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## Viewing a destinations Facebook page using a smartphone: The influence of posted media content

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# Viewing a destinations Facebook page using a smartphone: The influence of posted media content

## INTRODUCTION

This study was conducted to better understand the influence of information gathering mediums on the antecedents influencing mental imagery processing. Specifically, the influence of text and video content presented on a destinations Facebook page is explored. Travel narratives are an important source of information for tourists, and with the increasing number of outlets from which tourists can consume travel narratives, destination marketers should be aware of the influence of narratives on potential visitors. Currently there is a lack research pertaining to how consumers process and perceive different types of travel narratives (Rozier-Rich & Santos 2011). This study advances mental imagery research by examining how viewing media content posted on a destination's Facebook page utilizing a smartphone's smaller screen influences mental imagery through the process of narrative transportation. Smaller screens can create a more immersive experience (Bracken, Pettey, Guha, & Rubenking 2010), thus the use of smartphones should aid in creating an experience that stimulates narrative transportation, and mental imagery.

## LITERATURE REVIEW

Narratives are an important means by which individuals can communicate and comprehend their experience (Padgett & Allen 1997). They have the ability to shape the way we see the world and understand it (Wiles, Rosenberg, & Kearns 2005). Narrative transportation is conceived as a convergent process, "where all mental systems and capacities become focused on events occurring in the narrative" (Green & Brock 2000, 701). When individuals read stories, either fiction or nonfiction, they may become transported into a narrative world, imagine experiences that seem real, and have their own beliefs influenced by the beliefs of the character (Green & Brock 2000). Narrative marketing plays a significant role in the tourism and hospitality field as products within the field are characterized by their experiential values (Tussyadiah, Park, & Fesenmaier 2011). Through the form of consumer stories, narratives can result in potential visitors imagining themselves experiencing a destination, and hence can be used to effectively promote a destination and influence decision-making (Tussyadiah et al. 2011). This study looks to capture the influence of narratives pre-travel to understand how narratives can influence people who have not visited a particular destination.

Narratives have the means to evoke mental imagery (Green & Brock 2000). Green and Brock (2000) conceptualized transportation "into a narrative world as a distinct mental process, an integrative melding of attention, imagery, and feelings" (701). Mental imagery is "a mental event involving visualization of a concept or relationship" (Lutz & Lutz 1978, 611). Mental imagery can be seen as a way to process information. Mental imagery can be elicited through one of three types of strategies, or external treatment variables: pictorial stimuli, concrete verbal stimuli, and imagery instructions (Miller & Stoica 2004; Paivio 1971). Both pictorial material and concrete verbal stimuli are types of external stimuli used to elicit mental imagery. Imagery instructions provide participants a statement that directs him or her to form a mental picture of the desired notion to be learned (Lutz & Lutz 1978). Verbal stimuli and instructions to imagine take a narrative form.

In consumer research, mental imagery helps the consumer persuasion process (Lee & Gretzel 2012), increases product attitudes (Lee, Gretzel, & Law 2010; Miller & Stoica 2004),

satisfaction (MacInnis & Price 1990), and behavioral intentions (Kim, Kim, & Bolls 2013). Research evidence also supports the influence of mental imagery processing on tourists' selection of a destination and anticipation for their vacation (MacInnis & Price 1990; Lee et al. 2010; Lee & Gretzel 2012). Goossens (2000) suggested that promotional stimuli can be manipulated in numerous forms of media, including video, to stimulate mental imagery and emotions, and better understand vacation behavioral intentions. In terms of this study, dual-coding theory was used in conjunction with multimedia learning theory and media richness theory to explain the proposed relationships in a mobile, social media context, presenting lean (text) and rich (video) media (Dennis & Kinney 1998; Harley & Fitzpatrick 2009; Lee & Gretzel 2012; Paivio 1971).

Tourism “is a visual encounter with a place that is coded as distant, both spatially and temporally. When one visits an actual place, he or she might therefore feel that the place seems strangely familiar even though he or she has never previously visited” (Kim 2012, 388). Mobile technologies provide an easy and convenient way for tourists to experience a destination they have not previously visited. Wang, Park, and Fesenmaier (2012) posited that smartphones could mediate the tourist experience through storytelling customer reviews. Real-time virtual experiences can be facilitated by mobile applications through mobile narratives and mobile text chats (Hyun, Lee, & Hu 2009). In a mobile context, social media apps, including Facebook, are a popular choice for destinations looking to engage potential and past visitors. Xiang and Gretzel (2010) identified a lack of existing literature addressing the role of social media in online travel information search. Understanding how media content presented on a destination's Facebook page influences narrative transportation is essential for identifying how that content may influence a potential visitor's mental imagery processing. Based on a review of literature, the following hypotheses are proposed:

- H1: Narrative text on a destination's Facebook page will have a greater impact on narrative transportation than descriptive text when read using a smartphone.
- H2: A short, fast-paced video on a destination's Facebook page will have a greater impact on narrative transportation than a long, slow-paced video when viewed using a smartphone.
- H3: The influence of narrative text on narrative transportation will be greater when combined with a short, fast-paced video.
- H4: Narrative transportation has a positive impact on mental imagery processing.

## **METHODS**

A 2 (narrative vs. descriptive) x 2 (fast-paced video vs. slow-paced video) experiment was designed to identify the influence of narrative and video on narrative transportation, and subsequently mental imagery processing. Four different versions of the same island destination's Facebook page represented the four conditions. The Facebook page presented participants with a fictitious text entry from a previous visitor in either descriptive or narrative format, and a video depicting the same content but varied by pace. The inclusion of video is important, as travelers who have had less experience with a particular destination tend to explore more video-included information (Lee & Tussyadiah 2010). This study measured narrative transportation utilizing an 11 item scale developed by Green and Brock (2000). Three constructs of mental imagery, ease of use, quantity, and vividness, were measured through an adaptation of a scale utilized by Go and Gretzel (2010). All items except vividness were measured on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Vividness was measured on a seven-point semantic differential scale. Students at a large southwestern

university were recruited to participate in the study. Participants indicating they did not watch the video, read the text, had previously visited the destination or did not fill out a majority of the questionnaire were removed before analysis. In total, 343 responses were usable for the analysis.

Analysis was done using a two-step SEM approach advocated by Anderson and Gerbing (1988) using AMOS 22.0. This study incorporated parcels into the model for measuring the three constructs mental imagery construct. Parceling is a process in which item responses are combined into subscales before the analysis (Meade & Kroustalis 2005). Item-level responses combined into parcels can be used as indicators in structural equation models (Hall, Snell, & Foust 1999). Additionally, in this study the independent variables (media content viewed) were unobserved, thus dummy coded variables were created in order to observe their effects. Two new variables were created to represent text (1=narrative, 0=descriptive) and video (1=short/fast-paced, 0=long/slow-paced). The codes of 1's and 0's were used to represent group membership within the new variables. A third variable was created to represent the interaction of these two dummy variables by multiplying them by each other (text  $\times$  video). Narrative and the short video were both coded 1 for the purpose of interpreting the results. Based on this coding, a significant positive correlation will be an indication that narrative text, the fast-paced video, or the interaction of the two influenced participants narrative transportation.

## RESULTS

Prior to confirmatory factor analysis, a missing conducting a missing data analysis, assumptions of were examined. As shown in Table 1, the original measurement model produced a relatively poor fit. As a part of the confirmatory factor analysis (CFA), construct reliability and validity of the model were examined. Cronbach's alpha for mental imagery, with items parceled, was .88. After analyzing the initial model, items were removed from the narrative transportation construct to improve internal consistency from .69 to .76 respectively. A revised model vastly improved model fit (see Table 1). In addition to an improved model fit, the correlation between the two latent factors was not too high (.75). As Brown (2006) suggested, problematic discriminant validity occurs when factor correlations equal or exceed .85.

Table 1

### *Summary of Measurement Model Fit Statistics*

Model Fit Statistics	$\chi^2$	<i>df</i>	$\chi^2/df$	CFI	GFI	NFI	RMSEA
Initial CFA	532.0	76	7.00	.78	.78	.78	.132
Final CFA	26.2	13	2.0	.99	.98	.98	.055

Calculations of the structural model overall model fit produced a good fit to the data as shown by goodness-of-fit measures:  $\chi^2/df = 1.2$ , CFI = .99, GFI = .98, NFI = .98, RMSEA = .023. The squared multiple correlation coefficients ( $R^2$ ) provide an understanding of how well the model explains the latent constructs. Results show that the model does not explain narrative transportation ( $R^2 = .02$ ); however, a much larger portion of mental imagery is explained ( $R^2 = .55$ ). The hypothesized structural model paths are shown in Figure 1. The paths show no significant difference between the type of media participants were exposed to or the interaction of text and video on narrative transportation. Findings show that narrative transportation had a

significant effect on participants' mental imagery processing ( $\beta = .74$ ,  $p < .001$ ). This finding is consistent with previous literature (Green & Brock, 2000).

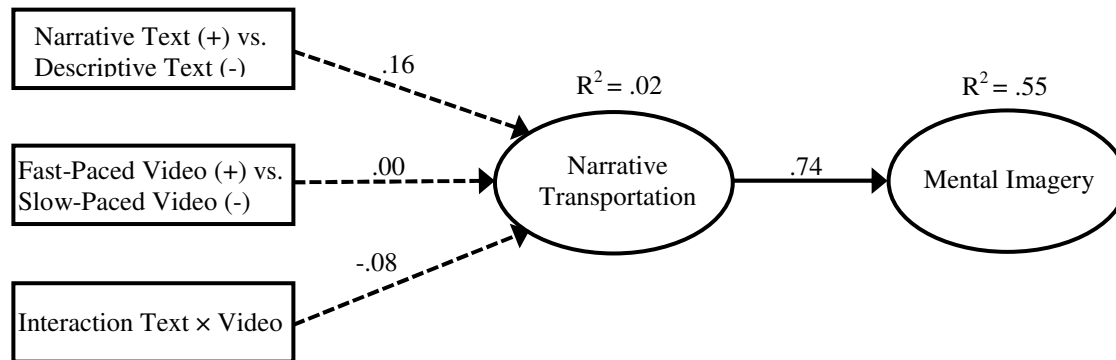


Fig. 1. Hypothesized structural model

## DISCUSSION AND CONCLUSION

There was no significant relationship between media content and narrative transportation. Based on previous literature, the influence of narrative text on narrative transportation was the most anticipated significant relationship. While not below the .05 level, it was extremely close ( $p = .056$ ). Compared to video contents' lack of influence ( $\beta = .00$ ,  $p = .976$ ), it could be argued that displaying narrative text is influential. Narrative text written by a previous visitor and posted on a destination's Facebook page can aid a potential visitors ability to mental transport themselves to the destination and visualize the previous travelers' experience as his or her own. A significant positive effect was found between narrative transportation and mental imagery. This finding is consistent with previous literature (Green & Brock 2000). Previous research supports the influence of mental imagery processing on tourists' selection of a destination (MacInnis & Price 1990; Miller & Stoica 2004; Lee et al. 2010; Lee & Gretzel 2012). Understanding what type of content influence narrative transportation ultimately can help destination marketers understand how mental imagery processing can be influenced.

Overall, a strength of this study was the use of smartphones. The way content was presented mimics how many potential visitors now access content; through Facebook using a smartphone. As Wang et al. (2012) found, through shared experiences and storing memories, and gathering information, a tourists' behavior and emotional state can be changed by the use of smartphones. Technology is used by tourists because they enjoy the interactions it offers (Chung & Buhalis 2008), thus the capabilities of these smaller devices should not be underestimated. Highlighting destination features that spotlight social interaction opportunities is strongly suggested here. In this study, two forms of media (text and video) were presented on the same Facebook page, but separate from one another. Future research should explore influence of narrative text and other forms of media (e.g., audio) embedded in videos.

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