often proxied as word length or number of syllables (e.g., Flesch, 1948; Gunning, 1952; McLaughlin, 1969). Syntactic complexity is often proxied as average sentence length (Chall & Dale, 1995). However, these are only guidelines. Long words are not always more difficult than short words. For example, "interesting" and "neighborhood" are considered more difficult than "dight" and "serac" by most readability metrics, but in general, more people would process these long words more fluently than these shorter words. This fits with work that shows frequency of use leads to word familiarity and thus ease of processing (Thorndike, 1921).

The idea that texts composed of familiar words and short sentences should be more easily read

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supports the possibility that this could lead to a *fluency effect*, where people tend to enjoy things more when they are easily processed (Alter & Oppenheimer, 2009). Given the link between enjoyment and engagement (Berger & Milkman, 2012), we expect that posts which are more fluently processed thus enjoyed more will subsequently increase consumer engagement via liking, commenting, and sharing.

In examining these possibilities, we make three primary contributions. First, we demonstrate the impact of readability on the popularity/virality of social media in a real consumption context. Despite the pervasiveness of social media, understanding the underlying drivers of content preference is nascent. Second, we empirically demonstrate that the effects of readability on engagement are robust to information-rich content (e.g., photos) and noisy environments (e.g., browsing one's timeline). Third, we extend fluency outcomes to novel behaviors: commenting and sharing. This is meaningful as organizations often seek such metrics as a means of predicting consumption.

Fluency and Social Media Engagement

Processing fluency is "the subjective experience of ease with which people process information" (Alter & Oppenheimer, 2009, p. 219). Fluency can positively influence judgments in several domains including veracity and confidence (Reber & Schwarz, 2002; Reber, Schwarz, & Winkielman, 2004; Winkielman, Schwarz, Fazendeiro, & Reber, 2003). It does so via a metacognitive experience, where the ease of processing elicits positive affect, and the positive affect becomes attributed toward the content (Kent & Allen, 1994; Kohli, Harich, & Leuthesser, 2005; Moreau, Lehmann, & Markman, 2001). Indeed, this has implications for digital engagement tactics such as sharing, commenting, and liking.

"Liking" tends to require the least amount of effort and is the least visible of social media engagement metrics (Lipsman, Mudd, Rich, & Bruich, 2012). Given the literature's well-established relationship between text complexity, fluency, and positive affect (Winkielman et al., 2003), we expect consumers would be more inclined to "like" a post that is easy to read relative to those that are more complex.

"Commenting," where users share their thoughts on a post, has been shown to be primarily motivated by social interaction needs (Smock, Ellison, Lampe, & Wohn, 2011; Wilson, Gosling, & Graham, 2012). Prior work has also shown that when people feel good, they seek out more interactions with others or spend more time in social contact (Berry & Hansen, 1996; Watson, Clark, McIntyre, & Hamaker, 1992). In conjunction with the fluency-positive affect link, we would also expect that easy-to-read texts are more likely to generate comments relative to difficult texts.

"Sharing" a post makes it available on a user's own timeline as well as that of their friends, adding another means to satisfy social interaction needs. Prior work has demonstrated that positive content is more likely to be shared (Berger & Milkman, 2012) as it can positively reflect on the sender and help boost the mood of others. Since the positivity from reading simple texts is often attributed to the content itself, we predict that readable posts are also more likely to be shared.

Taken as a whole, we predict that textually less complex posts will facilitate processing fluency, and the positive affect arising from fluency will lead to more likes, comments, and shares.

Overview of the Studies

We conduct two field studies and a laboratory experiment to examine our predictions. Study 1 demonstrates the positive effect of readability in posts on actual social media behaviors. The dataset was built from scraping three years of Facebook posts from *Humans of New York* (HONY), a page that features street portraits and brief interviews with people typically living in New York City. The page posts multiple times daily, features a broad array of stories with people of various backgrounds, and has 18 million followers, making it an ideal place to study digital engagement. Study 2 follows up with an experiment to explore the effects of post length. By directly manipulating readability and post length while holding all else constant, we confirm that readability breeds engagement. We return to the field for a follow-up study on HONY's Twitter page and replicate the readability effect in a context where post length is constrained.

Study 1

Method

Dataset. We downloaded all posts issued by the HONY Facebook page from 2013–2015 using Facepager, a program that fetches publicly available data from Facebook's Graph API (Keyling &

Table 1
Study 1: Correlation Matrix

	Likes	Comments	Shares
Likes	1	0.77	0.71
Comments	–	1	0.75
Shares	–	–	1

Jünger, 2016). The sample contained 4,064 posts, each including an image and a brief story. On average, a post received 146,709 likes, 2,886 comments, and 5,950 shares. Likes, comments, and shares were all positively correlated (see Table 1).

Readability. To measure the readability of a post's text, we used the Dale-Chall Readability Formula (Chall & Dale, 1995; Dale & Chall, 1948). The Dale-Chall is one of the most well-established measures in linguistics that blends a dictionary-based list of words to measure word familiarity with syntactic complexity (DuBay, 2004). It checks each word of a text against a list of 2,950 words that are known by at least 80% of Grade 4 students. The formula represents a continuous variable and is comprised of two factors: the percentage of words found outside the word list and the average sentence length in words. On average, HONY posts scored 3.6 (SD = 1.9). For context, stories scored below five should be easily read by Grade 4 students and stories scored at 10 should be readable at the college level.

$$\text{Dale-Chall Readability Score} = 0.1579\left[\frac{\#\text{Unfamiliar Words}}{\#\text{Total Words}} \times 100\right] + 0.0496\left[\frac{\#\text{Total Words}}{\#\text{Sentences}}\right]$$

Note: If the percentage of difficult words is above 5%, then add 3.6365 to the raw score to get the adjusted score, otherwise the adjusted score is equal to the raw score.

Control variables. We controlled for post length, which is the number of words in the post, as longer posts may require more effort to process. Given that text length has previously been linked to reading comprehension (Klauda & Guthrie, 2008), we also accounted for a potential readability × length interaction on engagement. We also conducted sentiment analysis using VADER, a tool designed exclusively for social media (Hutto & Gilbert, 2014). This allowed us to extract the sentiment of the text, ranging from −1.0 to +1.0 (negative to positive). Each post was also analyzed using automated text classification (Pancer & Poole, 2016). Content was categorized based on the subject taxonomy of the International Press Telecommunications Council. We allowed for multitag classification, with some posts containing content related to multiple media topics (see Table 2 for summary). For many of the control and dependent variables, the standard deviations are large and often larger than the mean. This is common in text analysis based on non-normal distributions and the nature of language (see Kite et al., 2016; Saxton & Waters, 2014).

We relied on human coders to classify the images of the subjects. Two coders worked independently on the dataset and were blind to our hypotheses. The photo subjects' age, gender, and ethnicity were coded. Finally, we used a quadratic time trend to address the nonlinear growth in popularity. The regression equation is as follows:

$$\text{Likes/Comments/Shares}_i = e^{\propto_i \ln(n)} + \beta_0 + \beta_1\text{Readability}_i + \beta_2\text{Post Length}_i + \beta_3\text{Readability}*\text{Post Length}_i + \beta_4 X_i + u_i$$

Results and Discussion

To examine the dependent variables, we used a negative binomial regression, which addresses the data's skewness (Kite, Foley, Grunseit, & Freeman, 2016; Saxton & Waters, 2014). Our primary finding was that increased text readability was associated with a corresponding increase in likes, comments, and shares. For example, an increase of one level of readability (i.e., lower Dale–Chall score) was linked to an increase of over 8,500 likes (see Table 3).

Further examination yielded that the effect of readability on likes and comments was qualified by a significant interaction with post length. Floodlight analysis (Spiller, Fitzsimons, Lynch, & McClelland,

Table 2
Study 1: Summary Statistics of Facebook Posts

	Mean	Standard deviation
Dependent variables		
Likes	145,105.90	165,741.40
Comments	2,863.17	4,436.40
Shares	5,886.51	12,788.96
Independent variables		
Text analysis variables		
Dale–Chall Score	3.59	1.90
Number of Words	55.97	62.75
VADER (%)	16.67	53.17
Social media categories		
Art and Culture (%)	14.05	34.75
Crime (%)	5.34	22.48
Disaster and Accident (%)	2.19	14.64
Economy and Finance (%)	3.49	18.36
Law and Justice (%)	7.50	26.35
Environment (%)	3.74	18.98
Health (%)	4.97	21.73
Social Issue (%)	17.05	37.61
Labor (%)	6.64	24.91
Tourism (%)	2.83	16.58
Lifestyle and Leisure (%)	2.95	16.93
Politics (%)	1.13	10.58
Religion and Belief (%)	1.77	13.19
Science and Technology (%)	2.83	16.58
Sport (%)	3.84	19.21
Unrest (%)	2.09	14.31
Greetings and Thanks (%)	0.24	4.95
Ethnic groups categories		
Arab (%)	9.32	29.08
Asian (%)	4.35	20.41
African American (%)	26.13	43.94
Caucasian (%)	43.41	49.57
Hispanic (%)	4.89	21.58
Other/Unidentified Group (%)	14.27	34.98
Age categories		
Child (%)	17.69	38.16
Teenager (%)	7.55	26.43
Adult (%)	58.26	49.32
Senior (%)	17.74	38.21
Other control variables		
Weekend (%)	26.57	44.18
Male (%)	60.63	48.86
Sample: 4,064		

2013) revealed a significant positive effect of post length on likes at readability scores below 5.9 (b_{JN} = .216, p = .05). In other words, long posts (>70 words) were liked more than short posts (≤20 words) when they were easily read by an average Grade 5/6 student. We also found the same pattern of effects on commenting (b_{JN} = .319, p = .05). Given the interactions on likes and comments, we were surprised to find that there was no interaction for sharing behavior. That said, sharing was positively affected by main effects of readability and length, and consistent with likes and comments, the slope for long posts was significantly different from short posts (see Figure 1).

These interactions make intuitive sense—longer posts in particular benefit from being easier to read. There are a few reasons why this might be happening. One is that more words can add depth, texture, and meaning to a story relative to very short posts, which likely makes them more enjoyable and generates engagement. In conjunction with this, long and complex posts may be more inherently taxing to process and thus more likely to create a negative metacognitive experience. Another possibility is that users do not even bother to process or read posts that are long and complex, akin to the TL;DR anecdote (too long; didn't read). These possibilities motivated us to probe the relation between readability and length further.

Study 2

The purpose of Study 2 was to elaborate on the unanticipated interaction in Study 1, and thus directly test the causal impact of readability on media engagement while empirically validating the underlying mechanism. Finally, while the context of Study 1 is an affect-laden online community that shares personal experiences, we sought to test if readability would generalize in a typical brand community.

Method

Participants (N = 236, 42.8% female, M_{age} = 36.3) were recruited through MTurk and were assigned at random in a 2 (readability: simple vs. complex) × 2 (post length: short vs. long) between-subjects factorial design. Participants were asked to imagine that they follow a running club on Facebook and were told that they would see a post from a fellow member. The post was about a fictitious running shoe brand the member used before a marathon (MDA, Appendix S1, p. 8). Short posts were 59 words (based on the HONY's average post length of 55 words), while long posts were 268 words (based on the average of the longest 5% of HONY posts). To vary readability, several common words, as listed on the Dale-Chall word index, were substituted with less familiar synonyms not on the list (e.g., think vs.

Table 3
Study 1: Negative Binomial Regression Results

	(1) Likes	(2) Likes	(3) Comments	(4) Comments	(5) Shares	(6) Shares
Dale Chall Score	−0.07***	−0.04***	−0.11***	−0.03***	−0.13***	−0.07***
	(0.000)	(0.000)	(0.000)	(0.009)	(0.000)	(0.000)
Number of Words		0.004***		0.007***		0.007***
		(0.000)		(0.000)		(0.000)
Number of Words * Dale Chall Score		−0.001***		−0.001***		0.000
		(0.000)		(0.001)		(0.608)
Sentiment (VADER)		0.02		−0.04		0.02
		(0.606)		(0.382)		(0.740)
Quadratic Time Trend		X		X		X
Social Media Dummies (17)[a]		X		X		X
Ethnic Dummies (6)		X		X		X
Age Dummies (4)		X		X		X
Male Dummy		X		X		X
Weekend Dummy		X		X		X
Constant	12.14***	9.49***	8.33***	5.84***	9.14***	6.28***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Constant (ln_alpha)	0.07***	−0.61***	0.20***	−0.43***	0.51***	0.08**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.019)
N	4,063	4,063	4,063	4,063	4,063	4,063
Pseudo r^2	0.0005	0.0329	0.0014	0.0454	0.0013	0.0321

Notes. *p*-values in parentheses using robust standard errors.
*$p < .10$, **$p < .05$, ***$p < .01$.
[a]Regression output for each variable is articulated in the MDA, Appendix S1 (pp. 3–4).

cogitate). This represented less than ¼ of total words in either passage. Simple posts had a Dale–Chall score of 2.0 (Grade 2 level), while complex posts had a 5.0 score (Grade 5 level). We also captured the time (i.e., seconds) it took to read the post as a rival explanation for the interaction. This allowed us to test the possibility that when passages are too long and complex, people just give up on reading them.

After reading the narrative, participants were asked their willingness to like, comment upon, or share the post. Each different engagement behavior was built from two items ("I would [like/consider liking] this post, $r = .85$, $p < .001$; "I would [comment on/consider commenting on] this post," $r = .87$, $p < .001$; and "I would [share/consider sharing] this post," $r = .85$, $p < .001$). Processing fluency was captured using the single-item measure of whether reading the passage was easy or difficult (Graf, Mayer, & Landwehr, 2018). Positive affect was built from three items about feeling (good/favorable/positive) toward the post (α = .97). We also collected several items to explore potential confounds including credibility, competence, and expertise (MDA, Appendix S1, p. 7). None of these variables could explain the results, and thus are not discussed further.

Results and Discussion

Liking. A two-way ANOVA on liking yielded a significant main effect of readability, such that simple posts were liked more ($M = 4.33$, $SD = 1.69$) than were complex posts ($M = 3.06$, $SD = 1.81$), $F(1, 232) = 31.49$, $p < .001$, $\eta^2 = .12$. There was no effect of post length on liking ($M_{Short} = 3.52$, $SD = 1.80$ vs. $M_{Long} = 3.88$, $SD = 1.90$), $p = .12$. The effect of readability was, however, qualified by a significant interaction with post length, $F(1, 232) = 4.11$, $p < .05$, $\eta^2 = .02$ (see Figure 2). Simple effects revealed that participants were more inclined to "like" short, simple posts ($M = 3.93$, $SD = 1.68$) relative to short, complex posts ($M = 3.12$, $SD = 1.83$), $F(1, 232) = 6.48$, $p < .05$, $\eta^2 = .03$. This effect was exacerbated for long posts ($M_{Simple} = 4.73$, $SD = 1.61$ vs. $M_{Complex} = 3.01$, $SD = 1.79$), $F(1, 232) = 28.93$, $p < .001$, $\eta^2 = .11$). This interaction is consistent with the HONY field study, wherein simple posts were liked more and this effect was stronger when posts were longer.

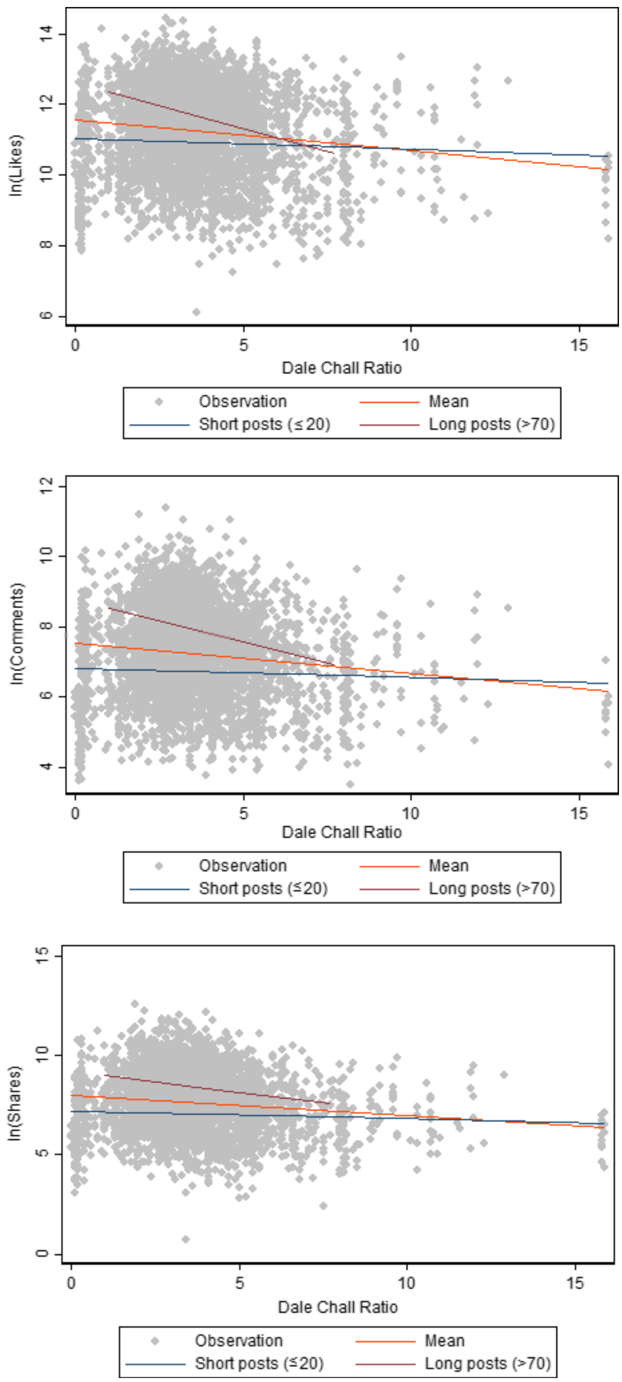

Figure 1. Study 1: engagement as a function of readability and post length. [Color figure can be viewed at wileyonlinelibrary.com]

Commenting. As with the liking results, there was a main effect of readability on commenting, such that simple posts were more likely to be commented on (M = 3.71, SD = 1.81) than complex posts (M = 2.87, SD = 1.68), F(1, 232) = 13.99, p < .001, η^2 = .06. There was no effect of post length on commenting (M_{Short} = 3.15, SD = 1.80 vs.

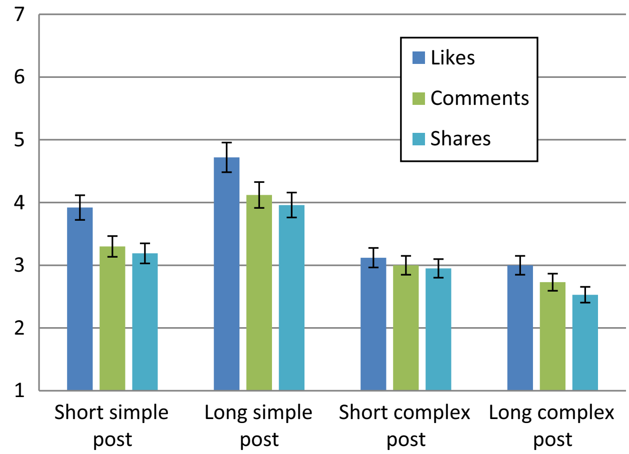

Figure 2. Study 2: engagement as a function of readability and post length. [Color figure can be viewed at wileyonlinelibrary.com]

M_{Long} = 3.43, SD = 1.90), p = .22. The readability effect was also qualified by a significant interaction with post length, F(1, 232) = 5.86, p < .05, η^2 = .02. Simple effects revealed no significant difference in commenting between short, simple posts (M = 3.30, SD = 1.75) relative to short, complex posts (M = 3.00, SD = 1.74), p = .35. However, for long posts, easy-to-read texts (M = 4.12, SD = 1.79) were commented on more so than complex texts (M = 2.73, SD = 1.62), F(1, 232) = 18.82, p < .001, η^2 = .07. The results suggest that the effects of readability on commenting appear to be driven by longer text passages.

Sharing. The results on sharing intentions follow the same pattern as commenting. Overall, there was a main effect of readability on sharing, where simple posts were more likely to be shared (M = 3.58, SD = 1.85) than were complex posts (M = 2.74, SD = 1.71), F(1, 232) = 13.27, p < .001, η^2 = .05. There was no effect of post length on sharing (M_{Short} = 3.07, SD = 1.76 vs. M_{Long} = 3.24, SD = 1.91), F(1, 232) = .54, p = .46, η^2 = .01. The effect of readability was again qualified by a significant interaction with post length, F(1, 232) = 6.65, p < .05, η^2 = .03. Simple effects revealed no significant difference in sharing between short, simple posts (M = 3.20, SD = 1.74) and short, complex posts (M = 2.95, SD = 1.78), p = .45. However, for long posts, simple texts (M = 3.96, SD = 1.91) were shared more than complex texts (M = 2.53, SD = 1.62), F(1, 232) = 19.19, p < .001, η^2 = .08. Again, the interaction appears to be driven by longer text passages, consistent with the directional trend in HONY.

Underlying mechanisms—processing fluency and positive affect. While we were able to replicate the unanticipated interaction effects from the HONY data, there was still the question of whether these effects were altering our theoretical account (i.e., whether long posts were making something less fluent). If not, then our predicted model, in its simplest form, may be the most accurate, and other extraneous factors may be contributing to the interactive effects. To that end, a two-way ANOVA on processing fluency yielded a main effect of readability, whereby simple posts were processed easier ($M = 6.04$, $SD = 1.11$) than complex posts ($M = 3.79$, $SD = 1.75$), $F(1, 232) = 138.76$, $p < .001$, $\eta^2 = .37$. There was neither an effect of post length on processing fluency ($M_{Short} = 4.83$, $SD = 1.89$ vs. $M_{Long} = 5.00$, $SD = 1.81$), $p = .44$, nor a readability × length interaction, $p = .49$.

This was not too surprising given our results on reading time. There was a main effect of post length on reading time, where participants spent more time reading long texts ($M = 62.89$ seconds [s], $SD = 63.52$) than short texts ($M = 29.23$s, $SD = 53.22$), $F(1, 232) = 19.59$, $p < .001$, $\eta^2 = .08$. There was, however, no effect of readability on reading time ($M_{Simple} = 48.85$s, $SD = 63.95$ vs. $M_{Complex} = 42.99$s, $SD = 57.62$), $p = .45$. That said, there was a marginal readability × length interaction, $F(1, 232) = 3.25$, $p = .07$, $\eta^2 = .01$. Simple effects showed that while there was no difference in time for short passages ($M_{Simple} = 25.20$s, $SD = 36.71$ vs. $M_{Complex} = 33.19$s, $SD = 65.63$), $p = .46$, people spent *less* time reading long complex passages ($M = 53.12$s, $SD = 46.38$) than long simple ones ($M = 72.49$s, $SD = 75.93$), $F(1, 232) = 3.23$, $p = .07$, $\eta^2 = .01$. Given the reading difficulty of the long and complex text, it appears that participants gave up on reading it, consistent with the anecdote of TL;DR ["too long, didn't read"]. This finding, coupled with the absence of a main effect of readability suggests that the relationship between readability and engagement is not driven by length, but rather a fluency effect.

A two-way ANOVA on positive affect revealed a main effect of readability, whereby posts with simple words were enjoyed more ($M = 4.64$, $SD = 1.59$) than those with complex words ($M = 3.40$, $SD = 1.74$), $F(1, 232) = 32.43$, $p < .001$, $\eta^2 = .12$. There was neither an effect of post length on affect ($M_{Short} = 3.89$, $SD = 1.79$ vs. $M_{Long} = 4.15$, $SD = 1.76$), $p = .24$, nor a readability × length interaction, p = .12. These results suggest that the unanticipated length interaction on engagement does not undermine our theoretical account of fluency increasing affect.

Given the lack of an interaction on fluency and positive affect, we tested fluency (M1) and affect (M2) as serial mediators for text complexity (X) on engagement (Y), recognizing that this pathway could not explain the readability × length interaction on engagement (Hayes, 2013; Model 6, 10,000 draws). The results confirmed the pathway for liking (indirect $\beta = 1.02$, 95% CI = 0.74, 1.35), commenting (indirect $\beta = .88$, 95% CI = 0.63, 1.19), and sharing (indirect $\beta = .85$, 95% CI = 0.61, 1.16). Reversing the order of mediators yielded insignificant results for all engagement measures (CIs include 0).

Overall, these results reinforce the general findings from the field study and lend support for fluency and affect as the serial mechanisms driving the influence of readability on engagement. Furthermore, the study addresses various rival accounts, and generalizes our findings from affect-laden brand communities to brand narratives in general.

General Discussion

This research highlights the impact of readability on the popularity of social media messages in a real information-sharing context. Our field study used data from a popular brand community to demonstrate that this effect is not undermined by subject matter typology or sentiment and holds up even when accompanied by information-rich content (e.g., photos) and processed in a noisy context (e.g., reviewing one's Facebook newsfeed). A follow-up laboratory experiment with a fictitious brand community reinforces these findings and supports processing fluency and positive affect as the serial mechanisms.

Given the findings on how longer posts appear to strengthen the readability-engagement link in both the Facebook study and the laboratory experiment, we were motivated to return to the field to test if the readability effect could be replicated in a context where length is constrained. We ran a replication study using HONY's Twitter posts, which tends to post the same stories, but at the time, restricted the character length to 140 characters (MDA, Appendix S1, p. 10). This context provided a natural setting to test whether the readability of the first few words of a post affect both liking and retweeting (a form of sharing) while still controlling for story content and photo characteristics. Even when only exposed to the first phrase of a text (16 word average), we replicated the same readability main effect on liking and retweeting. This suggests that users' willingness to engage with content can be shaped by the vocabulary choice of only a few words, not only long passages.

These findings have important implications for social media managers who are interested in incorporating a fluency perspective into their content structure.

For example, the readability level across both studies was already rather low with the average post being easily understood by most 9-year-olds. This means that our coefficient typically measures the impact of increasing the reading level from Grade 3 to Grade 4. This increase seems minute—both types of text should be easy for the HONY audience to process. However, in the distraction-laden landscape of social media, even minor changes to a message's readability shape engagement.

Limitations and Future Research

A limitation of the current work is the ability to generalize the effects of readability to other brands on social media. Although we do detect the readability effect in the laboratory using a fictitious brand community, the insights for social media content developers would be improved by testing whether readability predicts engagement for real brands on social media, not just brand communities.

The use of vocabulary complexity to operationalize textual fluency has been empirically limited, which presents several interesting directions for future research. As our investigation focused on a mainstream blog, there may be differential effects of readability for unique content types and audience preferences. Exploring the boundary conditions of this effect, particularly circumstances where readability might have a negative impact (i.e., oversimplification), would be beneficial for practitioners.

While the link between word complexity and fluency is well-established, there is an opportunity to further explore how words are processed in specific domains and its subsequent impact on engagement. A word that is fluently processed for one community (e.g., academic subdisciplines) may be disfluent for another (e.g., the general public). In some contexts, domain-specific words could be more fluent than ordinary words. The development of domain-specific word lists would be a fruitful avenue to improve fluency within a group while "translating" words could promote fluency between groups. Future research could examine whether similar metrics could lend insight into other contemporary consumption domains, such as promotional campaigns (Taylor, Noseworthy, & Pancer, 2018), environmental claims (Pancer, McShane, & Noseworthy, 2017), food labeling (Hingston & Noseworthy, 2018), and new product communications (Noseworthy, Murray, & Di Muro, 2018).

As this concept is valued in contexts where readers seek simplicity, there are also opportunities to test the readability effect in a public policy context to help "nudge" consumers and induce behavioral change. In a pragmatic sense, readability faces a trade-off with vocabulary precision. On many government forms, the precision of terminology is critical, but often makes them much more difficult to complete for busy people. Readability is a relatively simple concept to measure and lends itself well to natural field experiments to facilitate the fluency of burdensome bureaucracy.

Fluency also has a richer role to play in other forms of online communications. Whether designing clickbait for targeted advertisements or developing a chatbot to automate communications with a customer, we suggest that making text more readable can be a simple tool to increase audience engagement.

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Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's website:

Appendix S1. Methodological Details