Words in Motion: How Regulatory Mode Language Fuels Consumer Engagement in Online vs. Offline Channel Promotions

Frank Mathmann, Queensland University of Technology, f.mathmann@qut.edu.au

Janina Garbas, ESCP Business School, jgarbas@escp.eu

Yuanyuan (Gina) Cui, Clemson University, YUANYUC@clemson.edu

Patrick van Esch, Coastal Carolina University, pvanesch@coastal.edu

Daniel Wentzel, RWTH Aachen University, wentzel@time.rwth-aachen.de

INTRODUCTION

In today's rapidly evolving market landscape, the distinction between online and offline channels has become increasingly pronounced, presenting challenges and opportunities for firms across various industries, such as entertainment, education, sports. Even though delivering the same core service (e.g., movie), online and offline consumption channels have distinct characteristics. For example, an online channel like Netflix offers on-demand access, allowing consumers to instantly stream a movie from the comfort of their homes. In contrast, offline channels like movie theaters require physical attendance, often necessitating planning and time commitment. This disparity highlights the need for firms to consider the nuances of each channel when crafting marketing and promotional strategies to optimize customer engagement. Aligning promotional approaches with the specific characteristics of online and offline channels holds significant managerial relevance, as it allows companies to tailor their marketing strategies to resonate more effectively with consumers' expectations in each context.

Previous research has examined the impact of online communication on both online sales (Lobschat et al., 2017) and offline sales (e.g., Pauwels et al., 2011; Lobschat et al. 2017). However, there remains a gap in the literature concerning how promotional strategies can be tailored to leverage linguistic features that align with the unique characteristics of online versus offline consumption channels. Put differently, while we know that communication can influence sales in both online and offline channels, we have yet to fully understand how the language used in promotional content can be optimized for each channel. Our research aims to fill this gap by proposing that a one-size-fits-all promotional strategy may not be effective and we explore the following research question: Can the effectiveness of promotional offers for online (vs. offline) channels be enhanced through linguistic features that align with the channel's inherent characteristics? We build on regulatory mode theory to address this research question.

CONCEPTUAL FRAMEWORK

Regulatory mode theory

Regulatory mode theory proposes distinct preferences for pursuing goals: locomotion and assessment (e.g., Kruglanski et al. 2000). While locomotion is a motivation to "move on with things", initiating movement towards a goal without any delays, assessment favors a motivation to "do the right thing", which involves critical planning (e.g., Kruglanski et al. 2000). Locomotion and assessment were originally operationalized as chronic individual differences (Kruglanski et al. 2000). As shown by extant research, exposure to locomotion (e.g., "go") or assessment (e.g., "think") words can also activate a temporary state (Avnet and Higgins 2003), influencing readers' motivations and subsequent actions (e.g., Kanze et al. 2021).

Hypothesis development

As indicated above, online channels allow for instant accessibility, whereas offline channels typically demand more time and planning. Engagement with content (e.g., a promotional message) is strengthened when it fits regulatory mode motivations (e.g., Higgins 2000). Drawing on regulatory fit theory, we expect that user engagement with content promoting online vs. offline offers increases when the regulatory mode orientation in the message matches the channel's characteristics due to increased conceptual fluency. Specifically, we assume that posts evoking locomotion motivations (initiating movement towards a goal) match online channels' emphasis on moving quickly (on-demand), whereas posts using assessment language (critically evaluating) match offline channels' requirement for (delayed) critical planning. We hypothesize:

H1: The effectiveness of promoting online (vs. offline) offers in terms of consumer engagement is influenced by the predominant regulatory mode emphasized in the promotional message. That is, promotions using predominantly locomotion (assessment) language enhances consumer engagement for online (offline) offers.

H2: The interaction effect of consumption channels and regulatory mode on consumer engagement is mediated by conceptual processing fluency.

We test this assumption through a combination of observational field data (Study 1) and lab experiments (Studies 2 and 3) across three contexts (entertainment, education, fitness).

STUDY 1: OBSERVATIONAL FIELD DATA

Study 1 uses observational field data to examine whether firms promoting offers for their online (offline) channels via social media should employ locomotion (assessment) language to increase user engagement. Specifically, we analyze textual data from firm messages posted on Facebook and their corresponding engagement metrics.

Method

We collected all Facebook posts from the official US-based Disney account. We chose Disney as our sampling frame because it actively promotes offers for its online channel (i.e., their streaming service Disney+) and offline channels (i.e., theatres). After data collection, we preprocessed the data in line with the recommendations by Berger et al. (2020), which resulted in 11,063 preliminary observations.

User engagement. Following prior work (e.g., Pezzuti & Leonhardt 2022; Cascio Rizzo et al. 2023), we used shares, comments, and likes as our dependent variables.

Online vs. offline channel promotions. We operationalized our independent variable by employing a custom-made dictionary to identify the channel type (online vs. offline) from the social media post. Specifically, posts that contained "disney+" (N_{online} = 1,239) were regarded as promoting offers in the online channel whereas posts that featured the word stem "theat _" (including theatre, theater, theaters, etc.) were considered as promoting offers in the offline channel ($N_{offline}$ = 1,336).

Regulatory mode orientation. Applying Kanze et al.'s (2021) regulatory mode dictionary, locomotion and assessment scores were derived as percentages of locomotion/assessment words in the post. Following previous studies (Kanze et al. 2021), locomotion predominance was calculated by subtracting assessment from locomotion scores.

Controls. We considered different controls (e.g., images/video used, positive/negative tonality, word count). Additionally, we account for theatre lockdowns during the pandemic using a representative survey on theatre attendance.

Results and Discussion

Negative binomial regressions consistently demonstrate significant positive interaction effects of online (vs. offline) channel promotions and locomotion predominance on shares (B = 0.130, $p < 0.001$), comments (B = 0.100, $p < 0.001$), and likes (B = 0.079, $p < 0.001$). Supporting our theorizing and H1, locomotion-oriented language yields more favorable effects for *online* channel promotions, while assessment-oriented language is more effective for *offline* channel promotions (see Fig. 1). The findings are consistent across various robustness tests, including models without controls, OLS regressions, and a dataset limited to post-2019 data after the introduction of Disney+.

STUDY 2: A PREREGISTERED REPLICATION STUDY

The purpose of Study 2 (preregistered) was threefold: We first sought to replicate the findings from the field by establishing causality using an experimental approach in a different context (consumer-generated content in terms of online reviews for a fitness offer instead of marketer-generated social media content). Moreover, we aim to test for the mediating role of processing fluency (H2). Finally, while we used social media engagement metrics (i.e., number of likes, comments, shares) in Study 1, we employed two different measures for consumer engagement in this study. We (a) assessed both consumer's direct and indirect engagement (purchase behavior, word-of-mouth) and (b) employed an incentive compatible paradigm via a lottery in this study.

Method

Study 2 used a 2(consumption channel: online vs. offline) × 2(regulatory mode: locomotion vs. assessment) between-subject design. Three-hundred U.S. Cloud Research participants (56.0% females, M_{Age} = 42.84, SD = 12.21), were exposed to a social media post by a fictious fitness company, promoting either online or offline fitness courses. Participants next read one of two versions of consumer-generated reviews. Following Kanze et al. (2021), the online reviews contained our manipulations utilizing locomotion (e.g., "act," "change") or assessment (e.g., "observe," "examine") words. The word count was kept constant across conditions, including words featured in the course description [116 words] and those manipulating regulatory mode [21 words], following Kanze et al. (2021).

Consumer engagement was captured using a scale assessing both consumer's *direct* and *indirect* engagement (Kumar & Pansari, 2016; Septianto et al., 2023; (α = 0.97), e.g., "I would buy fitness courses of the [firm offer]," "I would love talking about my [firm offer] experience."). As an incentive compatible measure (Fuchs, Schreier, & Van Osselaer, 2015), participants were informed of a chance to win a free fitness session as part of the World Health Day celebration. If participants indicated their interest in receiving more information about [firm offer] via their signature, they qualified for the lottery. Researchers then randomly draw one participant, and a qualifying participant will receive a free fitness session they are exposed to.

To examine H2, we captured perceptions of processing fluency while studying the promotion using an established five-item scale (α = 0.96; Graf, Mayer, & Landwehr, 2018).

Results and Discussion

Consumer Engagement Intentions. A two-way ANOVA on engagement intentions revealed insignificant main effects of consumption channel and regulatory mode and a significant channel × regulatory mode interaction effect ($F(1, 296) = 12.30$, $p < 0.001$, $\eta_p^2 = 0.04$). Specifically, in the *locomotion* condition, participants in the online condition (M_{online} = 4.56, SD = 1.71) indicated significantly higher engagement than those in the offline condition ($M_{offline}$ = 3.80, SD = 1.67; $F(1, 296) = 7.82$, $p = 0.006$, $\eta_p^2 = 0.03$). In contrast, in the *assessment* condition, participants in the online condition (M_{online} = 3.89, SD = 1.68) reported significantly lower engagement than those in the offline condition ($M_{offline}$ = 4.50, SD = 1.68; $F(1, 296) = 4.74$, $p = 0.030$, $\eta_p^2 = 0.02$). See Fig. 2, Panel A. These results support H1.

Incentive-Compatible Engagement. Consumers' signature responses were coded as a dummy variable (0 = No, 1 = Yes). In support of H1, the results documented a significant

interaction effect (B = 1.84, SE = .50, Wald = 13.60, $p < 0.001$). Follow-up analyses showed that, as hypothesized, the messages promoting online (vs. offline) fitness courses increased the likelihood of signing to show interests among participants exposed to *locomotion*-oriented languages (B = 1.04, SE = .35, Wald χ^2 = 8.74, p = 0.003). In contrast, the relationship was reversed among those exposed to *assessment*-oriented languages, such that social media posts featuring online (vs. offline) fitness courses led to a lower likelihood of signature (B = -.80, SE = .35, Wald χ^2 = 5.12, p = 0.024). See Fig. 2, Panel B.

Processing Fluency. A two-way ANOVA on processing fluency revealed a significant interaction effect of consumption channel and regulatory mode ($F(1, 296) = 20.13$, $p < 0.001$, $\eta_p^2 = 0.06$). Specifically, in the *locomotion* condition, participants in the online condition reported significantly higher perceived processing fluency (M_{online} = 6.14, SD = .92) than those in the offline condition ($M_{offline}$ = 5.43, SD = 1.75; $F(1, 296) = 9.35$, $p = 0.002$, $\eta_p^2 = 0.03$). On the other hand, in the *assessment* condition, participants in the online condition indicated significantly lower perceived processing fluency (M_{online} = 5.20, SD = 1.71) than those in the offline condition ($M_{offline}$ = 5.99, SD = 1.28; $F(1, 296) = 10.79$, $p = 0.001$, $\eta_p^2 = 0.04$). See Fig. 2, Panel C.

Mediation Analysis. We conducted a moderated mediation analysis (PROCESS Model 8, 10,000 resamples; Hayes, 2017), examining the indirect effect of the consumption channel × regulatory mode interaction on consumer engagement mediated by processing fluency. In line with our expectations and in support of H2, the results revealed a significant positive indirect effect in the *locomotion* condition (B = .35, SE = .12, $CI_{95\%}$: [.13, .61]) and a significant negative indirect effect in the *assessment* condition (B = -.39, SE = .14, $CI_{95\%}$: [-.67, -.14]).

STUDY 3: CHANNEL CHOICE STUDY (PREREGISTERED)

Study 3 sought to conceptually replicate the findings of Study 1 and Study 2 in another meaningful way. In contrast to Studies 1 and 2 in which the channel was a (quasi-)experimental factor, we opted for consumers' channel choice between dyadic options (i.e., choice between online vs. offline channel), thereby enhancing the ecological validity. Moreover, to further triangulate the findings for enhanced robustness, we incorporated participants' textual responses as an additional dependent engagement variable. Additionally, we enhance the generalizability of our research utilizing yet another context (i.e., education).

Method

Study 3 featured a 2(regulatory mode: locomotion vs. assessment) between-subject design. We recruited 318 participants in the United States from Cloud Research (52.8% females, M_{Age} = 43.10, SD = 12.43). Upon completing a captcha question to verify non-bot respondents, participants were asked to evaluate one of two learning course descriptions. Following Kanze et al. (2021), the course descriptions contained our manipulations utilizing locomotion (e.g., "act," "change") or assessment (e.g., "observe," "examine") words. The word counts were kept consistent across conditions, including words featured in the course description [38 words] and those manipulating regulatory mode [13 words].

Our dependent variable consumer engagement was measured using two different measures. First, we asked participants to choose between online and offline enrollment (i.e., channel choice). We counter-balanced the options but coded the answer such that a higher score reflected the choice favoring the online option (1 = definitely offline, 2 = definitely online). Second, participants were asked to list their thoughts when reading the course description and making their choices in an

open-ended question; we then used the word count as a measure of engagement (Mathmann et al., 2019).

Results

Channel choice. To assess channel choice, we compared the proportion of people who chose the online channel with the proportion of people who chose the offline channel depending on the language used (locomotion vs. assessment). Supporting H1, a Chi-square test revealed that participants' channel choice share significantly differed across conditions (χ^2 (1, N = 318) = 8.53, p = .004), indicating a significant interaction effect between regulatory mode and consumption channel. As predicted, in the *locomotion* condition, chi-square analysis demonstrated that participants were more likely to prefer online consumption channel over the offline one (92 [online] vs. 69 [offline]; χ^2 (1, N = 161) = 4.20, p = .040). In contrast, participants in the *assessment* condition significantly preferred offline consumption channel over instead of the online channel (64 [online] vs. 93 [offline]; χ^2 (1, N = 157) = 4.31, p = .038). See Fig. 3, Panel A.

Word count. The results of Welch's t-test demonstrated that participants in the *locomotion* condition showed significantly higher word-count engagement when choosing the online channel (M_{online} = 58.34, SD = 43.29) compared to choosing the offline channel ($M_{offline}$ = 47.58, SD = 22.88, t = 2.04, p = .022 [one-sided]). In contrast, in the *assessment* condition, participants reported significantly lower word-count engagement when choosing the online channel (M_{online} = 48.39, SD = 35.63) over the offline channel ($M_{offline}$ = 60.61, SD = 33.39, t = -2.19, p = .015 [one-sided]; independent sample t-test was conducted given equal variance across conditions). See Fig. 3, Panel B.

CONCLUSIONS

Drawing on regulatory mode theory, we find that promotional messages using predominantly locomotion (assessment) language increase engagement for online (offline) offerings across one field and two lab studies. Our findings have important theoretical contributions and managerial implications. We extend channel promotion research, which has established that online communication can influence online sales (Lobschat et al., 2017) and offline sales (e.g., Pauwels et al., 2011; Lobschat et al. 2017), yet does not consider that one-size-fits-all promotional messages might not be ideal. We address this gap by showing that consumer engagement with online and offline channels (e.g., liking, sharing, commenting, purchase intention, channel choice) can be enhanced when message linguistics are aligned with the distinct nature of online/offline channels. Based on our findings, we advise managers to align their promotional messages with the consumption channel for which the service is offered: If the consumption channel is *online* (e.g., streaming), the promotional message should use *locomotion* wording; if the consumption channel is *offline*, *assessment* wording should be used.

In our next studies, we aim to replicate and generalize the findings of Study 1 in a multi-firm context leveraging not only text but also audio data.

FIGURES

Fig. 1: Results of Study 1

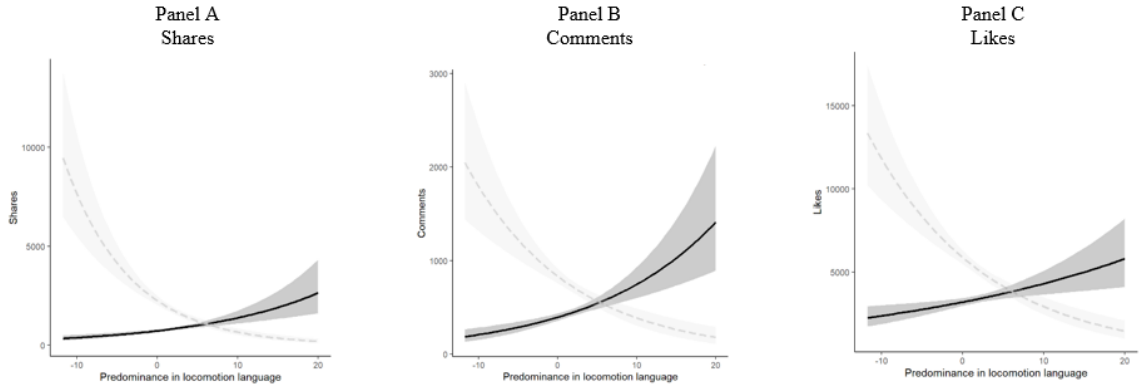


Fig. 2: Results of Study 2

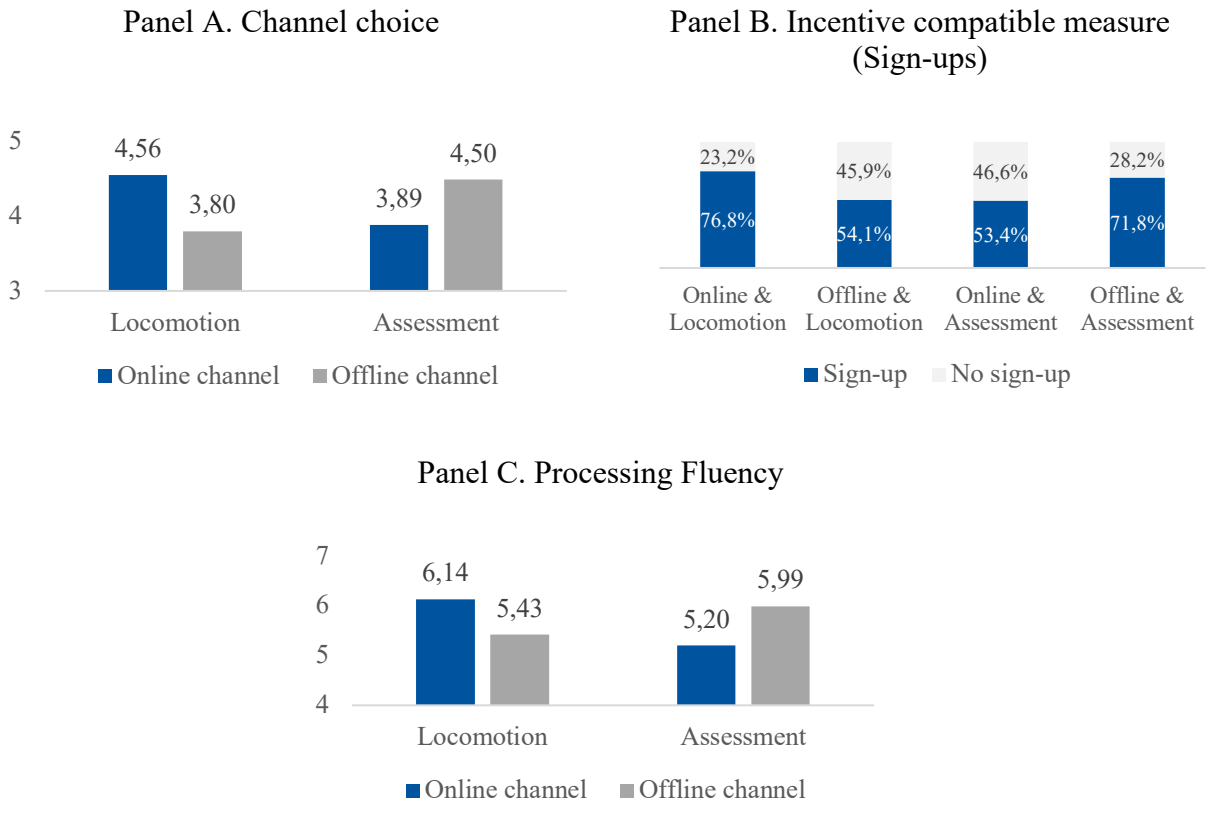
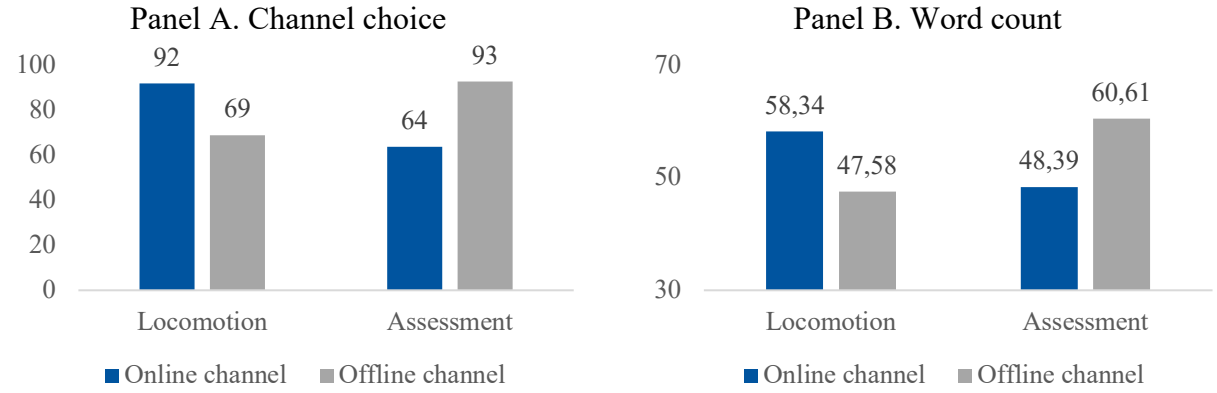


Fig. 3: Results of Study 3



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