What Makes Consumers Engage? The Effects of Mobile Location-Based Advertising (MLBA) Messages on Consumers' Engagement with a Retailer on a Location-Based Social Commerce Application (LSCA)

by

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Abstract

The rapid advancement of mobile and internet technology has changed the landscape of mobile marketing revolutionarily. The customization-focused contemporary retail trends have heightened the need for applications of location-based services (LBS) in retail marketing. *Mobile location-based advertising (MLBA)* is one of the ways to utilize LBS in retail marketing. However, very limited research has been conducted on the influences of consumer motivations in MLBA messages evoke and how these message motivations drive consumers' value perceptions with regard to engagement with retailers. This study aimed to examine the effects of different types of MLBA messages on consumers' perceived values, attitudes, and intentions towards engagement with a retailer on location-based social commerce applications (LSCA), applying the uses and gratification (U&G) theory and theory of reasoned action as the theoretical framework.

This study utilized an experimental design to investigate how different motivational messages addressed in MLBA (functional message vs. symbolic message vs. hedonic message vs. no motivational message [control] conditions) stimulate consumers' perceived values (economic, social, and entertainment values) of engagement with a retailer on a LSCA, and how these perceived values lead to consumers' attitude and intention with regard to engagement with retailers on LSCAs. Chili's and Yelp were used as the retailer and the LSCA, respectively, for the experimental context. Results revealed that participants tended to perceive a higher economic value of engaging with retailers on LSCAs upon receiving a functional motivation message in MLBA. Participants' perceived economic and entertainment values positively predicted their

attitude towards engagement with a retailer on a LSCA. Finally, participants' engagement attitudes positively predicted their engagement intentions, while privacy risk had no significant moderating effect upon this relationship.

The current study provides a conceptual basis for further empirical research on MLBA and consumers' engagement with retailers on LSCAs, by revealing a more concrete framework of MLBA-driven consumer engagement. Furthermore, by presenting a unique perspective of MLBA messages regarding their role in promoting consumers' engagement with a retailer on a LSCA, it shows the potential to enhance consumer-retailer interaction. Additionally, this study provides meaningful implications to retailers that sought to utilize MLBA in their mobile marketing and encourage consumers' engagement with retailers on LSCAs. Future research could utilize distinct product and service retail categories to augment the external validity of the findings. Finally, further investigation into the modes of the message (e.g., text vs. multimedia) and the types of content shared in connection to the message (e.g., geo-specific location, comments, images, and videos) is recommended.

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CHAPTER I. INTRODUCTION

Background

The rapid advancement of technology, including the advent of Internet of things (IoT), the proliferation of smartphones, and the growth of mobile-commerce and social media has changed the landscape of marketing revolutionarily (Gazley, Hunt, & McLaren, 2015; Grob, 2015). Mobile marketing has become a popular marketing tool in the United States. Mobile marketing is expected to increase to a $65 billion business by 2019 and accounts for nearly three-quarters of all digital advertising spending (Grewal, Bart, Spann, & Zubcsek, 2016). As a part of this trend, applications of *location-based service (LBS)* technology in mobile marketing have also become increasingly popular (Gazley et al., 2015; Lin, Huang, Chang, & Jheng, 2013). In general, LBS technology indicates customized services available to users based on the identified geo-specific location of any object or person (Duri, Cole, Munson, & Christensen, 2001; Gazley et al., 2015). LBSs are currently being used across various application areas such as safety, entertainment, navigation, directory, traffic updates, and mobile marketing (Unni & Harmon, 2007).

A distinct feature of LBS relevant to mobile marketing is that it provides customized information aligned to the locations of users' mobile devices and allows retailers to send location-specific advertising (Gazley et al., 2015; Unni & Harmon 2007). The customization-focused contemporary retail trends have amplified the need for LBS applications in retail marketing because of their location-tailored promotions and their provisions of interactive

communications between marketers and consumers (Zhou, 2013). The use of LBS technology in retail is expected to enhance customers' store experiences and increase sales volume (Gazley et al., 2015).

Mobile location-based advertising (MLBA) is one-way LBS technology can be utilized in retail marketing for targeted advertising or promotions specific to individual consumers' locations (Gazley et al., 2015; Unni & Harmon, 2007; Wagner, 2011). MLBA can be an effective way for retailers to reach an individual consumer through mobile devices, particularly, smartphones (Gazley et al., 2015). Due to this advantage, MLBA is already being actively used by many retailers to provide customized advertising and promotional messages to their consumers (Wagner, 2011). Retailers are interested in exposing customers to MLBA messages through their mobile devices in such a way that consumers could engage themselves in marketing stimuli by perceiving, evaluating, and sharing the MLBA messages (Gazley et al., 2015). Today, approximately 71% of retailers adopt location-based marketing to bring online/mobile shoppers to physical stores; while 82% of marketers have further plans to boost their use of location data in the next two years (Williams, 2018). Over 95% of American consumers own smartphones and/or other mobile devices that can receive MLBA promotions (Pew Research Center, 2018), and young consumers are highly open to receiving and sharing MLBA messages through social media (Grewal et al., 2016).

A *location-based social commerce application (LSCA)* is one form of specialized social media that provides a platform where retailers and consumers can interact effectively (Tuten & Solomon, 2013). Through LSCA, retailers can offer advertising, deals, and coupons relevant to each consumer's current location, and consumers can check in, post reviews, and give ratings about the retailers' products and services (Tuten & Solomon, 2013). Yelp and Foursquare

(rebranded as Swarm now) are two examples of LSCAs that provide consumers with different advertisements based on their current location setting. LSCAs like Yelp and Foursquare are distinct from other types of social media (e.g., Facebook, Instagram) in that they are focused more on connecting retailers and consumers than building a social network among users (Allcott & Gentzkow, 2017).

The effectiveness of a retailer's MLBA can be strengthened if it can facilitate consumers' engagement with the retailer on LSCAs, where consumers can exchange ideas and feedback about the retailer's products and services advertised through the MLBA, thus increasing the reach and impact of the MLBA (Chang, Yu, & Lu, 2015). However, not all retailers' MLBA messages succeed in increasing consumers' engagement with the retailers: consumers can become easily accustomed to retailers' MLBA and can find promotional offers communicated in MLBA irrelevant or uninteresting (Brunner-Sperdin, Scholl-Grissemann, & Stokburger-Sauer, 2014; Kang, Mun, & Johnson, 2015). What MLBA strategies can retailers use to increase consumers' engagement on LSCAs? Researchers recently suggested that consumers' level of engagement with a retailer on a LSCA might vary by their motivations evoked by MLBA messages (Kim, Kim, & Wachter, 2013). This implies that MLBA could be more effective in driving consumers' engagement with the retailer if the MLBA message is designed to evoke consumers' motivations to engage with retailers on the LSCA that are relevant to consumers' sought values. However, very limited research (e.g., Fodor & Brem, 2015; Cho, Kim, Park, & Lee, 2014; Lin et al., 2013; Sun, Wang, Shen, & Zhang, 2015) has considered the influences of consumers' motivations and values evoked by MLBA on their engagement, and ultimately, how to incorporate motivational messages in MLBA to facilitate consumers' engagement with the retailer.

Problem Statement and Purpose

Previous research on MLBA has predominantly been focused on the effectiveness of promotional offers and coupon redemption via MLBA in driving sales (Pagani & Malacarne, 2017). The current study focuses on the MLBA messages, which drive consumers to go to LSCAs in order to redeem deals and coupons. It is necessary to understand the mechanism behind why some MLBAs can be more effective than others in consumers assigning them higher values. In general, retailers evaluate the success of message delivery though some numbers such as frequency of consumer buying but may not be enough. MLBA messages may not drive all recipients to make a purchase but may motivate the recipients at motivational levels to lead them to engage in other types of approach or avoidance behaviors toward the brand such as checking in the brand on a LSCA. Therefore, this study aims to examine not only the "cause" part (i.e., MLBA message design), but also the "result" part, such as what motivational message in MLBA could evoke consumers' perceived values and ultimate behavior with regard to engaging with the retailer in a LSCA.

To date, only a few researchers have looked into the value-based perspective of consumers' engagement with retailers by MLBA motivational message (Yu, Zo, Choi, & Ciganek, 2013). While the utilitarian/economic values have been studied by some researchers, the experiential values, such as social and entertainment values, did not receive much attention by previous MLBA studies; however, those might be other important value dimensions of consumers' engagement with retailers on LSCAs (Wu, 2016). More specifically, to understand what specific motivations could drive distinct types of values, it is necessary to compare the effects of different types of motivations (e.g., *functional motivation, symbolic motivation,* and

hedonic motivation). Nevertheless, minimal research has compared the effects of different types of consumer motivations on the perceived values of engaging with retailers on LSCA.

The concept of "consumers' engagement" is still rather abstract and vague in the literature, although the extent of consumers' participation in LSCA varies highly. The realm of social media covers several online platforms including social community, microblogs, online forums, social commerce apps, and virtual game worlds (Tuten & Solomon, 2013). Social communities including Facebook, Twitter, and Instagram provide users the freedom to produce own content and share with other users and brands. On the contrary, LSCAs including Yelp and Foursquare offered platforms for users to produce limited content and to explore around places, products, and brands only (Chang et al., 2015). Social perspective of engagement with retailers on LSCAs took a new course due to the emergence of social media; social value needs be redefined in future research to capture the whole picture of LBS in retailing (Yu et al., 2013). Prior literature did not focus on such evaluation of LBS in retailing. It is necessary to explore different types of consumers' engagement and compare the effectiveness of different MLBA to achieve those levels of consequences. Doing so will help retailers identify what type of consumer's engagement in social media, particularly in LSCA they want to drive by offering an appropriate design of MLBA. However, only a few studies have investigated the extent of engagement with retailers on LSCAs (Guesalaga, 2016; Lin, Paragas, & Bautista, 2016), thus giving very limited information about the detailed types of engagement. Thus, the role of MLBA messages (the stimulus inserted in an MLBA message to promote consumers to engage with a retailer on LSCA) in shaping different values, subsequently increasing the attitude and intentions toward consumers' engagement, needs to be studied.

Previous researchers in the mobile marketing area largely agreed that privacy risks are an important moderator variable that determines the final behavior of consumers' mobile media usage (Fodor & Brem, 2015; Kim, 2016; Sun et al., 2015). The critical role of privacy risk in consumers' engagement with retailers on LSCAs is that although consumers hold positive values and attitudes toward engaging with retailers on LSCAs, their final decisions of actually engaging in it could have been affected by privacy risks. Different opt-in services (i.e., private location sharing) might leverage the privacy risk issue (Cho et al., 2014). Nonetheless, limited research has taken this moderating factor into account in studying MLBA and social media engagement. A need exists to investigate the effect of privacy risk that moderates the relationship between the attitudinal and behavioral outcomes regarding engagement with retailers on LSCAs.

The purpose of this study is to examine the effects of motivational messages in MLBA on consumers' perceived values, attitudes, and intentions with respect to engagement with a retailer on a LSCA. This purpose will be met by addressing the following specific objectives:

(1) To examine the effects of motivational messages of MLBA (functional vs. symbolic vs. hedonic vs. no motivation) on different domains of consumers' perceived values (economic, social, and entertainment values) of engagement with a retailer on a LSCA;

(2) To examine the influence of consumers' perceived values (economic, social, and entertainment values) on their attitudes toward engagement with the retailer on the LSCA;

(3) To examine the influence of consumers' attitudes on their intentions toward engagement with the retailer on the LSCA;

(4) To examine the moderating role of consumers' privacy risk on the relationship between their attitudes and intentions toward engagement with the retailer on the LSCA.

For this study, restaurants were utilized to represent a retailer in creating the MLBA stimuli. Restaurants are highly consumer-oriented businesses where word-of-mouth (e.g., reviews, recommendation, check-in) play an important role in bringing consumers to physical location (Hosbond & Skov, 2007; Wang et al., 2015). The casual dining restaurant chain brand Chili's Grill & Bar was selected to be used in the stimuli. Using an existing brand name could influence the responses because respondents could have some the brand associations. Although, using a fictitious LSCA and restaurant brand might prevent this potential confounding effect of existing brand associations in general sense, still respondents need to invest significant amount of time to understand the MLBA motivations. The current study used a novel approach of designing MLBA in a way that consumers can redeem their virtual offer in physical place. Instead of a fictitious restaurant, Chili's Grill & Bar would serve the purpose in the nation-wide survey as participants could focus on the motivation in MLBA rather than association of the restaurant. In the same way, this study utilized Yelp as a mobile social commerce application that specialize in location-based operations. Yelp is specialized in restaurant-based reviews and advertisements and has formed a high level of familiarity within consumer groups with diverse demographic characteristics (Bao, Zheng, Wilkie, & Mokbel, 2015).

Definitions of Key Terms

Attitude toward Engagement with a Retailer on a LSCA: Individual consumers' disposition to respond favorably or unfavorably about engaging with a retailer on a LSCA (Ajzen, 1989; Cho et al., 2014). In this study, this variable was operationalized specifically as participants' degree of favorability toward check-in at Chili's on Yelp.

Check-In: A feature of a LSCA that allows users to share their current location (e.g., being in a retail store) with the LSCA (Cho et al., 2014).

Engagement with a Retailer on a LSCA: Consumers' participation in interactions with a retailer on a LSCA (Malthouse, Calder, & Tamhane, 2007; Pagani & Malacarne, 2017). In this study, this term specifically refers to participating in check-in at Chili's on Yelp.

Functional Motivation Message (or Functional Message): The message in MLBA that is designed to appeal to consumers with functional benefits of engaging with a retailer on LSCA, such as free offerings or price discounts that consumers can earn by engaging with the retailer on LSCA (Pura, 2005; Sun, Tai, & Tsai, 2010).

Hedonic Motivation Message (or Hedonic Message): The message in MLBA that is designed to appeal to consumers with hedonic benefits of engaging with a retailer on LSCA, such as emotional stimulation that consumers can earn by engaging with the retailer on LSCA (Bauer et al., 2005; Kang et al., 2015).

Intention to Engage with a Retailer on a LSCA: The degree to which a consumer has formulated conscious plans to engage with a retailer on a LSCA (Hausenblas, Carron, & Mack, 1997). In this study, this variable was operationalized specifically as the degree to which participants form plans to check-in with Chili's on Yelp.

Location Based Services (LBS): The "services in which the location of a person or an object is used to shape or focus the application or service" (Duri et al., 2001, p. 20).

Location-Based Social Commerce Application (LSCA): The type of social media that provides a platform in which retailers can offer advertising, deals, and coupons relevant to each consumer's current location, and consumers can correspondingly check-in, post reviews, and give ratings about the retailers' products and services (Tuten & Solomon, 2013). Yelp and Foursquare are example LSCAs.

Mobile Location-Based Advertising (MLBA): Targeted advertising where marketers deliver promotional information that is specific to the consumer's geographic location to a consumer's mobile device (Gazley et al., 2015; Unni & Harmon, 2007).

Motivational Message in MLBA: The message content enclosed in MLBA that is designed to encourage consumers to engage with a retailer on a LSCA by offering a benefit of doing so, such as functional, hedonic, and symbolic benefits (Kim et al., 2013).

Perceived Economic Value: Consumers' perception about how likely engaging with a retailer on a LSCA (i.e., check-in) would provide him or her with monetary benefits, such as a free/discounted product and a financial reward (Wu, 2016).

Perceived Entertainment Value: Consumers' perception about how likely engaging with a retailer on a LSCA (i.e., check-in) would provide him or her fun and enjoyable experiences (Yu et al., 2013).

Perceived Social Value: Consumers' perception about how likely engaging with a retailer on a LSCA (i.e., check-in) would help them maintain or enhance their social status or association with a specific social group (Yu et al., 2013).

Privacy Risk: Consumers' level of sensitivity toward revealing personal information (Kim, 2016) which could be used by third parties in an unauthorized manner (Fodor & Brem, 2015; Thierer, 2015).

Symbolic Motivation Message (or Symbolic Message): The message in MLBA that is designed to appeal to consumers with symbolic benefits of engaging with a retailer on a LSCA, such as enhancing social reputation among others by engaging with the retailer on a LSCA (Hogan, 2010; Kang et al., 2015)

CHAPTER II. REVIEW OF LITERATURE

This chapter provides a review of literature regarding the constructs proposed in the research framework (see Figure 2.1). The first section of this chapter discusses MLBA, including a review of the current theoretical discussion of mobile marketing and an understanding of the location-based social media. In the second section, the research framework (see Figure 2.1) is presented, followed by the hypothesized relationships developed based on the literature review.

Mobile Location-Based Advertising (MLBA)

Previously, businesses had control over consumers through advertising contents and timing in one-way communication (Seiders, Berry, & Gresham, 2000; Wen & Song, 2017), but the exponential development of interactive media such as Internet and mobile technology introduced two-way communications between consumers and businesses (Ngai, Tao, & Moon, 2015). As a result, businesses have shared some of the controls with consumers in two-way symmetrical communication (Wen & Song, 2017). More and more mobile applications are providing location-based offers today, such as promotional offers, available coupons, and ongoing sales that are directly relevant to consumers' geographic location and their interests to opt in (Humphrey & Laverie, 2011; Van't Riet et al., 2016).

Many omni-channel retailers (e.g., Walmart, Best Buy, and Kohl's) provide location-based promotions through their own mobile apps (Kang & Johnson, 2015). Two large retailers, Macy's and J.C. Penney, partnered with Shopkick, a mobile app to provide in-store rewards and discounts to customers (Kang et al., 2015). Walmart's U.S. stores offer location-based

promotions in an interactive map attached to the Walmart app (Clifford & Miller, 2012). Shopkick allows customers to earn points in their partnered stores (e.g., Macy's, Walmart, Target, Wet Seal, American Eagle Outfitters, and Old Navy), as well as redeem customer points through store gift cards and products (e.g., Starbucks lattes, dinner vouchers) (Kang & Johnson, 2015).

This type of marketing stimuli has been given numerous names by previous researchers in an inconsistent manner such as location-based services (LBS) (Fodor & Brem, 2015; Hosbond & Skov, 2007; Lin et al., 2013; Wang & Lin 2017), location-based advertising (LBA) (Ketelaar et al., 2017; Shin & Lin, 2016; Xu, Oh, & Teo, 2009), location-based marketing (LBM) (Beldona, Lin, & Yoo, 2012), location-aware marketing (LAM) (Xu, Luo, Carroll, & Rosson, 2011), location-based mobile promotions (LMP) (Fang et al., 2015), or mobile location-based advertising (MLBA) (Gazley et al., 2015). Among all these related terms, MLBA is specified as the context for this study. MLBA refers to targeted advertising where marketers deliver promotional information that is specific to the consumer's geographic location to the consumer's mobile device (Gazley et al., 2015; Unni & Harmon, 2007).

Particularly, this study risks MLBA messages sent to consumers by mobile social commerce applications that specialize in location-based operations, such as *Swarm* and *Yelp*, which promote themselves as an interesting and interactive medium to explore a city with points awarded, badges achieved, and deals unlocked through location check-in (Bao et al., 2015; Humphrey & Laverie, 2011). Swarm, which was rebranded from *Foursquare*, allows users to gain points by checking in to an existing location or a new location and provides instant notifications of user-generated tips or prizes for nearby locations whenever users check in (Saker, 2017; Yu et al., 2013). Swarm also connects consumers and brands for mutual benefits

by awarding a specific promotional offer (e.g., virtual badges) attached to specific brands or services (Humphrey & Laverie, 2011). Similarly, in Yelp, users can search for deals based on tips and reviews about retailers and can earn elite squad membership on the basis of their purchase activity (Bao et al., 2015).

Theoretical Framework

The theoretical framework of this study is based on the *uses and gratification (U&G)* theory and *theory of reasoned action (TRA)*. The U&G theory explains that the different motivational messages inserted in MLBA can trigger consumers' perceived values toward engagement with a retailer on LSCA; whereas the TRA provides a theoretical base for determining the belief (value)-attitude-intention links in regard to the engagement with a retailer on LSCA. The following sections present the detailed explanations on how both theories are used in the development of hypotheses.

Uses and Gratification (U&G) Theory

The U&G theory postulates that individuals might seek out media available to people to fulfill their needs and lead to ultimate gratifications (Lariscy, Tinkham, & Sweetser, 2011). Previously, the U&G theory was applied to determine the social-psychological factors involved in people's selection and usage of media (Cho et al., 2014; Katz, Blumler, & Gurevitch, 1974). The U&G theory was first developed in research on the effectiveness of the radio medium in the 1940s (Liu, Sinkovics, Pezderka, & Haghirian, 2012). Since then, researchers used the U&G theory to trace motivational factors involved in tele media (i.e., television, telephone) (Rubin, 1983), print media (i.e., newspapers and magazines) (Dimmick, Sikand, & Patterson, 1994), and online media (Charney & Greenberg, 2002).

Over the past decade, the nature of retailer-consumer communication has been reshaped from information sourcing (one-way communication) to active self-expression (two-way communication) that leads to users' specific values or beliefs regarding the communication media (Cho et al., 2014; Park, Kee, & Valenzuela, 2009). For instance, consumers are expressing their beliefs regarding retailers' services as well as grabbing the opportunity of personalized product/service offers through different online media. Liu et al. (2012) investigated consumers' perceived values of mobile advertising with a cross-national sample and found that infotainment and credibility are key factors predicting advertising value. Lin et al. (2016) suggested that U&G theory provides an appropriate explanation as to how motivations in MLBA could influence consumers' evaluations of the values of MLBA. However, except for Lin et al. (2016), virtually no research has been conducted applying the U&G theory to examine the relationship between motivational message in MLBA and advertising value.

This study explores motivational messages used in MLBA to drive consumers to check in with a retailer on a LSCA. In this study, three motivational messages inserted in MLBA are hypothesized to predict consumers' perceived values of engagement with retailers on LSCAs (see Figure 2.1). U&G theory helps to explain the media used to fulfill consumer needs and lead to ultimate gratifications. In this study, based on this theory, we argue that as an interactive medium, a LSCA offers a platform on which a retailer can craft its MLBA messages to address consumer motivations which can trigger the consumer to perceive motivation-relevant values of engaging with the retailer through the LSCA, which in turn lead the consumer to use the LSCA to engage with the retailer. Using media related theory in this study accelerated the crucial analysis of MLBA effectiveness in terms of consumer responses to engagement with retailers on LSCAs. To explain how the motivations inserted in MLBA shape consumers' thoughts about

using the LSCA to engage with the retailer, the U&G theory fits well to the study context because of its origin in the communication literature (Cho et al., 2014; Katz et al., 1974).

Theory of Reasoned Action (TRA)

According to TRA, individuals' attitude and subjective norms are the predictors of behavioral intentions toward performing a certain task; subsequently, the behavioral intention turns into specific behavior (Ajzen & Fishbein, 1980). In this study, we only considered individuals' attitude, which is predicted by behavioral beliefs. According to Ajzen and Fishbein (1980), an individual's overall attitude toward any act (A_{act}) is conceptualized in the following equation:

(1) $A_{act} = \Sigma B_i E_{i,}$

where i is a consequence, and B_i and E_i represent the individual's belief and evaluation about the consequence i, respectively. According to this equation, the product of the individual's belief about its consequences of an act and evaluation of the consequences determine an individual's overall attitude toward the act.

TRA has been used in the marketing research since early 1980s; for instance, Shimp and Kavas (1984) applied the TRA on coupon usage in their study. Over the last decade, many researchers have investigated consumer behavior on social media applying the TRA (e.g., Lee & Hong, 2016). However, prior studies mainly focused on subjective norms of social media usage (Kwon & Wen, 2010; Pelling & White, 2009) or continual social media usage (Choi, 2013), with little attention paid to the beliefs regarding engagement with a retailer on social media as drivers of consumer attitude and behavioral intentions.

The belief-attitude-behavioral intention link proposed by the TRA is used in this study to predict linkages among consumers' perceived value (i.e., beliefs), attitude, and intention with

respect to engaging with retailers on LSCAs. In this study context, consumers' perceived values refer to behavioral beliefs of assessing the benefits of engaging with a retailer on a LSCA. The attitude toward engagement with a retailer on a LSCA operationalizes the construct of attitude from the TRA. In this study context, attitude is defined as the dispositions of individual consumers to respond favorably or unfavorably to engage with a retailer on a LSCA (Ajzen, 1989; Cho et al., 2014). According to the conceptual framework in Figure 2.1, consumers' perceptions (beliefs) of the values of engaging with a retailer on a LSCA are hypothesized to be driven by MLBA motivational messages and include three dimensions: perceived economic value, perceived social value, and perceived entertainment value. These three dimensions of perceived values are then predicted as possible antecedents of consumers' attitude towards engaging with the retailer on the LSCA. The variable of intention toward engagement with a retailer on a LSCA is conceptualized based on the TRA construct, behavioral intention. Accordingly, the consumers' attitude towards engagement with a retailer on a LSCA is hypothesized to predict their intention to engage with the retailer on the LSCA.

Research Framework and Hypotheses

In the perspective of mobile location-based media, motivational messages used in MLBA to drive consumers to check in on a LSCA need to be considered. Consumers' beliefs derived from MLBA messages including perceived economic value, perceived social value, and perceived entertainment value associated with engaging with a retailer on a LSCA are hypothesized as possible antecedents of consumers' attitude towards retailer engagement on the LSCA, which in turn determines intention to engage with the retailer on the LSCA. Based on the U&G theory and TRA, and the concepts discussed above, the current study proposes a research framework as shown in Figure 2.1. U&G theory explains that consumers may check in a retailer

on a LSCA, a medium, for satisfying their needs (i.e., motivations). Therefore, this theory gives rise to an idea that by employing different types of motivational messages in MLBA, marketers may be able to trigger certain values of the media usage (i.e., checking in the retailer on the LSCA) more salient in the consumer's mind (i.e., enhance perceptions of the value relevant to the motivational message). This enhanced perceived value then may lead to facilitate a positive attitude towards LSCA engagement, which in turn may boost the intention for LSCA engagement, according to the TRA. Detailed explanations about each of the proposed hypotheses are provided in the following section.

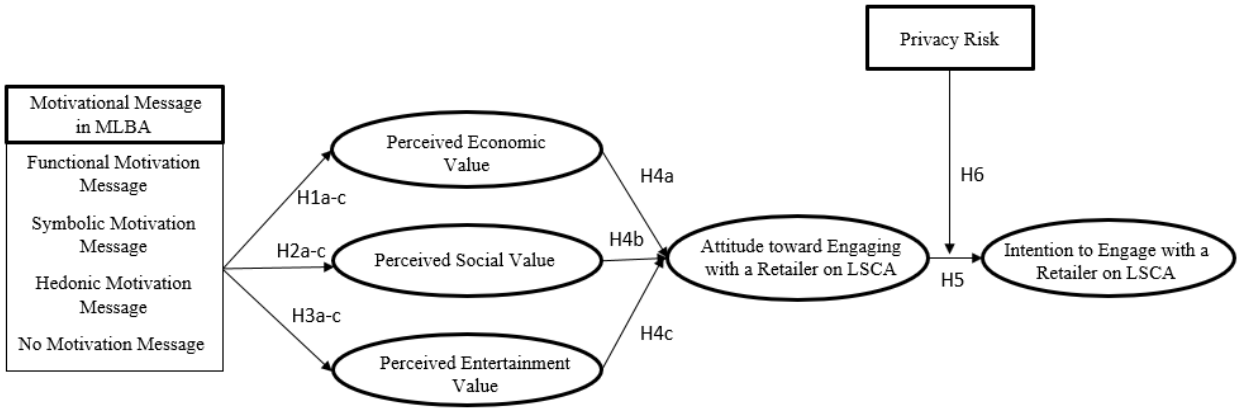


Figure 2.1. Research Framework

Motivational Messages in MLBA

In this study, motivational messages in MLBA refer to enclosed contents (visual and/or text) inserted in a MLBA message sent by a LSCA, in addition to the focused promotional information, with an intent to evoke a consumer's desire to engage with a retailer via the LSCA (Kim et al., 2013; Lin & Lu, 2011). These motivational messages may contain a statement encouraging consumers to share their current locations, comments, or media contents via the LSCA. For example, Yelp uses a motivational message such as "check in five times in 'X'

restaurant, you will get 10% money back!" (Bao et al., 2015). Varying motivations of consumers' engagement with a retailer via a LSCA could be addressed by such MLBA messages, including (a) functional motivation, (b) symbolic motivation, and (c) hedonic motivation (Kim et al., 2013).

Functional Motivation Message. Functional motivations refer to the utilitarian rationale (i.e., the receipt of discounts or gifts) that motivates consumers to make consumption decisions (Aday, Phelan, & Ravichandran, 2018). MLBA motivation messages may evoke these functional motivations of engaging with the retailer on a LSCA in the consumer's mind when MLBA messages contain statements and/or visuals that emphasize functional benefits of engaging with a retailer on LSCA, such as free offerings or price discounts that consumers can earn by engaging with the retailer on LSCA (Pura, 2005; Sun, et al., 2010). An MLBA message that provides a quota-based offer, which presents an incentive to consumers upon fulfilling a condition (e.g.,

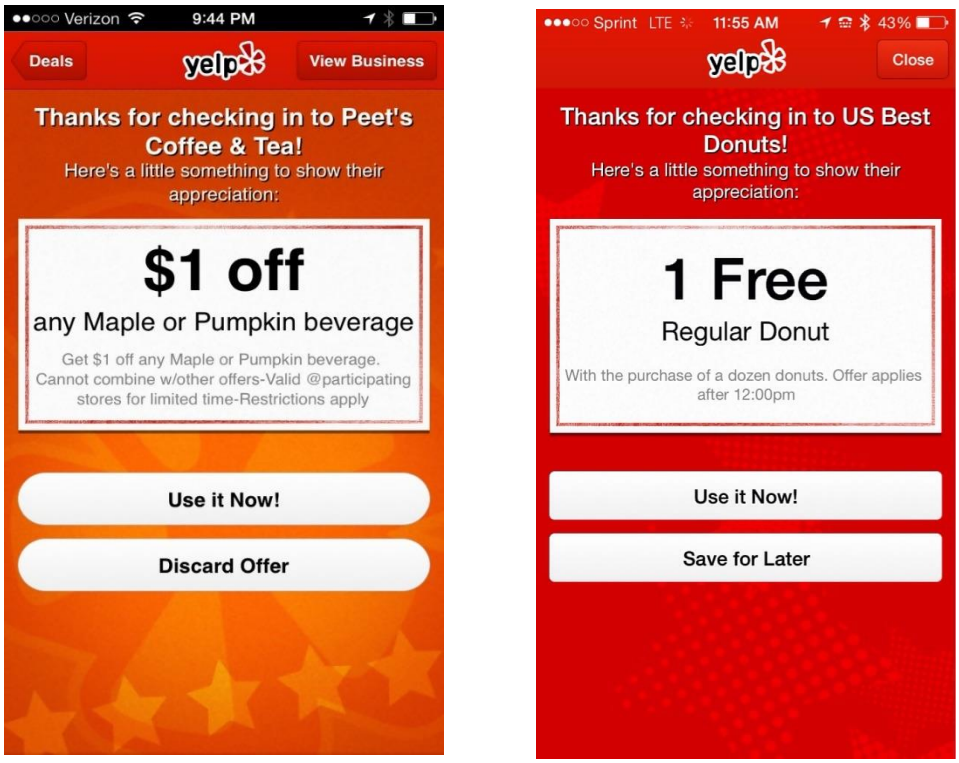


Figure 2.2. Functional motivation message examples sent by Yelp

frequency of check-ins) (Humphrey & Laverie, 2011), is an example of functional motivation message. Yelp provides businesses with several features to craft their advertisement with a financial motivation such as a free cup of coffee with three check-ins at the restaurant and a full-price burger purchase (Bao et al., 2015; see Figure 2.2 for examples).

Symbolic Motivation Message. Symbolic motivations can be illustrated as consumers' motivation to interact virtually that may provide social approval and enhance the user's self-concept (Hogan, 2010). Within the scope of this study, the statement and/or visual included in a MLBA message that is intended to facilitate consumers' engagement with the retailer in a LSCA for social approval or self-concept enhancement is called a symbolic motivation message (Hogan, 2010; Kang et al., 2015). Therefore, a MLBA symbolic message may emphasize sharing consumption experiences with other consumers and prestigious brand-involvement activities that may lead to a boost in the consumer's status among users of the LSCA (Kim et al., 2013). For example, consumers' checking-in at high-end restaurants may help them get credit from their friends and appear socially desirable in the eyes of other LSCA users (Aday et al., 2018). Foursquare used to give an award called *Mayor* to consumers with the highest frequency of check-in at a certain physical store or restaurants (Humphrey & Laverie, 2011). Figure 2.3 present examples of symbolic motivation messages sent by LSCAs.

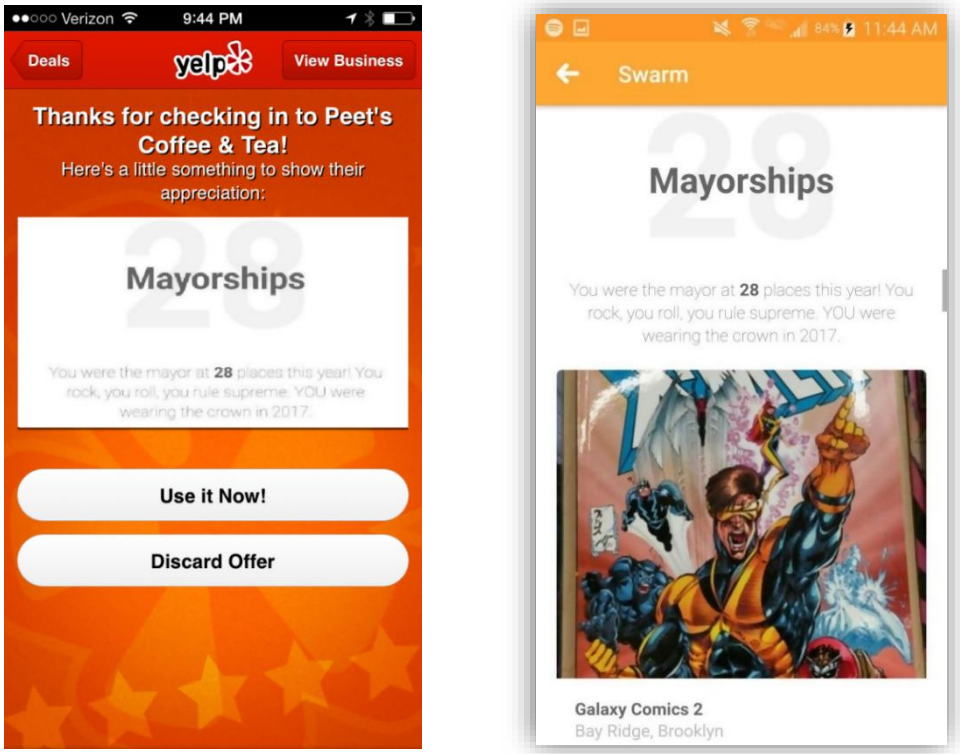


Figure 2.3. Symbolic motivation messages in MLBA sent by Yelp and Swarm

Hedonic Motivation Message. Hedonic motivations refer to consumers' inclination for an enjoyment of sensory facets of media contents or having fun while experiencing different activities in physical place (Kang et al., 2015). A hedonic motivation message is identified in this study as the statement and/or visual provided in a MLBA message, which is designed to encourage consumers to share their contents including their location, comments, images, and videos with a retailer on a LSCA for a goal of enjoying sensory pleasure (Kim et al., 2013). Hedonic message components embedded within MLBA may inspire affective responses from consumers who use a LSCA (Kim et al., 2013). Hedonic motivational messages are crafted in such a way that they appeal to the individual's preferences of affective elements as pleasure, subtle emotions, and feelings (Kang et al., 2015). Social media provides scopes of content creation and content re-sharing that may give consumers more pleasurable and enjoyable

experiences (Li, Shan, Jheng, & Chou, 2016). Several location-based applications use game mechanisms such as giving points for location covering as a reward which can be converted into virtual or real-life fun activities (see Figure 2.4 for examples) (Humphrey & Laverie, 2011).

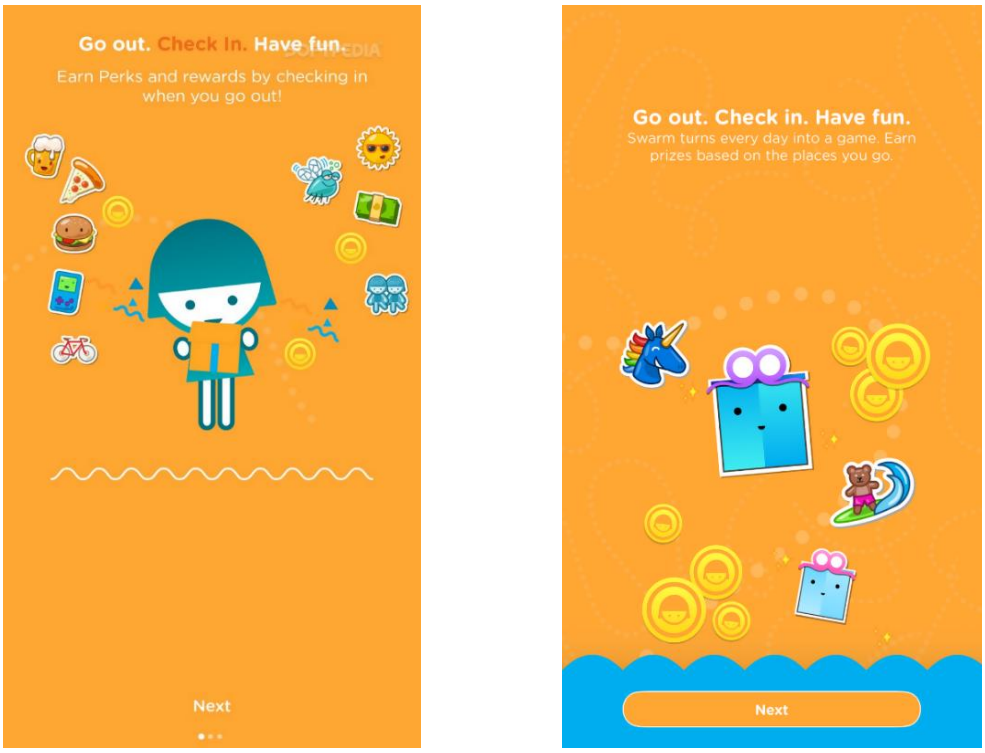


Figure 2.4. Hedonic motivation message examples sent by Yelp and Swarm

Perceived Value of Engagement with a Retailer on a LSCA

Perceived value of a behavior refers to one's judgment or belief about gratification of one's needs through the behavior (Holbrook, 1994). In this study, perceived value of engagement with a retailer on a LSCA, thus, should be understood as consumers' overall assessment of the utility in satisfying their needs by engaging with the retailer in the LSCA from which they receive a MLBA message (Zeithaml, 1988). Depending on the specific categories of needs under consideration, perceived values of engagement with a retailer on a LSCA can be classified into

three dimensions: (a) perceived economic value, (b) perceived social value, and (c) perceived entertainment value.

Perceived Economic Value. In this study, perceived economic value refers to consumers' perception about how likely engaging with a retailer on LSCA (i.e., check-in) would provide them with financial benefits, such as a free/discounted product and a financial reward, which satisfy their instrumental needs (Wu, 2016). Consumers' economic value perceptions are strongly related to task-specific, efficient, and functional aspects of services (Yu et al., 2013). Functional motivation messages in MLBA often communicate financial gains through monetary value and frequency-based offers (Ha & Jang, 2010; Ström, Vendel, & Bredican, 2014). Hence, functional motivation messages in MLBA are likely to enhance consumers' perception of the economic value of engagement with a retailer on a LSCA, as compared to a symbolic or a hedonic motivation message, which does not deal with financial aspects of retailer engagement via LSCAs. Thus, the following hypothesis was developed to predict the differences in perceived economic value across the varying types of motivational messages in MLBA:

H1: Consumers perceive a *higher economic value* of engaging with a retailer on a LSCA when the MLBA contains a *functional motivation message* than when it contains a *symbolic motivation message* (**H1a**), a *hedonic motivation message* (**H1b**), or *no motivational* message (**H1c**).

Perceived Social Value. Social value addresses the extent to which a behavior meets social needs such as symbolic identification, expression of personality, and a pursuit of community (Holbrook, 1994). LSCAs provide a convenient social platform for its users to maintain existing social relationships and to create new connections with anonymous users (Ellison, Steinfield, & Lampe, 2006; Pagani & Mirabello, 2011). In general, social value

includes various aspects such as symbolic identification, expression of personality, and a pursuit of community (Holbrook, 1994). Perceived social value is identified in this study as the consumer's belief about the extent to which engaging with a retailer on a LSCA can symbolize his or her social class, social status, or association with a specific social group (Lai, 1995; Yu et al., 2013). Consumers are motivated to engage symbolically with a LSCA to enjoy the sense of community (Kim & Han, 2009). In this study, a symbolic motivation message inserted in MLBA uses statements and/or visuals intended to sensitize consumers to the role of engaging in a LSCA to meet their needs for social interactions and thus is likely to enhance the consumers' perceived social value of engaging with a retailer on a LSCA, as compared to the functional or hedonic motivational messages. Thus, the following hypothesis is plausible:

H2: Consumers perceive a *higher social value* of engaging with a retailer on a LSCA when the MLBA contains a *symbolic motivation message* than when it contains a *functional motivation message* (**H2a**), a *hedonic motivation message* (**H2b**), or *no motivational message* (**H2c**).

Perceived Entertainment Value. Entertainment value of a behavior refers to the degree to which the behavior satisfies individuals' need for fun, playfulness, and amusement in life (Babin, Darden, & Griffin, 1994). Thus, in this study, perceived entertainment value is conceptualized as the degree to which a consumer believes that engaging with a retailer on a LSCA would provide fun and enjoyable experiences (Lin et al., 2013). In a LSCA, users entertain themselves by looking at friends' responses or comments on wall contents, photographs, and profile information they post (Cho et al., 2014). A hedonic motivation message in MLBA could emphasize that users can convert their effort (e.g., check-in points) into an enjoyable experience or event, such as virtual prize conversion into fun activities at physical

store (Yu et al., 2013) and promote the idea that engaging with the retailer on the LSCA can provide a means to escape from the stress of life by a fun and pleasant outcome that may result from their engagement with retailers on LSCAs (Kim et al., 2009). Thus, hedonic motivation messages in MLBA will be likely to drive consumers' perceived entertainment value of engaging with a retailer on a LSCA. Therefore, the following hypothesis was developed:

H3: Consumers perceive a *higher entertainment value* of engaging with a retailer on a LSCA when the MLBA contains a *hedonic motivation message* than when it contains a *functional motivation message (***H3a**), a *symbolic message* (**H3b**), or *no motivational message* (**H3c**).

Attitudes and Behavioral Intentions toward Engagement with a Retailer on a LSCA

Social media encompass a variety of new sources of online information that are initiated, dispersed, and consumed by consumers with an intent to share about products, brands, services, personalities, and issues (Williams, Crittenden, Keo, & McCarty, 2012). The recent growth of social media has provided more opportunities to connect and share information with an unlimited range (Guesalaga, 2016). In this study, LSCAs are described as a type of social media platform where retailers reach potential consumers with advertising, deals, and coupons, while consumers exchange ideas and feedback about products and services through check-ins, reviews, and ratings (Tuten & Solomon, 2013). Generally, consumer engagement indicates consumers' effort to attach individually with a brand, an advertisement, or a particular communication medium (Hollebeek, 2011; Pagani & Malacarne, 2017). In this study, engagement is conceptualized in terms of consumers' exerting efforts to be involved with and devoted to a retailer via their action on a LSCA (Malthouse et al., 2007; Pagani & Malacarne, 2017). Consumers' engagement with a retailer on a LSCA is exemplified by a series of different actions, such as creation, critics, and

publication of contents (Gensler et al., 2013; Pagani & Malacarne, 2017). In LSCAs, retailers present various marketing stimuli to gain consumers' attention, thus driving their engagement in physical stores through retailers' LSCA platform (Brodie, Hollebeek, Jurić, & Ilić, 2011; Kaplan & Haenlein, 2010).

According to Pagani and Malacarne (2017) and Sashi (2012), the extent of consumers' engagement with a retailer on a LSCA varies by their commitment levels. Some consumers may actively engage by generating contents as an active creator, such as posting self-taken pictures or videos and writing reviews and comments relevant to the retailer (Ashley & Tuten, 2015; Pagani & Malacarne, 2017); whereas others may engage more passively by simply observing and browsing contents generated on LSCAs by other users (Pagani & Malacarne, 2017). Consumers' level of engagement with a retailer on a LSCA may be driven by retailers' marketing efforts, such as how they design their MLBA messages sent via LSCAs.

Attitudes refer to individuals' disposition to respond favorably or unfavorably toward an action. In this study, attitude towards engaging with a retailer on a LSCA is described as participants' degree of favorability toward checking in at Chili's on Yelp. In the broader sense, behavioral intention is the degree to which a person has formulated conscious plans whether to participate in an action (Hausenblas et al., 1997). Based on this construct meaning, in this study, intention to engage with a retailer on a LSCA is described as the degree to which a consumer has formulated conscious plans to exert efforts to be involved with and devoted to a retailer via their action on a LSCA, such as checking in the retailer on Yelp.

Based on the belief-attitude-behavioral intention link proposed by the TRA, consumers' behavioral intentions are predicted by their attitudes (Ajzen & Fishbein, 1980). According to previous researchers, the various values perceived from an advertisement can facilitate a positive

attitude toward the advertisement (Cho et al., 2014; Eagly & Chaiken, 1993). Thus, in this study, consumers' perceived economic, social, and entertainment values of engagement with a retailer on a LSCA would positively influence their attitudes toward this behavior, which in turn may appear as a conceivable precursor to the consumers' intentions to engage with the retailer on the LSCA, according to the TRA. Based on this discussion, the following hypotheses were developed:

H4: Consumers' perceived economic value (**H4a**), social value (**H4b**), and entertainment value (**H4c**) of engagement with a retailer on a LSCA positively influence their attitude towards engagement with the retailer on the LSCA.

H5: Consumers' attitudes toward engagement with a retailer on a LSCA positively influence their intentions toward engagement with the retailer on the LSCA.

Privacy Risk

Many of the previous location-based social media studies have looked into the factors that hinder consumers' active engagement in social media, such as *privacy risk* (Fodor & Brem, 2015; Junglas et al., 2008; Kim, 2016). Engagement with retailers on LSCAs requires consumers to share some personal information with other consumers, such as their current location/address (by "checkin"), personal contents (e.g., pictures and videos posted), opinions (e.g., comments and reviews shared with others), and network (e.g., their connections in LSCA) (Kim, 2016; Pagani & Malacarne, 2017). Using a permission-based function, LSCAs have the access to users' personal data including demographic and geographic location information (Pagani & Malacarne, 2017). Therefore, some consumers may find their personal information vulnerable when they engage with LSCAs through sharing location updates, demographics, general transaction information, or sentiment (Bansal & Gefen, 2010).

The privacy risk refers to the level of risk an individual associate with revelation of personal information which could be used by third parties in an unauthorized manner (Fodor & Brem, 2015; Thierer, 2015). In some cases, users may perceive greater privacy risks due to the potential misuse of personal data by the service provider than the perceived benefits that may be obtained from using their service, and thus might end up with a low intention to engage with the service provider (Malhotra, Kim, & Agarwal, 2004; Sun et al., 2015). Similarly, consumers' privacy risk may moderate the degree of influence of consumers' attitude on their intention with regard to engagement with a retailer on a LSCA. In case of LSCAs and other location-sharing apps, information control and exchange are often initiated by service providers, and users feel less control over information (Bansal & Gefen, 2010; Hubert, Blut, Brock, Backhaus, & Eberhardt, 2017). Using a permission-based function, mobile shopping applications get access to users' personal data including demographics and geographic location information (Pagani & Malacarne, 2017). Users' attitude towards engaging with a retailer on a LSCA may interact with user's intrinsic belief of privacy risk of sharing the location information on a LSCA, which ultimately weaken the relationship between the consumer's attitude and intention towards engagement with the retailer on the LSCA (Hubert et al., 2017). Thus, the following hypothesis is feasible:

H6: Privacy risk moderates (*weakens)* the relationship between consumers' attitude toward engagement with a retailer on a LSCA and their intention to engage with a retailer on a LSCA.

CHAPTER III. PRETEST

This study utilized an experimental method to investigate how different motivational messages (functional message vs. symbolic message vs. hedonic message vs. no motivational message [control] condition) used in MLBA stimulate consumers' perceived values (economic, social, and entertainment values) of engagement with a retailer on a LSCA, and whether these perceived values predict consumers' attitude, which in turn predict intention toward engagement with a retailer on a LSCA. In addition, the moderating role of consumers' privacy risk was considered. In this chapter, the method and results of the pretest aimed to calibrate the MLBA message stimuli (i.e., functional, symbolic, and hedonic) to be used in the main experiment are described.

Method

Design

The pretest was conducted to develop one set of stimuli for the manipulated conditions of the main experiment. A within-subject design was used to asses consumer perceived motivation towards advertisement stimuli. The study utilized an online survey, by setting up visual stimuli and questionnaire on Qualtrics. The participants were assigned each of the four conditions (functional, symbolic, hedonic, and no motivation) in a randomized manner, and asked to answer a set of questions measuring their perceived motivation of the stimuli (manipulation check).

Stimulus Development

To manipulate the MLBA message motivation variable, this study employed mock MLBA messages containing varying levels of motivational statements presented in text on visual stimuli that simulate screenshots of a smartphone screen. The visual stimulus (see Figures 3.1 and 3.2) for each of the three motivation conditions contained a fictitious MLBA message with four parts including 1) logos of the LSCA (Yelp) and the name of the retailer (Chili's Grill and Bar) with an image of a beer glass (top left), 2) the focused promotion message, "check-in on Yelp" (middle), 3) a red text box containing a text for the assigned motivational message (text manipulation), and 4) an imagery aligned with the motivational message condition (visual manipulation) (see Figure 3.1). The control (no motivation) condition stimulus only contains the first two parts and no experimental manipulation parts.

Figure 3.1. Structure of the stimuli

Functional Motivation Message | Symbolic Motivation Message | Hedonic Motivation Message | No Motivation Message

Figure 3.2. Four MLBA motivational message stimuli used in the pretest

Restaurants were utilized for the retail business context in creating the MLBA stimuli because they cater to the general consumer population (not pertaining to any specific demographic group with certain ages or gender) and are highly consumer-oriented businesses than any other sectors (Hosbond & Skov, 2007; Wang et al., 2015). An online study shows that 65% of people read online reviews for restaurants or cafés, while 35% for clothing store and 33% for healthcare professionals (BrightLocal, 2018). In general, 50% of the people who read online reviews, visit retailers' websites and 15% of them visit physical stores (BrightLocal, 2018).

Chili's Grill & Bar was selected as the restaurant retailer to be used in this study because it belongs to one of the U.S. casual dining restaurant chain that has a high familiarity to U.S. consumers. As this study intended to use a national sample, Chili's Grill & Bar would serve the intended purpose. In addition, Yelp was used as the LSCA in this study because it is one of the LSCAs highly frequently used by consumers for checking restaurant reviews. Yelp is one of the local consumers' most trusted review sites, followed by Facebook and Google (BrightLocal, 2018).

To develop the stimuli, an exploratory approach was used to record, analyze, and categorize an initial pool of real-world MLBA messages from Yelp during a one-month period. Motivational statements used in common MLBA messages sent by restaurants on Yelp were collected to introduce the development of the motivational statement to be used in the text manipulation part of the stimuli. The collected MLBA motivational statements were then categorized by the researcher into functional, symbolic, and hedonic motivations based on the definitions of these motivations provided in the literature, through a thematic analysis procedure. At least one stimulus candidate for each of the three MLBA motivations was selected through a

panel of experts consisting of three faculty members with research experiences of mobile marketing and consumer behavior. At the same time, the usual visual style of MLBA messages sent by Yelp (e.g., the Yelp logo along with the retailer's name, a red box with the ad message, an imagery aligned to the motivation type) was also identified to provide a background image to those motivational statements (see Figure 3.1). Besides the three treatment conditions' visual stimuli (one for each condition), one "no motivation" condition stimulus was created by duplicating the visual presentation of candidate stimuli but deleting the motivational statements. To avoid the potential confounding effects within stimuli, photographic quality, color, size, and formatting were remained constant.

Instruments

At the beginning of the pretest survey, participants were asked to indicate their level of prior association with Yelp and Chili's Grill & Bar. Doing this helped to detect any possible biases due to participants' pre-existing engagement with Yelp and Chili's Grill & Bar. Afterward, the pretest questionnaire containing manipulation check items (i.e., perceived motivations measure) for each of the three motivational message types (functional, symbolic, hedonic, and no motivation message), along with demographic information items were provided to the participants.

***Prior Yelp Engagement and Prior Chili's Grill & Bar Familiarity*.** The items for measuring prior Yelp engagement and prior Chili's Grill & Bar familiarity were adapted from previous studies (see Table 3.1 and Appendix D). Five items for measuring prior engagement with Yelp were adopted from Wu's (2016) study. The first three items of prior Yelp engagement were adopted from Wu's (2016) mobile social network (MSN) engagement (Cronbach's $\alpha = .91$) scale. Next two items of prior Yelp engagement were adopted from Wu's (2016) mobile

advertising acceptance scale (Cronbach's α = .96). The wording of the items remained unaltered in the existing study other than inserting *Yelp* in the place of *MSN apps.* Prior familiarity with Chili's Grill & Bar was measured using a scale adapted from Han et al. (2016) whose items were originally developed to assess brand awareness of restaurants. The original scale demonstrated high reliability with Cronbach's α =.84 (Han et al., 2016). The wording of the items remained unaltered in the existing scale other than adding *Chili's Grill & Bar* at the end of the item. Whereas the original items of the scale stated, "I am familiar with this restaurant brand," the items wording in the current study was modified as "I am familiar with this restaurant brand, Chili's Grill & Bar."

Table 3.1

Pretest Items for Prior Yelp Engagement and Prior Familiarity with Chili's

Variable		Items	Source (Reported Cronbach's α)
Prior Yelp Engagement	1	Using Yelp is part of my routine.	Wu (2016) (.91 & .96)
	2	I always check Yelp anytime I am using my smartphones or tablets.	
	3	I use things from Yelp in online discussion or arguments with people I know.	
	4	I feel positive about advertising on Yelp.	
	5	I will think about accepting advertisements on Yelp.	
Prior Chili's Grill & Bar Familiarity	1	I am familiar with this restaurant brand, Chili's Grill & Bar.	Han et al. (2015) (.84)
	2	I can recognize this restaurant brand, Chili's Grill & Bar, among other restaurant brands.	
	3	I am aware of this restaurant, Chili's Grill & Bar.	

Manipulation Check Measures. The manipulation check items measured participants perceived functional, symbolic, and hedonic motivations to check-in at Chill's on Yelp using a 5-point Likert scale (1 for *strongly disagree* and 5 for *strongly agree*). The manipulation check

items were adopted from previous studies and modified accordingly to fit in the context of current study (see Table 3.2 & Appendix D). First, items for perceived functional motivation were adapted from Zhu et al.'s (2014) perceived special treatment scale (Cronbach's α = .82) which was originally deployed to assess potential functional benefits of using location-based recommendation agents (LBRA). The original items of the scale stated as 'Using this location-based recommendation agent (LBRA) would enable me to get discounts or special deals that most consumers do not get' which clearly provided the concept functional benefits of using location-based recommendation agent. A slight alteration to the wording was made in order to fit the context of the study by replacing 'Using this LBRA' by 'this location-based advertisement tells me that'.

The items for perceived symbolic motivation were adapted from Kang and Johnson's (2015) social self-concept benefit sale, which had shown Cronbach's α of .97(see Table 3.2). This scale was originally developed for measuring social self-concept benefit of mobile location-based shopping service. The first part of items was slightly modified to fit in the study context. For example, original item "using mobile location-based shopping service would help me to be accepted by others" was modified to "this location-based advertisement tells me that it would help me to be accepted by others."

Finally, the items for perceived hedonic motivations were adopted from Kang and Johnson's (2015) emotional benefit scale (Cronbach's α of .94) (see Table 3.2). Kang and Johnson (2015) measured consumers' emotional benefit in the context of mobile location-based shopping. The wordings of the first two original items were modified to meet the current context of motivations for checking in at Chili's on Yelp (see Table 3.2 & Appendix D). For example, original item 'using mobile location-based shopping service would make me feel good' was

modified to ‘this location-based advertisement tells me that it would make me feel good’. For demographic items, participants were asked about their age, gender, ethnicity, education, annual household income, employment status, and state of residence.

Table 3.2

Manipulation Check Items: Perceived Motivations to Check-In at Chili’s on Yelp

Construct	Items	Source (Reported Cronbach’s α)
Perceived functional motivation	This location-based advertising message tells me that 1. …I would get more timely product promotion information than most consumers through check-in at Chili’s on Yelp. 2. … I would get discounts or special deals that most consumers through check-in at Chili’s on Yelp. 3. … I would get better prices than most consumers through check-in at Chili’s on Yelp. 4. … I would get better shopping services than most consumers through check-in at Chili’s on Yelp.	Zhu et al. (2014) (.82)
Perceived symbolic motivation	This location-based advertising message tells me that 1. … it would help me to be accepted by others through check-in at Chili’s on Yelp. 2. … it would improve the way I am perceived by others through check-in at Chili’s on Yelp. 3. … it would make a good impression about me to other people through check-in at Chili’s on Yelp.	Kang & Johnson (2015) (.97)
Perceived hedonic motivation	This location-based advertising message tells me that 1. …it would make me feel good through check-in at Chili’s on Yelp. 2. …it would give me pleasure through check-in at Chili’s on Yelp.	Kang & Johnson (2015) (.94)

Sampling and Data Collection Procedure

The pretest data collection was performed through an online survey. The target population of this study consists of general U.S. adult consumers with any gender. While setting up the survey project on Amazon Mechanical Turk (MTurk), a crowdsourcing marketplace, two eligibility criteria were used: an M-Turker must reside in the USA and be at least 18 years old. At least 60 complete responses were required for the pretest. After receiving an Institutional Review Board (IRB) approval, the participants were recruited from Amazon MTurk. M-Turk worker are able to read a short task description and compensation information on MTurk's market survey/research survey advertisement page. MTurk workers who met the eligibility criteria received an access to the current project. All participants received a unique numeric participant ID which they needed to enter at the end of the survey to get their compensation. The pretest was conducted online through Qualtrics. Participants were routed to a Qualtrics survey by clicking on the survey (placed on the survey advertisement page on M-turk) hyperlinked to the Qualtrics online survey.

Upon clicking on the survey link, participants saw a detailed information letter, which included the study purpose, expected time commitment, incentive description, and consent option. Participants who agreed to the content of the letter proceeded by clicking the "Yes, I consent" button at the bottom of the page. Next, participants were asked to indicate their level of agreements with items for prior Yelp engagement and prior Chili's Grill & Bar familiarity. Afterward, the participants viewed each of the four visual stimuli, presented in random order, and completed the manipulation check measure (i.e., perceived motivation measure) for each stimulus. Following this, demographic items were asked. After the collection of responses from

Qualtrics, a survey platform, the data were cleaned (e.g., removing the incomplete responses), and analyzed using Version 24 of the Statistical Package for Social Sciences (SPSS) software.

Analyses and Results

Sample Characteristics

A total of 90 people responded to the internet survey in Amazon MTurk. From the 90 survey responses, 83 were valid and complete. The incomplete responses were removed from the data set. The respondents were found between the ages of 20 and 60, with a mean age of 34 years. A majority of the respondents (50.6%) were between 20 and 30 years old, representing a relatively younger segment. As to gender, male participants were found predominately than female participants. Most of the respondents were White-American (83%) and completed a bachelor's degree or above (67%). A majority of the respondents came from two income groups including under $49,999 and $50,000 to $99,999. Most respondents (90%) were employed for wages or self-employed. Finally, the statewide distribution of respondents revealed that among 27 states, Texas (n =19) and California (n =14) were the two main states of residence among the respondents. Participants' prior Yelp engagement mean was 3.15, meaning that the respondents' engagement with the LSCA was around the mid-point of the scale. Their prior Chili's Grill & Bar familiarity mean score was 3.94, indicating participants' moderate level of familiarity with the restaurant retailer.

Table 3.3

Pretest Respondents' Demographics Characteristics (*n* = 83)

Demographics	Description	*f* (%)	*M*
Age	20-29	35 (42.2)	33.85
	30-39	30 (36.1)	
	40-49	10 (12.0)	
	50-59	5 (6.0)	
	60-69	2 (2.4)	
Gender	Male	51 (61.4)	
	Female	31 (37.3)	
Ethnicity	American Indian/Alaskan Native	3 (3.6)	
	Asian/Pacific Islander	5 (6.0)	
	Hispanic	4 (4.8)	
	Black, Non-Hispanic	2 (2.4)	
	White, Non-Hispanic	69 (83.1)	
Education	High school graduate	9 (10.8)	
	Some college education or Associate degree	18 (21.7)	
	Bachelor's degree	46 (55.4)	
	Graduate degree (Master's or PhD)	10 (12.0)	
Annual Income	Under $25,000	13 (15.7)	
	$25,000 TO $49,999	27 (32.5)	
	$50,000 TO $74,999	23 (27.7)	
	$75,000 TO $99,999	10 (12.0)	
	$100,000 and above	9 (10.8)	
Employment Status	Employed for wages	57 (68.7)	
	Self-employed	18 (21.7)	
	Out of work	2 (2.4)	
	Homemaker	1 (1.2)	
	Student	2 (2.4)	
	Retired	1 (1.2)	
	Unable to work	2 (2.4)	
State Residence	AL	4 (4.8)	
	CA	14 (16.9)	
	CO	1 (1.2)	
	CT	1 (1.2)	

FL	3 (3.6)
GA	2 (2.4)
IA	1 (1.2)
IL	5 (6.0)
LA	1 (1.2)
MA	2 (2.4)
MD	1 (1.2)
MI	3 (3.6)
MO	1 (1.2)
MT	1 (1.2)
NC	3 (3.6)
NE	1 (1.2)
NJ	1 (1.2)
NM	1 (1.2)
NV	1 (1.2)
NY	5 (6.0)
OH	2 (2.4)
OK	1 (1.2)
PA	2 (2.4)
TN	1 (1.2)
TX	19 (22.9)
VA	1 (1.2)
WA	4 (4.8)

Factor Analysis and Reliability

Exploratory Factor Analysis (EFA) was performed using the principal component analysis (PCA) procedure with Varimax rotation to explore the underlying structure of the scaled items, which were mainly adapted from other studies. A factor loading greater than .50 was considered as a standard in this study (Kline, 1998). Cronbach's α (above 0.6) were used to test the reliability of all scale items, which helps us understand how closely related a set of items are as a group (Cronbach & Shavelson, 2004).

Prior Yelp Engagement and Chili's Grill & Bar Familiarity. The researcher assumed that prior Yelp engagement and Chili's Grill & Bar familiarity would be an important caveat to consider when interpreting dependent measurements associated with responses to values of

MLBA adoption. EFA was run with the five items for Yelp engagement and three items for Chili's Grill & Bar familiarity. Both constructs revealed uni-dimensionality with values of Cronbach α of .85 and .94, respectively.

Perceived Motivation. Separate EFAs were run for data from each of the four conditions (functional, symbolic, hedonic, and no motivation messages) with a setting to extract three factors (perceived functional, symbolic, and hedonic motivations) from the nine perceived motivation (i.e., manipulation check) items.

EFA results of data from the functional, symbolic, and hedonic motivation conditions resulted in the predicted three-factor structure, except that one of the perceived functional motivations items showed a low loading (< .50) in the functional motivation data. To maintain the consistency in the factor-item structure across the stimuli, this low-loading item was deleted from all four conditions. Another EFA was run with the remaining eight items, which loaded onto the three factors of motivations, as originally planned, consistently for the functional, symbolic, and hedonic motivation stimuli (see Table 3.4).

After deleting the low-loading item, a final EFA was run with each of the three treatment conditions' (functional, symbolic, and hedonic motivations) data sets. As shown in Table 3.4, the final EFA results revealed that the three motivation factors explained 74-78% of the total variance. Cronbach's αs (see Table 3.4) for all three factors were above .70 across the three treatment conditions, with only one exception (Cronbach's α of the perceived functional motivation factor was .58 for the functional motivation condition), which indicate the overall internal consistency of the factors.

On the other hand, EFA results from the no motivation condition (i.e., control condition) failed to replicate the three-factor structure observed from the three treatment conditions. Instead,

data from the no motivation stimulus revealed a single-factor structure (i.e., unidimensionality) (see Table 3.4). The variance-extracted percentage showed that the one factor explained 77.36% of the total variance. This is an interesting but understandable result. Given that the control condition stimulus did not include any motivation message, it is natural that responses to the perceived motivation items would not show differences across the three perceived motivation factors (i.e., low motivation in all three factors). This lack of variations in the three perceived motivation factor scores might have led to the failure to discern in the respondents' perceptions of the three motivations, resulting in a single-factor solution. This result offers indirect evidence for the manipulation success of this experiment. Despite this unidimensionality observed from the no motivation stimulus, the manipulation check analysis was done using three perceived motivation factor scores for all four conditions, following the three-factor structure concluded based on the EFA results from the three treatment conditions (functional, symbolic, and hedonic motivation stimuli) for convenient comparisons.

Table 3.4

Factor Loadings and Scale Reliability of Manipulation Check Items

Perceived Motivation Items	Loading[b] Functional Motivation Stimulus			Symbolic Motivation Stimulus			Hedonic Motivation Stimulus			No Motivation stimulus
	FM[a]	SM[a]	HM[a]	FM[a]	SM[a]	HM[a]	FM[a]	SM[a]	HM[a]	
This location-based advertising message tells me that I would get more timely product promotion information than most consumers through check-in at Chili's on Yelp.	.726			.854			.814			.833
This location-based advertising message tells me that I would get discounts or special deals that most consumers do not get through check-in at Chili's on Yelp.	.718			.815			.935			.894
This location-based advertising message tells me that I would get better prices than most consumers through check-in at Chili's on Yelp.	.717			.872			.688			.888
This location-based advertising message tells me that it would help me to be accepted by others through check-in at Chili's on Yelp.		.867			.810			.717		.883
This location-based advertising message tells me that it would improve the way I am perceived by others through check-in at Chili's on Yelp.		.841			.750			.906		.907
This location-based advertising message tells me that it would make a good impression about me to other people through check-in at Chili's on Yelp.		.892			.776			.796		.901
This location-based advertising message tells me that it would make me feel good through check-in at Chili's on Yelp.			.906			.893			.904	.851
This location-based advertising message tells me that it would give me pleasure through check-in at Chili's on Yelp.			.860			.775			.883	.868
*This location-based advertising message tells me that I would get better shopping services than most consumers through check-in at Chili's on Yelp.										
Eigenvalue	1.0	3.67	1.58	3.44	2.0	0.70	4.83	1.32	0.81	6.96
Cronbach's α	.58	.91	.87	.82	.79	.81	.87	.87	.82	.96
Variance extracted (%)	12.37	45.86	19.76	43.0	24.97	8.80	56.04	16.43	10.10	77.36

[a] FM = Perceived Functional Motivation, SM = Perceived Symbolic Motivation, HM = Perceived Hedonic Motivation.

* Dropped item

Manipulation Check

The factor mean scores were calculated by averaging the scores of the items loading on each factor. To check success of the manipulation, first, intra-stimulus mean comparisons across the three perceived motivation factor scores were conducted for each stimulus. This statistical analysis employed paired-sample *t*-tests. The intra-stimulus mean comparison analysis results are summarized in Table 3.5. The functional motivation stimulus was perceived to generate higher functional motivation (M = 3.50, SD = .76) than symbolic motivation (M = 2.68, SD = 1.18, t_{82} = 6.84, $p < .05$) or hedonic motivation (M = 3.05, SD = 1.17, t_{82} = 4.02, $p < .05$). The hedonic motivation stimulus was perceived to generate higher hedonic motivation (M = 3.51, SD = 1.02) than symbolic motivation (M = 2.90, SD = 1.15, t_{82} = - 4.83, $p < .05$) or functional motivation (M = 2.94, SD = 1.08, t_{82} = - 4.31, $p < .05$), as expected. However, for the symbolic motivation stimulus, there was not a significant difference (t_{82} =.418, p = .677) between participants perceived symbolic motivation (M = 3.54, SD = .99) and hedonic motivation (M = 3.50, SD = 1.03). Finally, the no-motivation (control) stimulus generated non-significantly different perceptions of functional, hedonic, and symbolic motivations from the intra-stimulus mean comparisons results (see Table 3.5). Therefore, the intra-stimulus means comparisons overall revealed successful manipulations of the functional, hedonic, and no motivation stimuli but a failed manipulation of the symbolic motivation stimulus.

Table 3.5

Intra-Stimulus Mean Comparison Results (n = 83)

Stimulus	Perceived Motivation Measure	*M*	*SD*	95% CI		Pairwise Comparison		
				Lower Bound	Upper Bound	Measures Compared	t_{82}	*p*
Functional Motivation	Functional (F)	3.50	.76	3.33	3.66	F-S	6.84	.000***
	Symbolic (S)	2.68	1.18	2.42	2.94	F-H	4.02	.000***
	Hedonic (H)	3.05	1.17	2.79	3.30	S-H	-2.81	.006**
Symbolic Motivation	Functional (F)	3.08	1.04	2.85	3.31	F-S	-3.47	.001**
	Symbolic (S)	3.55	.99	3.33	3.76	F-H	-3.17	.002**
	Hedonic (H)	3.51	1.03	3.28	3.73	S-H	.42	.677
Hedonic Motivation	Functional (F)	2.94	1.08	2.70	3.18	F-S	.45	.652
	Symbolic (S)	2.90	1.15	2.65	3.15	F-H	-4.32	.000***
	Hedonic (H)	3.51	1.02	3.28	3.73	S-H	-4.83	.000***
No Motivation	Functional (F)	2.62	1.20	2.35	2.88	F-S	.42	.681
	Symbolic (S)	2.59	1.31	2.30	2.88	F-H	.82	.417
	Hedonic (H)	2.55	1.32	2.26	2.84	S-H	.46	.646

*$p < .05$, **$p < .01$, ***$p < .001$

Then, inter-stimulus mean comparisons were conducted across the four stimuli with respect to each of the three perceived motivation factor scores (see Table 3.6). Results revealed that the perceived functional motivation mean score was significantly higher for the functional motivation stimulus than the other three stimuli (symbolic, hedonic, and no motivation), while the perceived symbolic motivation mean score was significantly higher for the symbolic motivation stimulus than the other three stimuli (functional, hedonic, and no motivation) and the

inter-stimulus mean difference appeared as statistically significant. On the other hand, the perceived hedonic motivation mean score was significantly higher for the hedonic motivation stimulus than for the functional motivation and no motivation stimuli; however, it did not differ significantly between the hedonic and symbolic motivation stimuli.

Table 3.6

Inter-Stimulus Mean Comparison Results (n = 83)

Perceived Motivation Measure	Stimuli Compared[a]	Δ*M*	*SD*	95% CI Lower Bound	95% CI Upper Bound	t_{82}	*p*
Functional	F-S	.42	.93	.22	.62	4.14	.000***
	F-H	.56	.96	.35	.76	5.27	.000***
	F-N	.88	1.19	.62	1.14	6.72	.000***
Symbolic	S-F	.86	1.29	1.14	.58	6.20	.000***
	S-H	.67	1.17	.38	.90	5.01	.000***
	S-N	.96	1.38	.65	1.25	6.31	.000***
Hedonic	H-F	.48	1.22	.72	.19	3.43	.001**
	H-S	.00	.98	-.21	.21	.00	1.000
	H-N	.96	1.46	.64	1.27	5.98	.000***

*$p < .05$, **$p < .01$, ***$p < .001$

[a] F = functional motivation stimulus, S = symbolic motivation stimulus, H = hedonic motivation stimulus, N = no motivation stimulus

Overall, the aforementioned manipulation check results revealed that the symbolic stimulus inadvertently affected hedonic motivation perceptions along with symbolic motivation perceptions. This lack of discriminant validity of the symbolic stimulus led to a decision to drop it from the set of stimuli to be used in the main experiment.

On the other hand, the no-motivation (control) stimulus revealed no statistically different perceptions of functional, hedonic, and symbolic motivations from the intra-stimulus mean comparisons results (see Table 3.5). Further, the inter-stimulus means comparisons also revealed

that the no-motivation stimulus generated lower mean scores in all three perceived motivation dimensions (functional, symbolic, and hedonic) as compared to the functional, hedonic, and symbolic motivation stimuli (see Table 3.6). These results demonstrate that the 'no motivation' stimulus successfully functioned as a baseline control against which the other three motivation stimuli can be compared to examine the effects of the motivational messages used in the stimuli (see Figure 3.3).

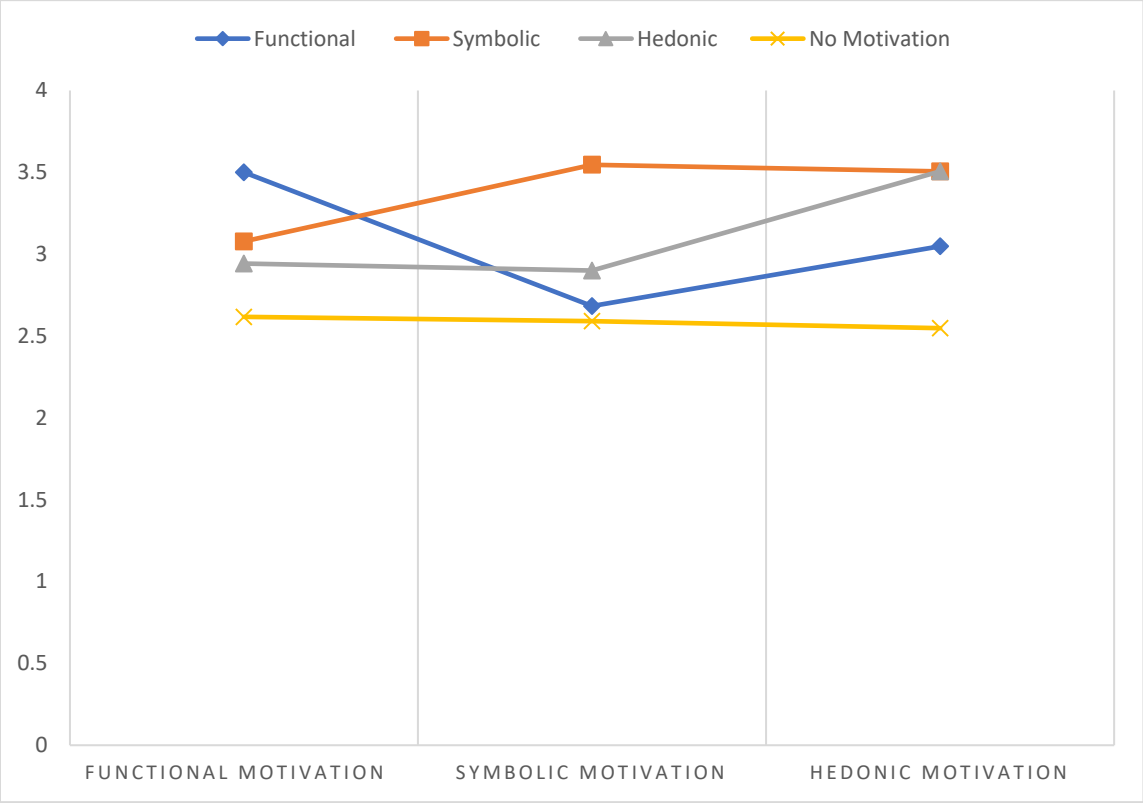


Figure 3.3. Comparative means plot for the three motivation groups across the stimuli

CHAPTER IV. MAIN EXPERIMENT

This chapter describes the methodology and results of the main experiment. The first section includes the main study's research method, including modified research framework, hypotheses, experiment design, stimuli, instrument, and data collection procedures. The second part of this chapter outlines the experiment results, including sample characteristics, measurement validity and reliability, manipulation check results, and hypotheses testing results.

Method

Research Framework

As reported in Chapter 3, the pretest results revealed that the symbolic motivation message stimulus failed to generate the desired level of symbolic motivation required for the experimental condition. Therefore, the researchers decided to drop the symbolic motivation condition from the main experiment and modified the research framework (see Figure 4.1) and hypotheses (see Table 4.1) accordingly. In other words, the original H3, which predicted that a symbolic motivation message in MLBA would lead to a higher social value perception as compared to the functional, hedonic or no motivation messages, was eliminated, while a new research question (RQ1) was added to explore the comparison of consumers' perception of social value driven by the functional, hedonic, and no motivation message conditions. The rest of the hypotheses remained same in wording except the diminution of the hypothesis number. For

example, H4 predicted the consumer's engagement attitude which tends to be determined by the economic, social, and entertainment values associated with MLBA has been now changed to H3.

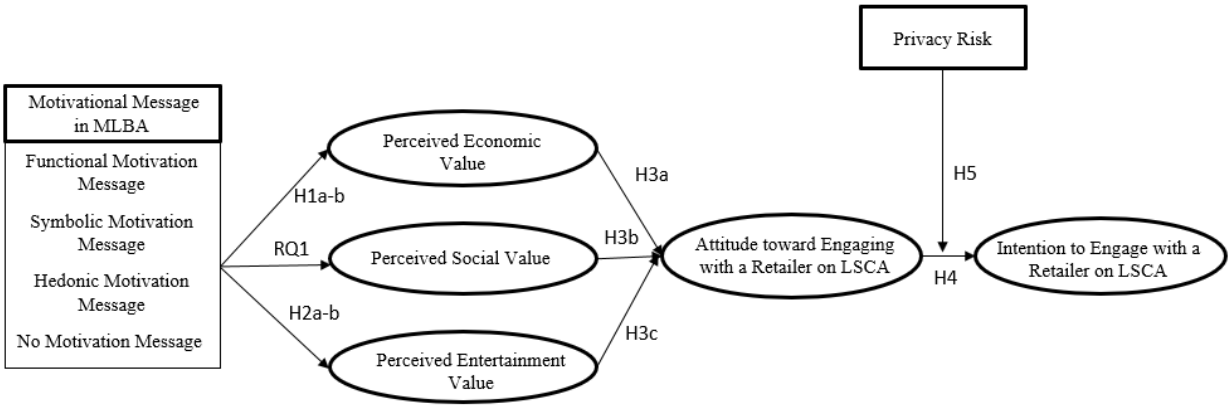


Figure 4.1. Revised Conceptual framework

Table 4.1

Revised Hypotheses and Research Question

	Hypotheses and Research Questions
H1	Consumers perceive a *higher economic value* of engagement with a retailer's LSCA when its MLBA contains a *functional message* for LSCA engagement than when it contains a *hedonic message* (**H1a**) or *no motivational message* (**H1b**).
H2	Consumers perceive a *higher entertainment value* of engagement with a retailer's LSCA when its MLBA contains a *hedonic message* for LSCA engagement than when it contains a *functional message* (**H2a**) or *no motivational message* (**H2b**).
RQ1	Does consumers' perception of social value differ among *functional message* (**RQ1a**), *hedonic message* (**RQ1b**), and *no motivational message* (**RQ1c**)?
H3	Perceived economic value (**H3a**), social value (**H3b**), and entertainment value (**H3c**) of LSCA engagement positively influence consumers' attitudes toward LSCA engagement.
H4	Attitude toward engaging with a retailer on a LSCA positively influence their intentions toward engagement with a retailer on a LSCA
H5	Privacy risk *moderates (weakens)* the relationship between consumers' attitudes and intentions toward engagement with a retailer on a LSCA.

Experimental Design

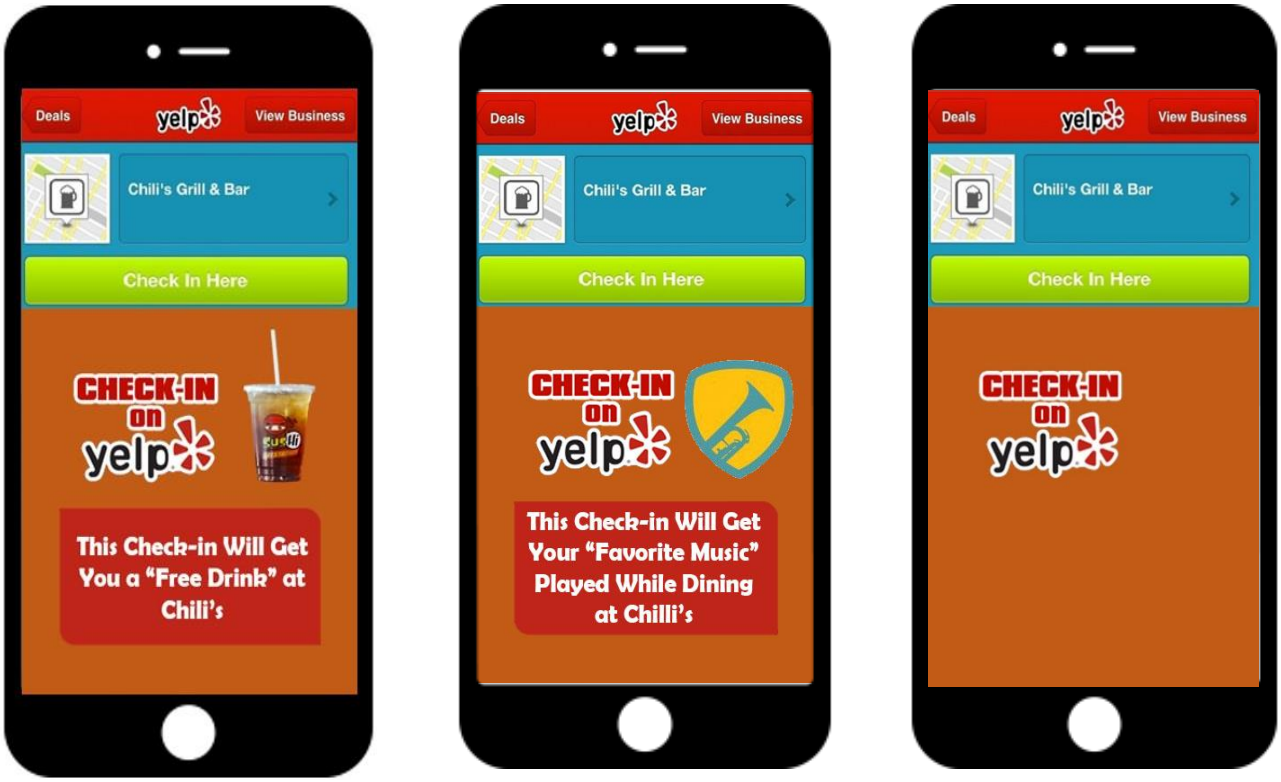
In the main experiment, a between-subject design was utilized to manipulate the experimental factor, *motivational messages in MLBA*, and examine how this affected perceived values, and subsequently, attitude and behavioral intention with regard to LSCA engagement, while examining the moderating role of consumers' privacy risk for the relationship between consumers' attitudes and intentions toward engagement with a retailer on a LSCA. The participants were randomly assigned to one of the three motivational message conditions (functional, hedonic, and no motivation) and answered a set of questions measuring their Yelp engagement, Chili's Grill & Bar familiarity, perceived motivation of the stimuli (manipulation check), perceived values, attitude, behavioral intentions, privacy risk, and demographic information. The study was conducted as an online experiment employing visual stimuli and questionnaire set up online using Qualtrics.

Stimuli

This study utilized mock MLBA messages to manipulate the MLBA motivation variable in three levels (functional, hedonic, and no motivational messages). Three stimuli were finalized through the pretest, with varying types of motivational statements presented in text on screenshots of a smartphone screen containing a fictitious MLBA message posed as being sent by Yelp (see Figure 4.2). The visual stimuli for the three motivation conditions contained fictitious MLBA advertising message with same constituent parts from pretest other than hedonic stimulus. The hedonic stimulus had a change in the motivational message integrated imagery in order to increase the relevance to motivational message type. One of the three stimuli was randomly assigned to participants. Before viewing their assigned stimulus, participants were

given a short description regarding LSCA, MLBA, and the smartphone-based stimulus. The visual stimulus was presented following a participant direction:

Location-based social commerce applications (LSCA), such as Yelp and Foursquare, use real time location data from mobile devices (e.g., smartphone) and send customized advertisement and promotion messages to targeted consumers. Now, we will show you a series of images one by one and ask your thoughts toward these images. Please pay attention to image to answer the following questions.



Functional Motivational Message | Hedonic Motivational Message | No Motivational Message

Figure 4.2. Stimuli used in the main experiment.

Instruments

Immediately following the stimulus presentation, participants were asked the covariates (Yelp engagement and Chili's Grill & Bar familiarity), followed by the two manipulation check measures (perceived functional motivation and perceived hedonic motivation) and then the three dependent measures (perceived values of engagement with a retailer on LSCA, attitude to engagement with a retailer on LSCA, and intention to engagement with a retailer on LSCA). A privacy risk (moderator) measure and demographic items were presented sequentially at the end of the survey.

Manipulation Check Measures

Prior Yelp Engagement and Chili's Grill & Bar Familiarity. Participants were asked about their prior Yelp engagement and Chili's Grill & Bar familiarity prior to participating in this study. The items for measuring prior engagement with Yelp and Chili's Grill & Bar were similar to those employed in the pretest, collected from previous studies and modified accordingly (see Table 4.2 & Appendix D). Participants responded to each item using a 5-point Likert scale (1 for *strongly disagree* and 5 for *strongly agree*).

Table 4.2

Measurements for Prior Yelp engagement and Chili's Grill & Bar familiarity

Variable		Items	Source (Reported Cronbach's α)
Prior Yelp Engagement	1	Using Yelp is part of my routine.	Wu (2016) (.91)
	2	I always check Yelp anytime I am using my smartphones or tablets.	
	3	I use things from Yelp in online discussion or arguments with people I know.	
	4	I feel positive about advertising on Yelp.	Wu (2016) (.96)
	5	I will think about accepting advertisements on Yelp.	

Prior Chili's Grill & Bar familiarity	1. I am familiar with this restaurant brand, Chili's Grill & Bar. 2. I can recognize this restaurant brand, Chili's Grill & Bar, among other restaurant brands. 3. I am aware of this restaurant, Chili's Grill & Bar.	Han et al. (2015) (.84)

Perceived Motivation. The level of perceived functional and hedonic motivations generated by the motivational message stimuli was assessed to check the manipulation success for the experimental factor. From the pretest manipulation check items (perceived functional, symbolic, and hedonic motivations to check-in at Chill's on Yelp), the symbolic measures were removed along with the elimination of the symbolic motivation condition decision. Perceived functional motivation was measured with the same items as those from the pretest, which were adapted from Zhu et al. (2014), except for one item of "This location-based advertising message tells me that I would get better shopping services than most consumers" dropped due to low factor loading obtained in the pretest results. For perceived hedonic motivation, the two items used in the pretest, adapted from Kang and Johnson (2015), were again employed in the main experiment.

In addition, to improve the discriminant validity of the perceived hedonic motivation measure, two more items were added, adapted from Bauer et al. (2005) with high reliability (Cronbach's $\alpha = .90$) (see Table 4.3). The additional two items originally measured the perceived utility of entertainment in mobile message advertising, and thus their wordings were modified to fit the context of the study by replacing mobile message advertising to the location-based advertising. For example, "I find advertising messages via the mobile phone exciting" was changed to "this location-based advertisement tells me that it would make me excited." All of the manipulation check items used a Likert-type scale with five points (1 for *strongly disagree* and 5

for *strongly agree*). Similar to the pretest, these manipulation check items were completed right after the presentation of the experimental stimulus.

Table 4.3

Manipulation Check Items: Perceived Motivations to Check-In at Chili's on Yelp

Variable	Items	Source (Reported Cronbach's α)
Perceived functional motivation	1 This location-based advertising message tells me that I would get more timely product promotion information than most consumers through check-In at Chili's on Yelp. 2 This location-based advertising message tells me that I would get discounts or special deals that most consumers do not get through check-in at Chili's on Yelp. 3 This location-based advertising message tells me that I would get better prices than most consumers through check-in at Chili's on Yelp.	Zhu et al. (2014) (.82)
Perceived hedonic motivation	1. This location-based advertising message tells me that it would make me feel good through check-in at Chili's on Yelp. 2. This location-based advertising message tells me that it would give me pleasure through check-in at Chili's on Yelp. 3. This location-based advertising message advertisement tells me that it would make me excited through check-in at Chili's on Yelp. 4. This location-based advertising message advertising message tells me it would give me entertainment through check-in at Chili's on Yelp.	Kang & Johnson (2015) (.94) Bauer et al. (2005) (.90)

Dependent & Moderation Check Measures

Perceived Values of Engagement with a Retailer on a LSCA. Perceived values of LSCA engagement were measured with 11 items (see Table 4.4 & Appendix C) using a 5-point Likert scale (1 for *strongly disagree* and 5 for *strongly agree*). Among three perceived value variables,

perceived economic value was measured through four items adapted from Kang and Johnson's (2015) functional benefit scale (Cronbach's α =.92) which was developed to measure consumers' perceived benefits of mobile location-based shopping. The wording of the items remained unaltered in the existing study other than inserting *Check-in at Chili's on Yelp* in the place of *mobile location-based shopping* (see Table 4.4 & Appendix D). Four items of perceived social value were adapted from Yu et al.'s (2013) social value scale (Cronbach's α > .70). Originally, the scale was developed to assess users' social value regarding location-based social networking services (LB-SNS). A slight alteration to the wording was made in order to fit the context of the study. For example, the original item, "People who influence my behavior would think I should use location-based social networking services (LB-SNS)," was modified as "People who influence my behavior would think I should check-in at Chili's on Yelp." For perceived entertainment value, three items were adapted from Nov et al.'s (2010) enjoyment scale (Cronbach's α = .84), originally developed to measure users' enjoyment through posting public photos on Flickr. Item wordings were modified to fit the context of the study by referring to *check-in at Chili's on Yelp* in the place of *posting public photos on Flickr*.

Table 4.4

Perceived Value Items

Construct	Items	Source (Reported Cronbach's α)
Perceived economic value	1 Check-in at Chili's on Yelp would be reasonable. 2 Check-in at Chili's on Yelp would offer value for money. 3 Check-in at Chili's on Yelp is reasonably valued upon this advertisement. 4 Check-in at Chili's on Yelp is a good deal upon this advertisement.	Kang & Johnson (2015) (.92)
Perceived social value	1. People who influence my behavior would think I should check-in at Chili's on Yelp 2. People who are important to me would want me to check-in at Chili's on Yelp 3. I would get a good reputation from others when I am good at check-in at Chili's on Yelp 4. I expect that check-in at Chili's on Yelp will add to me personal uniqueness	Yu et al. (2013) (.70)
Perceived entertainment value	1. Checking-in at Chili's on Yelp would be enjoyable 2. The process of check-in at Chili's on Yelp would be pleasant 3. Checking-in at Chili's on Yelp would be fun.	Nov et al. (2010) (.84)

Attitude towards Engagement with Retailer on LSCA. Engagement attitude was measured with six items (see Table 4.5) adapted Shimp and Kavas's (1984) scale measuring attitude toward coupon usage. A slight alteration to the instructions was made in order to fit the context of the study. Whereas the original scale stated the instruction as "*attitude toward the act of using coupons,"* the current study stated the instruction as *"thought toward check-in at Chili's on Yelp."* Participants indicated their responses using a 5-point semantic differential scale with six pairs of bipolar adjectives (foolish/wise, useless/useful, waste of time/wise use of time, negative/positive, worthless/valuable, and bad/good).

Intention to Engage with a Retailer on a LSCA. Intention to engage with a retailer on a LSCA was measured by three 5-point (1 for *strongly disagree* and 5 for *strongly agree*) Likert scale items (see Table 4.5) developed by the researcher in reference to the conceptual meanings expressed in Yu et al.'s (2013) scale of behavioral intention of using LB-SNS. The significant rewording of scale items to reflect this study context led to preserving minimal similarity between Yu et al.'s (2013) original scale items and the items used in this study. For example, the original item "*I will continuously use LB-SNS in the future*" was revised to "*I would be likely to check-in at Chili's on Yelp upon this advertisement*."

Privacy Risk. Three items for privacy risk were adopted from Sun et al.'s (2015) privacy risk scale and retained in its original form other than removing the phrase of "*this service provider"* from the original item wording (see Appendix D). Participants were instructed about the disclosure of personal information through check-in at Chili's on Yelp. Participants indicated their responses using a 5-point Likert scale (1 for *strongly disagree* and 5 for *strongly agree*). Detailed items for this measurement with the reliability index are provided in Table 4.5.

Demographic Items

The same set of demographic items that asked in the pretest were asked in the main experiment. Following all measures in each condition, participants were asked their age, gender, ethnic group affiliation, educational level, annual household income, employment status, and state of residence.

Table 4.5

Items for Measuring Attitude, Intention, and Privacy Risk

Construct	Items	Source (Reported Cronbach's α)
Attitude towards engagement with a retailer on a LSCA	I think, "check-in" at Chili's on Yelp is: 1. Foolish-Wise 2. Useless -Useful 3. Waste of Time-Wise Use of Time 4. Negative- Positive 5. Worthless-Valuable 6. Bad- Good	Shimp & Kavas (1984) 7-point semantic differential scale
Intention toward engage with a retailer on a LSCA	1. I would intend to check-in at Chili's on Yelp upon this location-based advertising message. 2. It is likely that I would check-in at Chili's on Yelp upon this location-based advertising message. 3. I would be likely to check-in at Chili's on Yelp upon this location-based advertising message.	Yu et al. (2013) (.84)
Privacy risk	1. Disclosing my personal information may bring many unpredicted problems. 2. Disclosing my personal information is risky. 3. Disclosing my personal information may bring potential losses.	Sun et al. (2015) (.93)

Sampling and Data Collection Procedure

For the main experiment, a similar sampling technique was utilized as in the pretest by recruiting participants from Amazon MTurk, a crowdsourcing marketplace. The target population of this study consists of general U.S. adult consumers at least 18 years old and with both genders. While setting up the survey project on Amazon MTurk, the eligibility criteria were used such as an M-Turker must reside in the USA and be at least 18 years old. Upon IRB approval, a total of 150 participants were recruited with the help of M-Turk to obtain a minimum of 50 usable responses for each condition. M-Turk worker read a short task description and compensation information on MTurk's research studies advertisement page. After reading M-Turk ad page, interested participants who clicked on the survey link were asked to answer two eligibility questions regarding age and country of residence. Subsequently, eligible participants were routed to the Qualtrics survey by clicking an URL hyperlinked to the Qualtrics online survey. All eligible panel members received a unique numeric participant ID which they need to put at the end of the survey to get their compensation.

Upon clicking on the Qualtrics link, participants saw a detailed information letter, which included the study purpose, expected time commitment, incentive description, and consent option. Participants who agreed to the content of the letter proceeded by clicking the "Yes, I consent" button at the bottom of the page. Next, participants were asked to indicate their level of agreements with items for Yelp engagement and Chili's Grill & Bar familiarity. Participants were asked to review a visual stimulus depicting a graphical representation of MLBA message appeared on the screen. One of the three MLBA stimuli developed through the pretest was randomly assigned to the participants in the between- subject design.

After reviewing the stimuli, the participants answered manipulation check items. Following this, participants completed measures for perceived values, attitude towards engagement with a retailer on a LSCA, and intention to engage with the retailer on the LSCA, privacy risk, and demographic information. The timespan for data collection was one week, starting from the delivery date of invitation to the final deadline of submission. Data were downloaded from Qualtrics, sorted, and cleaned. The collected data were analyzed through SPSS Version 24.

Analyses and Results

Demographic Characteristics

In order to describe sample characteristics, descriptive statistics were calculated for all demographic items (see Table 4.6). The data yielded 144 valid and complete responses including 65 men (40%) and 79 (60%) women, with 47-49 participants in each of the three conditions. Younger participants reflecting ages between 20 and 39 years comprised 65.2% of the participants and showed a similar pattern as the pretest sample demographics. A majority of the participants were White non-Hispanic (64%), followed by Asian or Pacific Islander (11.1%), Hispanic (9.7 %). Regarding educational level, 36.8% of respondents completed their bachelor's degree followed by an associate degree (31.3%), graduate degree (14.6%), and high school graduate (14.6%). Respondents' annual income level was normally distributed. Most of the participants were employed for wages (59.7%), followed by being self-employed (18.8%) and homemakers (9.7%). Lastly, respondents were from 35 states within the USA, and Florida (f = 19), Texas (f =12), and California (f =10) were three major states represented in the sample. Table 4.6 presents detailed demographic respondent characteristics.

Table 4.6

Respondent Characteristics in the Main Experiment (*n* =144)

Demographics	Description	*f* (%)	*M*
Age	20-29	46 (31.9)	28.43
	30-39	48 (33.3)	
	40-49	19 (13.2)	
	50-59	24 (16.7)	
	60-69	7 (4.8)	
Sex	Male	65 (45.1)	
	Female	79 (54.9)	
Ethnicity	American Indian/Alaskan Native	5 (3.5)	
	Asian/Pacific Islander	16 (11.1)	
	Hispanic	14 (9.7)	
	Black, Non-Hispanic	13 (9.0)	
	White, Non-Hispanic	92 (63.9)	
	Others or Mixed	4 (2.8)	
Education	Some high school or less	4 (2.8)	
	High school graduate	21 (14.6)	
	Some college education or Associate degree	45 (31.3)	
	Bachelor's degree	53 (36.8)	
	Graduate degree (Master's or PhD)	21 (14.6)	
Annual Household Income	Under $25,000	29 (20.1)	
	$25,000 TO $49,999	38 (26.4)	
	$50,000 TO $74,999	34 (23.6)	
	$75,000 TO $99,999	22 (15.3)	
	$100,000 and above	20 (13.9)	
Employment Status	Employed for wages	86 (59.7)	
	Self-employed	27 (18.8)	
	Out of work	4 (2.8)	
	Homemaker	14 (9.7)	
	Student	7 (4.9)	
	Military services	1 (0.7)	
	Retired	3 (2.1)	
	Unable to work	2 (1.4)	
State Residence	AL	6 (4.2)	
	AR	3 (2.1)	
	AZ	7 (4.9)	
	CA	10 (7.0)	

CO	1 (0.7)
CT	2 (1.4)
DE	1 (0.7)
FL	19 (13.2)
GA	2 (1.4)
IA	3 (2.1)
IL	4 (2.8)
IN	2 (1.4)
KS	2 (1.4)
LA	3 (2.1)
MA	3 (2.1)
MD	6 (4.2)
MI	3 (2.1)
MN	2 (1.4)
MO	2 (1.4)
MS	1 (0.7)
MT	1 (0.7)
NC	4 (2.8)
NH	1 (0.7)
NJ	4 (2.8)
NV	1 (0.7)
NY	9 (6.3)
OH	3 (2.1)
OK	1 (0.7)
PA	6 (4.2)
SC	4 (2.8)
SD	1 (0.7)
TX	12 (8.3)
VA	7 (4.9)
WA	7 (4.9)
WI	1 (0.7)

Measurement Validity and Reliability

EFA for Prior Yelp Engagement and Chili's Grill & Bar Familiarity. Prior to creating composite scores for all measurements in hypotheses testing, EFA with principle components analysis (PCA) with Varimax rotation was conducted to explore the underlying structure of the scaled items. The PCA results were determined using Kaiser's normalization by extracting factors with eigenvalues greater than 1.0. A factor loading greater than .5 was considered as a standard in this study (Kline, 1998).

Similar to the pretest, an EFA was run with the five items for Yelp engagement and three items of Chili's Grill & Bar familiarity separately. EFA results (see Table 4.7) revealed uni-dimensionality for both constructs.

EFA for Manipulation Check Items. EFA results demonstrated two underlying factors where four perceived hedonic motivation items loaded onto one factor, and the remaining three perceived functional motivation items loaded onto a second factor (see Table 4.8).

Table 4.7

EFA of Prior Yelp Engagement and Chili's Familiarity Items

Factor and Item	Factor Loading
Yelp engagement (Eigenvalue = 2.84; %Variance explained = 56.73 %)	
1. I always check Yelp anytime I am using my smartphones or tablets.	.831
2. Using Yelp is part of my routine.	.824
3. I use things from Yelp on online discussion or arguments with people I know.	.795
4. I will think about accepting advertisements on Yelp.	.762
5. I feel positive about advertising on Yelp.	.736
Chili's Grill & Bar familiarity (Eigenvalue = 2.51; %Variance explained = 82.40%)	
1. I am familiar with this restaurant brand, Chili's Grill & Bar	.938
2. I can recognize this restaurant brand, Chili's Grill & Bar, among other restaurant brands	.929
3. I am aware of this restaurant, Chili's Grill & Bar	.899

Table 4.8

EFA Results of Manipulation Check Items

Factor and Item	Factor Loading
Hedonic Motivation (Eigenvalue = 4.28; %Variance explained = 61.25 %)	
1. This location-based advertisement tells me that it would make me feel good	.86
2. This location-based advertisement tells me that it would give me pleasure	.87
3. This location-based advertisement tells me that it would make me excited	.82
4. This location-based advertising message tells me it would give me entertainment.	.90
Functional Motivation (Eigenvalue = 1.35; %Variance explained = 19.37 %)	
1. This location-based advertisement tells me that I would get more timely product promotion than most consumers.	.89
2. This location-based advertisement tells me that I would get discounts or special deals that most consumers do not get	.87
3. This location-based advertisement tells me that I would get better prices than most consumers.	.80

EFA for Perceived Value Items. EFA results revealed three factors of perceived values, as expected (see Table 4.9). The four items of perceived economic value loaded onto one factor, the four items of perceived social value loaded onto another factor, and the remaining three perceived entertainment value items loaded onto the last factor.

EFA for Attitude, Intention, and Privacy Risk Items. As shown in Table 4.10, EFA results revealed uni-dimensionality for each of the attitude toward engagement with retailer on LSCA, intention to engage with a retailer on a LSCA, and privacy risk scales.

Table 4.9

EFA Results of Perceived Value Items

Factor and Item	Factor Loading		
Economic Value (Eigenvalue = 6.38; %Variance explained = 58.02%)			
1. Check-in at Chili's on Yelp would be reasonable	.58		
2. Check-in at Chili's on Yelp would offer value for money	.81		
3. Check-in at Chili's on Yelp is reasonably valued upon this advertisement	.82		
4. Check-in at Chili's on Yelp is a good deal upon this advertisement	.86		
Social Value (Eigenvalue = .893; %Variance explained = 8.11 %)			
1. People who influence my behavior would think I should check-in at Chili's on Yelp		.74	
2. People who are important to me would want me to check-in at Chili's on Yelp		.86	
3. I get a good reputation from others when I am good at checking-in at Chili's on Yelp		.85	
4. I expect that checking-in at Chili's on Yelp will add to my personal uniqueness		.82	
Entertainment Value (Eigenvalue = 1.40; %Variance explained = 12.72 %)			
1. Checking-in at Chili's on Yelp would be enjoyable.			.76
2. The process of check-in at Chili's on Yelp would be pleasant.			.86
3. Checking-in at Chili's on Yelp would be fun.			.76

Table 4.10

EFA Results of Attitude, Intention, and Privacy Risk Items

Factor and Item	Factor Loading
Engagement Attitude (Eigenvalue = 4.94; %Variance explained =82.38 %)	
1. I think, "check-in" at Chili's on Yelp is: Negative: Positive	.88
2. I think, "check-in" at Chili's on Yelp is: Bad: Good	.90
3. I think, "check-in" at Chili's on Yelp is: Worthless: Valuable	.92
4. I think, "check-in" at Chili's on Yelp is: Useless: Useful	.90
5. I think, "check-in" at Chili's on Yelp is: Waste of Time: Wise Use of Time	.91
6. I think, "check-in" at Chili's on Yelp is: Foolish: Wise	.91
Engagement Intention (Eigenvalue = 2.78; %Variance explained = 92.93%)	
1. I would be likely to check-in at Chili's on Yelp upon this advertisement.	.96
2. I would intend to check-in at Chili's on Yelp upon this advertisement.	.95
3. It is likely that I would check-in at Chili's on Yelp upon this advertisement.	.97
Privacy Risk (Eigenvalue = 2.56; %Variance explained = 85.59 %)	
1. Disclosing my personal information may bring many unpredictable problems.	.93
2. Disclosing my personal information is risky.	.91
3. Disclosing my personal information may bring potential losses.	.92

Reliability of Scales. Cronbach's α was calculated for each scale to test the reliability of all measurement items. As shown in Table 4.11, all scales received at least .80 which could be interpreted as the moderate internal consistency

Table 4.11

Scale Reliability Results

Scale	Cronbach's α
Yelp engagement	.80
Chili's Grill & Bar familiarity	.90
Hedonic Motivation	.92
Functional Motivation	.85
Perceived Economic Value	.87
Perceived Social Value	.91
Perceived Entertainment Value	.91
Attitude to Engagement with a Retailer on LSCA	.96
Intention to Engagement with a Retailer on LSCA	.96
Privacy Risk	.92

After the scale dimensionality and reliability were identified as expected, scores of items from each factor were averaged to constitute the composite score for the respective factor for subsequent analysis.

Manipulation Check Results

An analysis of variances (ANOVA) was run to check mean differences in Yelp engagement and Chili's Grill & Bar familiarity across three experimental conditions. One way-ANOVA results (see Table 4.12) revealed that there were non-significant differences in the scores of Yelp engagement ($F_{2, 141} = .92$, $p = .40$) and Chili's Grill & Bar familiarity ($F_{2, 141} = .02$, $p = .98$) across the three conditions, eliminating the risk for a confounding effect of these variables. Therefore, these covariates were not used in further hypothesis tests. Table 4.12 demonstrate the corresponding means and standard deviation of Yelp engagement and Chili's Grill & Bar familiarity.

Table 4.12

Means and Standard Deviations of Yelp Engagement and Chili's Grill & Bar Familiarity (n=144)

				95% CI	
Variable	Stimulus	*M*	*SD*	Lower Bound	Upper Bound
Yelp Engagement	Functional	3.1	.92	2.91	3.45
	Hedonic	2.9	.92	2.72	3.22
	No Motivation	2.9	.87	2.73	3.22
Chili's Grill & Bar Familiarity	Functional	4.3	.83	4.09	4.52
	Hedonic	4.2	.73	4.02	4.53
	No Motivation	4.3	.82	4.06	4.54

To ensure the success of the manipulation, first, intra-stimulus mean comparisons between the two perceived motivation factor scores were conducted for each experimental condition. A series of paired sample t-tests were performed to compare perceived hedonic and functional motivation levels within each stimulus (see Table 4.13 and Figure 4.3). Participants in the functional motivation message condition perceived the stimulus to be significantly more functionally motivated (M = 3.62, SD = .77) than hedonically motivated (M = 3.10, SD = 1.12; t_{45} = 3.13, $p < .05$). Participants in the hedonic motivation message condition perceived higher hedonic motivation (M = 3.30, SD = 1.05) than functional motivation (M = 2.74, SD = 1.08; t_{48} = 3.66, $p < .05$) about their stimulus. On the other hand, participants in the control (no motivation) condition showed a non-significant difference between in their perceived hedonic and functional motivations. These results corroborate the intended manipulation of the three stimuli.

Table 4.13

Intra-Stimuli Motivation Factors (n =144)

Stimulus	Motivation	Mean	SD	*t (df)*	*p*-value
Functional	Functional(F)	3.62	.77	3.13 (45)	.003**
	Hedonic(H)	3.10	1.12		
Hedonic	Functional(F)	2.74	1.08	3.66 (48)	.001**
	Hedonic(H)	3.30	1.05		
No Motivation	Functional(F)	2.475	1.03	.62 (46)	.536
	Hedonic(H)	2.404	1.18		

*$p < .05$, **$p < .01$, ***$p < .001$

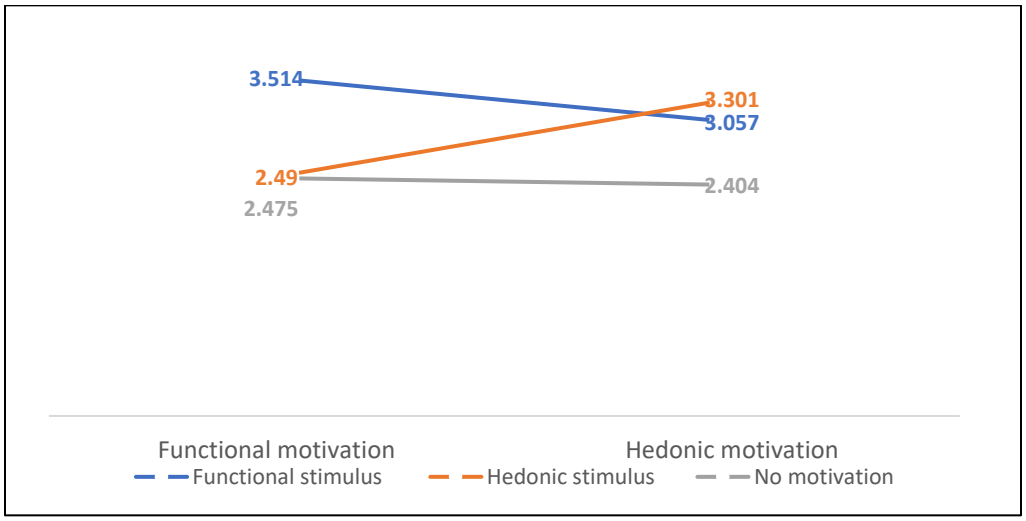


Figure 4.3. Comparative means plot for the two motivation groups across the stimuli

Second, inter-stimulus mean comparisons were conducted across the three stimuli with respect to each of the two perceived motivation factor scores using a series of independent sample *t*-tests (see Table 4.14). The inter-stimulus mean comparisons also revealed that the no-motivation stimulus generated lower perceived motivation score in all two dimensions (functional, hedonic) as compared to other stimuli. These results demonstrate that the control

stimulus successfully functioned as a baseline against which the other two conditions can be compared to examine the effects of the motivational messages used in the motivation stimuli.

Table 4.14

Inter-Stimulus Comparisons in Perceived Motivations (n =144)

Perceived Motivation Measure	Stimuli Compared[a]	Δ*M*	Δ*SE*	95% CI Lower Bound	95% CI Upper Bound	t_{82}	*p*
Functional	F-H	1.02	.19	.64	1.40	5.37	.000***
	F-N	1.04	.19	.65	1.41	5.44	.000***
Hedonic	H-F	.24	.23	-.19	.68	1.18	.275
	H-N	.89	.22	.44	1.35	3.92	.000***

**p < .05, **p < .01, ***p < .001*

[a]*F = functional motivation stimulus, H = hedonic motivation stimulus, N = no motivation stimulus*

Hypotheses Tests

Hypotheses 1 and 2 and Research Question 1. The first two hypotheses and the only research question addressed the effect of motivational messages employed in MLBA in stimulating different dimensions of perceived values (economic, social, and entertainment values) of engagement with a retailer on a LSCA. A multivariate analysis of variance (MANOVA) was conducted to compare the scores for each of the perceived values (dependent variables) across the three experimental conditions of MLBA messages (functional, hedonic, and no motivation). MANOVA results demonstrated a significant multivariate main effect for MLBA motivational messages (Wilks' $\lambda = .077$, $F_{2, 141} = 552.91$, $p < .05$, partial $\eta^2 = .923$).

Based on these MANOVA results, follow-up analyses of variances (ANOVAs) were conducted to reveal the effect(s) on each perceived value dependent variable. ANOVA results revealed that the effects of MLBA motivational messages were significant for perceived economic value ($F_{2, 141} = .14.92$, $p < .001$, partial $\eta^2 = .175$) (see Table 4.15). H1 predicted that consumers would perceive a higher economic value of engagement with a retailer on a LSCA

when the MLBA used a functional motivation message than when it used a hedonic motivation message (H1a) or no motivation message (H1b). Post-hoc comparisons revealed that the functional motivation message (M = 3.90, SD = 0.78) led to a higher economic value perception than did the hedonic motivation message (M = 3.14, SD =1.12) or the no motivation message (M = 2.77, SD =1.14) (see Table 4.16). Thus, both H1a and H1b were supported, respectively.

However, the ANOVA results revealed that the effect of MLBA motivational messages yielded a non-significant effect for entertainment value ($F_{2, 141}$ = 2.32, p = .102, partial η^2= .032) (see Table 4.15), and thus H2 was not supported. ANOVA results also revealed that MLBA motivational messages also did not have a significant effect on perceived social value ($F_{2, 141}$ = .338, p = .713, partial η^2= .005), which answered RQ1 in that both the hedonic and functional motivation conditions did not differ from the no motivation (control) condition in perceived social value.

Table 4.15

Univariate ANOVA Results

Effect & Dependent Variables	*SS*	*df*	*F*	*p*	Partial η^2
Motivation					
Economic value	31.704	2	14.92	< .001	.175
Social value	.851	2	.338	.713	.005
Entertainment value	5.604	2	2.32	.102	.032
Error					
Economic value	149.774	141			
Social value	177.325	141			
Entertainment value	170.081	141			

*p < .05, **p < .01, ***p < .001

Table 4.16

Descriptive Statistics and Post-hoc Analyses

Measure	Condition	*n*	*M*	*SD*	Pair-wise Comparison	*p*
Economic value	Functional (F)	48	3.90	.78	F-H	.001**
	Hedonic (H)	49	3.14	1.12	F-N	.000***
	No motivation (N)	47	2.77	1.14	H-N	.260
Social value	Functional (F)	48	2.68	1.17	F-H	1.000
	Hedonic (H)	49	2.62	1.15	F-N	1.000
	No motivation (N)	47	2.50	1.05	H-N	1.000
Entertainment value	Functional (F)	48	3.53	.98	F-H	.50
	Hedonic (H)	49	3.22	1.18	F-N	.107
	No motivation (N)	47	3.05	1.12	H-N	1.000

*$p < .05$, **$p < .01$, ***$p < .001$

Hypothesis 3. H3 predicted the relationships between consumers' perceived values and attitude towards engagement with a retailer on a LSCA. This hypothesis was tested using a multiple linear regression analysis. Prior to running the multiple regression, first bi-variate analyses were carried out to investigate whether the measures of value scales were significantly related to engagement attitude. According to the results (see Table 4.17), three value variables including economic value, social value, and entertainment value were found to be significantly related with engagement attitude. Based on the bi-variate results, all of the three perceived value variables were determined to be used as independent variables in the regression analysis.

Table 4.17

Correlation between Engagement Attitude and Perceived Values

	Pearson correlation	*p*
Economic value	.664**	< .001
Social value	.574**	< .001
Entertainment value	.714**	< .001

*$p < .05$, **$p < .01$

Results of a multiple linear regression with the "enter" procedure revealed that the overall model with attitude as the dependent variable and three dimensions of value as the independent variables was significant ($F_{2, 141} = 99.40$, $p < .001$). About 58% of the variance in attitude towards engagement with a retailer in a LSCA was explained by the combination of these three independent variables ($R^2 = .592$, Adjusted $R^2 = .584$). Two predictors including economic value (Std. β = .33, $t = 4.57$, $p < .001$) and entertainment value (Std. β = .43, $t = 5.50$, $p < .001$) were significant in the regression analysis. Thus, H3a and H3c were supported. However, social value (Std. β = .12, $t = 1.597$, $p = .112$) was found to be not significant in regression. H3b was not supported. Therefore, H3 was partially supported.

Hypotheses 4 and 5. For testing both H4 (whether engagement attitude predicts LSCA engagement intention) and H5 (moderating role of privacy risk in this relationship), regression analyses were conducted using the enter procedure (see Table 4.19). Attitude to engagement with retailers on LSCAs, privacy risk, and an attitude × privacy risk interaction term was entered as the independent variables in the regression model to predict intention to engagement with the retailer on the LSCA.

This regression model was significant ($F_{1, 142} = 215.35$, $p < .001$). About 60% of the variance in intention was explained by the predictors ($R^2 = .603$, adjusted $R^2 = .60$). Attitude toward engagement with retailers on LSCAs significantly predicts engagement toward engagement with retailers on LSCAs, (Std. β = .776, $t_{142} = 14.67$, $p < .001$). Thus, H4 was supported. However, neither privacy risk (Std. β = .011, $t_{142} = .20$, $p = .842$) or interaction term between engagement attitude and privacy risk (Std. β = .061, $t_{142} = .817$, $p = .415$) was not a significant predictor in the model. Therefore, privacy risk was not a significant moderator of the relationship between engagement attitude and engagement intention toward LSCA. Thus, H5 was rejected.

Table 4.18

Regression Model

Model	*SS*	*df*	*MS*	*F*	*p*
Regression	118.864	1	118.864	215.353	<.001
Residual	78.376	142	.552		
Total	197.240	143			

Table 4.19

Hypotheses Results

	Hypotheses and Research Questions	Results
H1	Consumers perceive a *higher economic value* of engagement with a retailer's LSCA when its MLBA contains a *functional message* for LSCA engagement than when it contains a *hedonic message* (**H1a**) or *no motivational message* (**H1b**).	Supported
H2	Consumers perceive a *higher entertainment value* of engagement with a retailer's LSCA when its MLBA contains a *hedonic message* for LSCA engagement than when it contains a *functional message* (**H2a**) or *no motivational message* (**H2b**).	Not supported
H3	Perceived economic value (**H3a**), social value (**H3b**), and entertainment value (**H3c**) of LSCA engagement positively influence consumers' attitudes toward LSCA engagement.	Partially supported
H4	Attitude toward engaging with a retailer on a LSCA positively influence their intentions toward engagement with a retailer on a LSCA	Supported
H5	Privacy risk *moderates (weakens)* the relationship between consumers' attitudes and intentions toward engagement with a retailer on a LSCA.	Not supported

CHAPTER V. DISCUSSION AND CONCLUSION

The present study used the U&G theory and the TRA to examine the effects of different motivational messages in MLBA on consumers' perceived values, attitudes, and intentions with regard to engagement with a retailer on a LSCA. The research results confirmed that consumers tend to perceive a higher economic value upon receiving a functional motivation message in MLBA. Perceived economic and entertainment values positively predict consumers' attitude towards engagement with a retailer on a LSCA. Consumers' engagement attitude predicts their engagement intention, while privacy risk has no moderating effect upon this relationship. This chapter discusses the findings as well as the theoretical and managerial implications of the findings. Then, the limitations of this study are explained, and recommendations for future research are suggested accordingly.

Discussion of Findings

While several research studies covering the use of mobile-based advertising via location-identification technology exist, hardly any has attempted to investigate aspects of MLBA messages that drive consumers' engagement with a retailer on a LSCA. As such, the current study enhances an understanding of the mechanisms by which MLBA can be a more effective tool in driving consumer uptake with a LSCA as an avenue for engaging with retailers. This study leverages the value-based perspective of consumer engagement with retailers on LSCA. This study explores the extent to which MLBA messages stimulate consumer engagement

attitudes and intentions and examines how privacy risk shapes behavioral outcomes. The subsequent subsections provide more comprehensive discussions on the findings.

Motivational Message in MLBA

Marketers design their MLBA messages to impact consumer buying behavior measured through changes in sales, a retailer's market share, and patterns of business strategy. In doing so, marketers often exclude or ignore the likely presence of influencing factors, such as perceived motivation, value-based opinion, and privacy risk. A LSCA offers an integrative support platform between consumers and retailers on one hand; on the other hand, the resulting interactions can go so far as to encourage further engagement with the retailers via the LSCAs and consequently extend the marketing outcomes. Often, the advertisement strategy that delivers positive business outcomes lies in the cleverly drafted dialogues as well as the use of memorable messages. Therefore, within the context of this study, MLBA messages crafted to inspire functional, symbolic, and hedonic motivations were examined to demonstrate the extent to which these MLBA message creation tactics can influence retailer engagement on a LSCA through altering consumers' value perceptions.

In this study, the functional and hedonic motivation message stimuli did successfully generate the respective motivations in participants' perception. This manipulation check results indicate the possibility of manipulating consumers' perceptions of LSCAs' motivations behind their MLBA messages although the symbolic motivation message stimulus failed to generate more symbolic motivation than other motivational messages (and thus was not used in the main experiment). Because previous research considered both symbolic and hedonic messages as the component of experiential value (Haghirian & Inoue, 2007; Komulainen et al., 2007), the lack of significant differences in consumers' perceived motivations upon exposure to the symbolic and

hedonic motivational messages may stem from this conceptual overlap, which warrants further research.

Motivational Message Effects on Perceived Values

A consumer will engage on a LSCA if the MLBA messages inspire favorable value of engaging with a retailer on a LSCA. According to the study context, MLBA messages tend to motivate consumers in assessing potential values of engaging in a LSCA that ultimately shapes consumers' current and future attitude and intention to engage with a retailer on a LSCA. Whether social, economic, or symbolic, a consumer's perceived value of engagement with a retailer, as a result of the comparative advantage drawn from the motivation perceived from a MLBA message, tends to lead to a behavioral outcome, such purchase decisions.

A LSCA, as a tool, provides a platform through which consumers can interact with both retailers and other consumers, thus allowing for comprehensive sharing of experiences resulting from the use of a product or a service. The first research purpose of this study was to examine the effects of MLBA motivational messages (functional and hedonic) on consumers' different domains of perceived values (economic, social, and entertainment values) of engagement with a retailer on a LSCA. Findings related to this purpose are crucial in that they enable us to understand MLBA motivational stimuli as a predictor of consumer perceptions of varying dimensions of value and therefore inform the importance of choosing the right motivational strategies for MLBA communications to generate value perceptions desired by the retailer.

Specifically, findings of this study provide support for H1, which predicted that the functional motivation message in MLBA would influence consumers to perceive a higher economic value as compared to the hedonic or no motivation messages. Based on the results, we can conclude that functional messages in MLBA tend to compel consumers to value the

instrumental and functional benefits of engaging with a retailer on a LSCA. This finding corroborates previous findings from Wu (2016) who reported that the relationship of engagement motivations and engagement attitude with MSN apps significantly mediated by advertisement value.

However, findings of this study did not provide support for H2, which predicted that a hedonic motivation message in MLBA would lead to a higher entertainment value perception as compared to the functional or no motivation messages. In other words, the use of hedonic motivational content aligned with an entertainment aspect of engaging with a retailer on a LSCA did not lead to a heightened sense of the entertainment value of the engagement. Although a research found entertainment motivations influence the use of Facebook places (Cho et al., 2014), virtually no literature described this specific hedonic motivation in MLBA. This study took a new approach to introduce hedonic motivation such as fun activity at the physical place (i.e., music in the restaurant). Most of the previous studies utilized virtual space in conceptualizing hedonic-based motivations (Sun et al., 2015; Wu, 2016). The non-significant effect of hedonic motivation on entertainment value may signify consumers' under-developed connection between virtual world (e.g., retailer's page on LSCA) and physical world (e.g., retailer's physical store), which warrants future research.

Due to the lack of success in the symbolic motivation message manipulation, the effect of symbolic motivation message on perceived social value could not be examined in this study. But, the investigation of RQ1 which asked to explore the comparison of consumers' perception of social value among the functional, hedonic, and no motivation message conditions revealed non-significant differences across these three conditions. This result may imply that the social value of engaging with retailers via LSCAs is not affected by either functionally or hedonically

motivated marketing stimuli. Being a social media, a LSCA provides the virtual space in which consumers merely perceive functional or hedonic rationales to check in at a physical place. Given the importance of social value in consumers' use of social media such as LSCAs (Yu et al., 2013), this finding suggests a need for further investigations on MLBA message factors that can impact consumers' social value perceptions with regard to engaging with a retailer on LSCAs.

Engagement Value, Attitude, and Intention

The second and third purposes of the study was to examine the TRA-based predictions for the belief-attitude-intention link within the context of engagement with a retailer on a LSCA. Specifically, this study examined the influences of consumers' perceived values (economic, social, and entertainment values) on their attitudes toward engagement with a retailer on LSCA, and the influence of consumers' attitudes on their intentions toward engagement with a retailer on LSCA. The TRA-based predictions were supported. As hypothesized by H3, consumers' engagement attitude tends to be determined by the economic, social, and entertainment values associated with engagement with a retailer on a LSCA.

First, findings from the examination of the belief-attitude link indicate that consumers' perceived economic and entertainment values are relevant to enhancing their attitude towards engagement with a retailer via a LSCA. This finding supports the notion that consumers were more inclined to engage with retailers via LSCA if they perceived the MLBA message conferring as either economic or entertaining value (Turel, Serenko, & Bontis, 2007; Yu et al., 2013). On the other hand, perceived social value did not significantly predict consumer engagement attitude in this study, which is not aligned to the previous literature (Yu et al., 2013). One possible reason could be the lack of variance in the perceived social value data, as partly

evidenced by non-significant differences in social value perceptions across the three experimental conditions, due to the exclusion of the symbolic motivation message stimulus from the main experiment. Therefore, the lack of significance in the relationship between perceived social value and attitude found in this study does not necessarily mean that social value is less important than the other two values in predicting consumer attitude towards engagement with a retailer on a LSCA.

The attitude-intention link postulated by the TRA was also supported in this study. Specifically, consumers' attitude towards engagement with a retailer on a LSCA was found to be a significant, positive predictor of their intention to engage with the retailer on the LSCA. Taken together, the current study abstracts that a consumer's attitude towards engagement with a retailer on LSCA following their exposure to MLBA motivational messages determines the likelihood of actual engagement. This result corroborates those previous findings by revealing user attitude and behavior as the outcomes of location-based advertising (Gazley et al., 2015; Lin et al., 2013). This result emphasizes the importance of precisely crafting mobile marketing messages with specific values and supports the standpoints of previous studies regarding behavioral outcomes of mobile advertising (Bauer et al., 2005; Wu, 2016).

Privacy Risk

Engaging in a LSCA through check-in can make consumers feel vulnerable (Andrews et al., 2016; Bansal & Gefen, 2010) because retailers utilize some of consumers' personal information, such as location, demographic, and/or social media activity or networks. A moderating effect of privacy riskwas predicted for the relationship between engagement attitude and intention in H5. To that end, results from regression analyses demonstrated no significant moderation upon the relationship between engagement attitude and engagement intention toward

a LSCA. Several previous studies have found privacy risk as an inhibitor for mobile marketing adoption in some cases; however, young consumers have been found relatively free from the risk of privacy during their location-based information sharing (Fodor & Brem, 2015; Hubert et al., 2017; Kim, 2016). The non-significant privacy risk moderating effect found in this study suggests that consumers might ignore privacy risk for less cognitively demanding tasks such as check-in at a restaurant on a LSCA (Hubert et al., 2017). This study considered check-in as the only mean of engaging with a retailer on a LSCA. Further research might need to examine the moderating effect of privacy risk in the context of other types of engagement behavior, such as posting videos, photos, and comments, Moreover, this study manipulated MLBA messages in the context of offline retailing, while consumers might feel minimum risk regarding past transactions, bank/credit card information, and other financial activities that were found considerably vulnerable in previous studies (Bansal & Gefen, 2010; Shankar & Balasubramanian, 2009). In addition, users' perceptions of control over the information they share on a LSCA might interact with risk beliefs (Hubert et al., 2017) which could be considered in future studies.

Implications

Theoretical Implications

The current study provided a conceptual basis for further empirical research on MLBA and consumers' engagement with retailers on LSCAs, revealing a more concrete framework of MLBA-driven consumer engagement. That is, this study provided the specific effects of two different types of MLBA motivational messages and three different domains of perceived values as antecedents of consumers' engagement attitude and behavior.

The current study used a theoretical framework based on uses and gratification (U&G) theory and theory of reasoned action (TRA) in the context of location-based advertising. To explain how the motivations inserted in MLBA trigger users' minds for LSCA engagement, the U&G theory fits well to the study. Through consumer survey, functional and hedonic motivational messages emerged as the successful manipulation in this study which predicts the values of engaging with retailers on a LSCA. Virtually no research applied the U&G theory to examine consumers' motivations in MLBA to engage with a retailer on a LSCA, except Lin et al. (2016) who explained the relationship between advertising value of MLBA and users' motivations through the U&G theory. In this study, two motivations inserted in MLBA messages are hypothesized to predict consumers' perceived values of LSCA engagement. Therefore, this study extended the applicability of the model to the location-based mobile marketing context.

In case of the TRA, prior studies mainly focused on subjective norms of social media usage (Kwon & Wen, 2010; Pelling & White, 2009) or continual social media usage (Choi, 2013), with little attention paid to the behavioral belief or value-based perspective of consumers' engagement with a retailer on a LSCA as drivers of consumer attitude and behavioral intentions. The belief-attitude-behavioral intention link proposed by TRA is used in this study to predict consumers' value, attitude, and intention to engage with retailers on LSCAs. By finding significant relationship between values and consumers attitude, subsequently intention to engage with a retailer on a LSCA, this study confirmed the belief-attitude-behavioral intention link proposed by TRA.

This study also addresses the literature gap that while a horde of previous studies largely sought to explore the utilitarian perspective of MLBA focusing on the effectiveness of the promotional offers, hardly any studies have attempted to explain the experiential feature of

MLBA messages that attract consumers to engage with retailers. To fill this gap, the current study manipulated the type of motivation evoked by MLBA messages sent by a LSCA and how these motivational messages in MLBA controlled consumers' perceptions, attitude, and ultimately their behavioral intentions with respect to engaging with the retailer on the LSCA. Particularly, this study employed a value-based perspective of consumers' engagement with retailers following exposure to MLBA messages, which also is an area that until this study researchers had not paid significant attention. Specifically, this study revealed how functional and hedonic motivations employed in MLBA messages helped stimulate perceived economic and entertainment values that drive consumer engagement with a retailer on a LSCA, which in turn led to their attitude and intention toward the engagement.

The major methodological contribution of this study is the use of experimental design in examining the effects of different MLBA messages. This research utilized a controlled experiment to empirically examine the effects the motivations intended by MLBA messages on consumers' value perceptions, attitude, and intention with regard to engagement in a LSCA. In the area of location-based advertising, previous studies mostly relied on the methodology of consumer surveys. Utilizing consumer surveys, Sun et al. (2015) explored location-based social network services (LBSNS) through several bipolar parameters including benefit structure (utilitarian vs hedonic), privacy calculus context (e-commerce vs LBSNS), and gender differences (male vs female). To understand how mobile users are continually engaging in different mobile activities, Kim et al. (2013) conducted a survey using undergraduate student samples. Unlike these studies, the current research manipulated conditions through an experimental design to establish the causal relationships between MLBA messages and

consumer perception, attitude, and behavioral intention variables, addressing the methodological gap in previous studies in this area.

Further still, the study found a gap in research regarding people's understanding of the concept of consumer engagement, which seemed rather vague and abstract. With the knowledge that consumer participation in a LSCA varied highly, the current study identified the need to analyze the consumer engagement through check-in and compare the effectiveness of the different MLBA messages to deliver the desired consequences.

Finally, this study pointed out a gap in the extent to which consumers' privacy risk among influences their LSCA engagement. Previous studies seemed to have postulated that although consumers held positive values and attitudes toward engaging with retailers on a LSCA, their final decisions in LSCA engagement would be affected by privacy risk (Fodor & Brem, 2015; Hubert et al., 2017; Kim, 2016). Virtually no research considered privacy risk in the context of using the virtual space and physical space simultaneously. The current study contributes an understanding towards the risk perception of consumers who visit a physical store led by a virtually formed motivation. Thus, the study has been efficient in investigating the research questions regarding privacy risk and filling the gaps that existed in this realm study.

Managerial and Practical Implications

Mobile location-based advertising (MLBA) is one of the ultimate marketing tools, which enables retailers to send tailored messages to customers' mobile devices (Berman, 2016). Because of the localization feature of the MLBA, retailers can utilize diverse marketing tactics to tailor mobile advertising. In the past decade, many retailers have adopted multi-channel or omni-channel platforms using diverse technologies and marketing tactics, such as online/mobile order pick up, order-online/return-in-store, and scan-and-go, to offer better convenience and customer

services (Andrews et al., 2016). This study provides meaningful implications to retailers that sought to utilize MLBA in their mobile marketing and encourage consumers' engagement with retailers on LSCAs.

Foremost, by presenting a unique perspective of MLBA messages regarding their role in promoting consumers' engagement with a retailer on a LSCA, it shows the potential to enhance consumer-retailer interaction. Since the advancement of location-based technology has provided retailers with a tool to pursue more tailored marketing stimuli to individual consumers (Frank & Wuersch, 2006), increasingly more retailers are seeking to adopt MLBA as part of their mobile marketing (Lin et al., 2013). In this trend, the key to success will be what kinds of MLBA stimuli they need to choose based on differing motivations and values they provide, and how these stimuli could point to the appropriate levels of consumers' engagement on LSCAs as intended. To this end, the findings of this study broaden retailers' understanding of the effectiveness of various motivational messages of MLBA in driving consumers' engagement on LSCAs, thus providing insights on how they could maximize the effectiveness of their investment in MLBA.

Next, the rapid transformation of social media has influenced brands at the point of creating renewed approaches towards marketing strategy and social media selection (Ashely & Tuten, 2015; Lin et al., 2016). LSCAs, as a tool, provide a platform through which consumers can interact with both retailers and other consumers, thus allowing for comprehensive sharing of product or service use experiences. The findings of this research may help brand managers better understand the antecedents of effective message strategy and ways to engage consumers in the brand on a LSCA through check-in. Stirring the motivation initiatives through MLBA messages could enhance the effective use of a LSCA. Consumers' sensitivity toward over-usage of LSCAs and lack of convenience in desired information lead to negative consequences (Hubert et al.,

2017). Specifically, an MLBA message that offers monetary incentives in the form of discounts has the potential of attracting consumers. Moreover, a MLBA message with enjoyment activities motivates consumers to spend their spare time in an effective way.

Furthermore, this research provides valuable insights to brand managers who still rely predominantly on off-line retailing. The off-line retailers are struggling with a volatile retail environment and the advent of giant online retailers, badly in need of improving not only store traffic and sales volume but also customers' in-store experiences and customer relationship management (CRM) (Andrews et al., 2016). Now, approximately 71% of retailers adopt location-based marketing to bring online/mobile shoppers to physical stores (Williams, 2018). Therefore, well-crafted MLBA messages can encourage online consumers to visit physical stores. Also, physical store visitations provide the consumer with assorted product/service lines from which to choose and may even encourage them to purchase more than intended. Retailers could continue the development of MLBA utilizing diverse marketing tactics based on recent purchases, coupon redemption in physical stores, purchase frequency etc. (Andrews et al., 2016). Viewed critically, the motivation to purchase more as inspired by MLBA messages demonstrates their effectiveness in enhancing the value of a product as perceived by a consumer.

Limitations and Recommendations

In this section, the research limitations and corresponding future recommendations are described. This study conducted one pretest before the main experiment to finalize MLBA message stimuli, still methodological and conceptual limitations were present. The study deploys an experimental design to examine the effects of different types of MLBA messages on consumers' perceived values, attitudes, and intentions toward engagement with a retailer on LSCA. The scope of this study does not encompass all research problems lying around the

effects of MLBA messages. Moreover, limitations from stimulus sampling, selected measurements, and selected sampling method also need to be acknowledged. Thus, revealing the following limitations may provide opportunities for future research.

First, despite the attempt to select the most appropriate stimuli for testing the research model, the study chose to test only one retail business context, a restaurant (a service retailer), in designing the stimuli. Using only one retail business category could have impacted the findings as consumers' motivations, interest, involvement, and decision-making criteria may differ by retail business categories. Thus, the findings may not be fully generalized to broad categories of retail businesses. Future research could utilize distinct product and service retail categories to augment the external validity of the findings.

Second, this study applied Yelp as the LSCA and Chili's Grill & Bar as the restaurant in designing the stimuli. Although this study asked participants regarding previous experiences with Yelp and Chili's Grill & Bar, using fictitious LSCAs and retailers would reduce the possibilities of confounding factors.

Third, to manipulate the MLBA motivation message variable, this study employed mock MLBA messages containing varying levels of motivational statements and images presented on visual stimuli simulating screenshots of a smartphone screen. The visual and text components of the MLBA motivational message stimuli could be pre-tested separately to ensure the appropriate manipulation of the stimuli. This study used only one set of stimuli in the pretest stimuli to represent each motivation condition. Further research could use stimulus sampling for MLBA motivations to enhance the external validity.

Fourth, the current study only focuses on the variances of motivations evoked by MLBA messages and does not examine other MLBA message attributes that may generate varying

effects on consumers' engagement with a retailer on LSCA. For example, modes of the message (e.g., text vs. multimedia) and the types of content shared in connection to the message (e.g., geo-specific location, comments, images, and videos) may also have effects on consumer engagement, which can be future research topics.

Finally, both the pretest and the main experiment were conducted using samples recruited from Amazon Mechanical Turk. In some cases, MTurk workers may not be representative of the general population in terms of gender, age, education, and income. Thus, further research may employ a variety of recruiting strategies to cross-validate findings from the current study. In addition, future research could investigate the impact of the usage behavior (e.g. active users vs. passive users) and demographics (e.g., gender, age). For instances, compared to female consumers, male consumers may seek more utilitarian features of MLBA rather than hedonic features.

Conclusions

The current study has effectively leveraged the power inherent in the Uses and Gratification theory and the Theory of Reasoned Action to show how different MLBA motivational messages influence consumers' perceptions regarding the value of a product, as well as their intentions and attitudes to engage with a retailer on a LSCA. Specifically, MLBA motivational messages significantly inspired perceived economic and entertainment values; hence, retailers can focus on the same to drive consumer interactions on the LSCA. The study also established positive relationships between perceived economic value and engagement attitudes on the LSCA. The study established that consumers' attitude to engage with a retailer on a LSCA is a significant predictor of their intention to engage. Finally, the study has also shown that privacy riskdoes not factor into the relationship between consumers' attitude and

intent of engaging with a retailer on a LSCA. Based on these findings, this study informs retailers on how to better leverage the power of MLBA to inspire consumer engagement with a retailer on a LSCA.

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APPENDIX A. EXAMPLES OF STIMULI

Figure 2. Functional Message

Figure 3. Symbolic Message

Figure 4. Hedonic Message

Figure 5. No Message

APPENDIX B. PRETEST QUESTIONAIRRE

Pretest Questionnaire

SURVEY OF MOBILE LOCATION-BASED ADVERTISING

1. We would like to know about your experiences with Yelp, a mobile application, and the restaurant named Chili's Grill & Bar. Please indicate your level of agreement with each of the following statements.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
Using Yelp is part of my routine.	1	2	3	4	5
I always check Yelp anytime I am using my smartphones or tablets.	1	2	3	4	5
I use things from Yelp in online discussion or arguments with people I know.	1	2	3	4	5
I feel positive about advertising in Yelp.	1	2	3	4	5
I will think about accepting advertisements in Yelp.	1	2	3	4	5
I am familiar with this restaurant brand, Chili's Grill & Bar.	1	2	3	4	5
I can recognize this restaurant brand, Chili's Grill & Bar among other restaurant brands.	1	2	3	4	5
I am aware of this restaurant, Chili's Grill & Bar.	1	2	3	4	5

Mobile Location-Based Advertising

Location-based social commerce applications (LSCA), such as Yelp and Foursquare, use real time location data from mobile devices (e.g., smartphone) and send customized advertisement and promotion messages to targeted consumers.

Now, we will show you a series of images one by one and ask your thoughts toward these images. Please pay attention to image to answer the following questions.

(All the following four stimuli will be provided to each participant)

2. We would like to know what you would think about the location-based advertising message that you just saw. Please indicate your level of agreement with each of the following statements.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
This location-based advertising message tells me that I would get more timely product promotion information than most consumers through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertising message tells me that I would get discounts or special deals that most consumers do not get through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertising message tells me that I would get better prices than most consumers through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertising message tells me that I would get better shopping services than most consumers through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertising message tells me that it would help me to be accepted by others through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertising message tells me that it would improve the way I am perceived by others through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertising message tells me that it would make a good impression about me to other people through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertising message tells me that it would make me feel good through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertising message tells me that it would give me pleasure through check-in at Chili's on Yelp.	1	2	3	4	5

Demographic Information

DIRECTION: Please answer the following questions by checking the appropriate selection, filling in the blanks or writing up your answer.

1. What is your **age?** Please type in:

2. What is your **gender?**
   - □ Male
   - □ Female

3. Which of the following **ethnic groups** do you consider yourself a member of?
   - □ American Indian/Alaskan Native
   - □ Asian/Pacific Islander
   - □ Hispanic or Latino
   - □ Black, Non-Hispanic
   - □ White, Non-Hispanic
   - □ Others or mixed (Please specify: _____)

4. What is your **education level**?
   - □ Some high school or less
   - □ High school graduate
   - □ Some college education or Associate degree
   - □ Bachelor's degree
   - □ Graduate degree (Master's or PhD)
   - □ Other (Please specify: _____)

5. What is your current combined **annual household income**?
   - □ Under $25,000
   - □ $25,000 TO $49,999
   - □ $50,000 TO $74,999
   - □ $75,000 TO $99,999
   - □ $100,000 and above

6. What is your current **employment status**?
   - □ Employed for wages
   - □ Self-employed
   - □ Out of work
   - □ Homemaker
   - □ Student
   - □ Military services

- Retired
- Unable to work

7. What is **your state of residence**? Please select one among the dropdown options below (e.g., AL, NY, NC, CA, etc.)

THANKS FOR PARTICIPATING IN THE SURVEY!

APPENDIX C. MAIN EXPERIMENT QUESTIONNAIRE

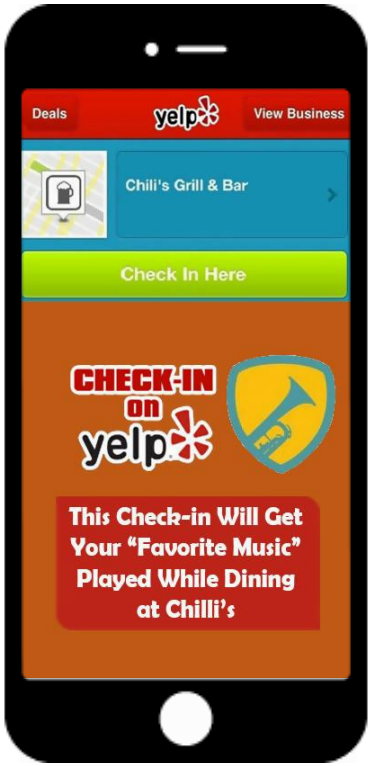
SURVEY OF MOBILE LOCATION-BASED ADVERTISING

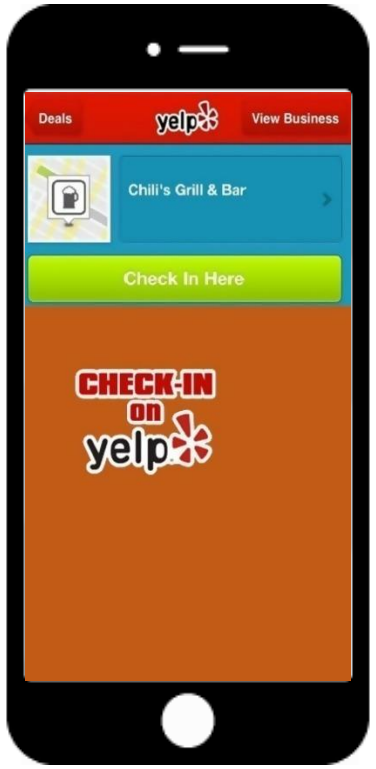
Mobile Location-Based Advertising

Location-based social commerce application (LSCA), such as Yelp and Foursquare, use real time location data from mobile devices (e.g., smartphone) and send customized advertisement and promotion messages to targeted consumers.

Below, you will see an image of Yelp's location-based advertising message about a restaurant. Imagine that you received this message through your smartphone. Please take a look at the images and answer the following questions.

(One of the following three stimuli will be provided according to the experimental cell that the participant be assigned)





1. We would like to know about your experiences with Yelp and the restaurant named Chili's Grill & Bar. Please indicate your level of agreement with each of the following statements.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
Using Yelp is part of my routine.	1	2	3	4	5
I always check Yelp anytime I am using my smartphones or tablets.	1	2	3	4	5
I use things from Yelp in online discussion or arguments with people I know.	1	2	3	4	5
I feel positive about advertising in Yelp.	1	2	3	4	5
I will think about accepting advertisements in Yelp.	1	2	3	4	5
I am familiar with this restaurant brand, Chili's Grill & Bar.	1	2	3	4	5
I can recognize this restaurant brand, Chili's Grill & Bar among other restaurant brands	1	2	3	4	5
I am aware of this restaurant, Chili's Grill & Bar	1	2	3	4	5

2. Now, we'll show you an image and ask your thoughts toward this image. Please pay attention to the image to answer the following questions.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
This location-based advertisement tells me that I would get more timely product promotion than most consumers through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertisement tells me that I would get discounts or special deals than most consumers through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertisement tells me that I would get better prices than most consumers through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertisement tells me that it would make me feel good through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertisement tells me that it would give me pleasure through check-in at Chili's on Yelp.	1	2	3	4	5

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This location-based advertisement tells me that it would make me excited through check-in at Chili's on Yelp.	1	2	3	4	5
This location-based advertising message tells me it would give me entertainment through check-in at Chili's on Yelp.	1	2	3	4	5

3. Now, we would like to know what you would think about check-in at Chili's on Yelp when you received this location-based advertising message. Please indicate your level of agreement with each of the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Check-in at Chili's on Yelp would be reasonable.	1	2	3	4	5
Check-in at Chili's on Yelp would offer value for money.	1	2	3	4	5
Check-in at Chili's on Yelp is reasonably valued upon this advertisement.	1	2	3	4	5
Check-in at Chili's on Yelp is a good deal upon this advertisement.	1	2	3	4	5
People who influence my behavior would think I should check-in at Chili's on Yelp	1	2	3	4	5
People who are important to me would want me to check-in at Chili's on Yelp	1	2	3	4	5
I get a good reputation from others when I am good at checking-in at Chili's on Yelp.	1	2	3	4	5
I expect that checking-in at Chili's on Yelp will add to my personal uniqueness.	1	2	3	4	5
Checking-in at Chili's on Yelp would be enjoyable.	1	2	3	4	5
The process of check-in at Chili's on Yelp would be pleasant.	1	2	3	4	5
Checking-in at Chili's on Yelp would be fun.	1	2	3	4	5

4. Next, we would like to know about your thoughts toward check-in at Chili's on Yelp. Please indicate how you think by choosing one among the five points on each continuum (e.g., toward 1 = close to the description on the left; toward 5 = close to the description on the right).

I think, "check-in" at Chili's on Yelp is:						
Foolish	1	2	3	4	5	Wise
Useless	1	2	3	4	5	Useful
Waste of Time	1	2	3	4	5	Wise Use of Time
Negative	1	2	3	4	5	Positive
Worthless	1	2	3	4	5	Valuable
Bad	1	2	3	4	5	Good

5. We would like to know about your likelihood of check-in at Chili's on Yelp. Please indicate your level of agreement with each of the following statements.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I would intend to check-in at Chili's on Yelp upon this location-based advertising message.	1	2	3	4	5
It is likely that I would check-in at Chili's on Yelp upon this location-based advertising message.	1	2	3	4	5
I would be likely to check-in at Chili's on Yelp upon this location-based advertising message.	1	2	3	4	5

6. Now, we would like to understand your risk about disclosing your personal information to others. Please indicate your level of agreement with each of the following statements.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
Disclosing my personal information may bring many unpredicted problems.	1	2	3	4	5
Disclosing my personal information is risky.	1	2	3	4	5
Disclosing my personal information may bring potential losses.	1	2	3	4	5

Demographic Information

DIRECTION: Please answer the following questions by checking the appropriate selection, filling in the blanks or writing up your answer.

1. What is your **age?** Please type in:

2. What is your **gender?**
   - □ Male
   - □ Female

3. Which of the following **ethnic groups** do you consider yourself a member of?
   - □ American Indian/Alaskan Native
   - □ Asian/Pacific Islander
   - □ Hispanic or Latino
   - □ Black, Non-Hispanic
   - □ White, Non-Hispanic
   - □ Others or mixed (Please specify: _____)

4. What is your **education level**?
   - □ Some high school or less
   - □ High school graduate
   - □ Some college education or Associate degree
   - □ Bachelor's degree
   - □ Graduate degree (Master's or PhD)
   - □ Other (Please specify: _____)

5. What is your current combined **annual household income**?
   - □ Under $25,000
   - □ $25,000 TO $49,999
   - □ $50,000 TO $74,999
   - □ $75,000 TO $99,999
   - □ $100,000 and above

6. What is your current **employment status**?
   - □ Employed for wages
   - □ Self-employed
   - □ Out of work
   - □ Homemaker
   - □ Student
   - □ Military services

- Retired
- Unable to work

7. What is your **state of residence**? Please select one among the dropdown options below (e.g., AL, NY, NC, CA, etc.)

THANKS FOR PARTICIPATING IN THE SURVEY!

APPENDIX D. INSTRUMENT TABLE

Construct	Adapted Items	Original Items	Original Construct
Functional message	1. This advertisement tells me that I would get more timely product promotion than most consumers through check-in at Chili's on Yelp. 2. This advertisement tells me that I would get discounts or special deals than most consumers through check-in at Chili's on Yelp. 3. This advertisement tells me that I would get better prices than most consumers through check-in at Chili's on Yelp. 4. This advertisement tells me that I would get better services than most consumers through check-in at Chili's on Yelp.	1. Using this location-based recommendation agent (LBRA) would enable me to get more timely product promotion information than most consumers 2. Using this LBRA would enable me to get discounts or special deals that most consumers do not get 3. Using this LBRA would enable me to get better prices than most consumers 4. Using this LBRA would enable me to get better shopping services than most consumers	Perceived Special treatment Zhu et al. (2014)
Symbolic message	1 This advertisement tells me that it would help me to be accepted by others through check-in at Chili's on Yelp. 2 This advertisement tells me that it would improve the way I am perceived by others through check-in at Chili's on Yelp. 3 This advertisement tells me that it would make a good impression about	1. Using mobile location-based shopping service would help me to be accepted by others 2. Using mobile location-based shopping service would improve the way I am perceived by others 3. Using mobile location-based shopping service would make a good impression on other people 4. Having products bought with mobile location-based shopping service would bring the owner social approval	Social Self-concept Benefit Kang & Johnson (2015)

	me on other people through check-in at Chili's on Yelp. 4 This advertisement tells me that it would bring me the social approval through check-in at Chili's on Yelp.		
Hedonic message	1 This advertisement tells me that it would make me feel good through check-in at Chili's on Yelp 2 This advertisement tells me that it would give me pleasure through check-in at Chili's on Yelp 3 This advertisement tells me that it would make me excited through check-in at Chili's on Yelp. 4 This advertising message tells me it would give me entertainment through check-in at Chili's on Yelp.	1. Using mobile location-based shopping service would make me feel good 2. Using mobile location-based shopping service would give me pleasure 3. I find advertising messages via the mobile phone exciting. 4. I find SMS messages are entertaining.	Emotional Benefit Kang & Johnson (2015) Perceived Utility of Entertainment Bauer et al. (2005)
Prior Yelp engagement	1. Using Yelp is part of my routine. 2. I always check Yelp anytime I am using my smartphones or tablets. 3. I use things from Yelp on online discussion or arguments with people I know.	1. Using MSN apps is part of my routine. 2. I always check MSN apps anytime I am using my smartphones or tablets. 3. I use things from MSN apps in discussion or arguments with people I know.	MSN Engagement Wu (2016)
	1. I feel positive about advertising on Yelp. 2. I will think about accepting advertisements on Yelp.	1. I feel positive about advertising in MSN apps. 2. I will think about accepting advertisements in MSN apps.	Advertising Acceptance Wu (2016)
Prior Chili's Grill & Bar familiarity	1. I am familiar with this restaurant brand, Chili's Grill & Bar	1. I am familiar with this restaurant brand 2. I can recognize this brand among other restaurant brands 3. I am aware of this brand	Brand awareness

	2. I can recognize this restaurant brand, Chili's Grill & Bar, among other restaurant brands 3. I am aware of this restaurant, Chili's Grill & Bar		Han et al. (2015)
Perceived economic value	1. Check-in at Chili's on Yelp would be reasonable. 2. Check-in at Chili's on Yelp would offer value for money. 3. Check-in at Chili's on Yelp is reasonably valued upon this advertisement. 4. Check-in at Chili's on Yelp is a good deal upon this advertisement.	1. Mobile location-based shopping would be reasonable 2. Mobile location-based shopping offers value for money 3. Mobile location-based shopping is reasonably priced 4. Mobile location-based shopping is a good service for the price	Functional Benefit Kang & Johnson (2015)
Perceived social value	1. People who influence my behavior would think I should check-in at Chili's on Yelp 2. People who are important to me would want me to check-in at Chili's on Yelp 3. I get a good reputation from others when I am good at checking-in at Chili's on Yelp. 4. I expect that checking-in at Chili's on Yelp will add to my personal uniqueness	1. People who influence my behavior would think I should use location-based social networking services (LB-SNS) 2. People who are important to me would want me to use LB-SNS 3. I get a good reputation from others when I am good at using LB-SNS 4. I expect that using LB-SNS will add to my personal uniqueness	Social Value Yu et al. (2013)
Perceived entertainment value	1. Checking-in at Chili's on Yelp would be enjoyable. 2. The process of check-in at Chili's on Yelp would be pleasant.	1. I find posting public photos on Flickr to be enjoyable. 2. The process of posting public photos on Flickr is pleasant.	Enjoyment Nov et al. (2010)

	3. Checking-in at Chili's on Yelp would be fun.	3. I have fun posting public photos on Flickr.	
Attitude toward engagement with a retailer on a LSCA	I think, "check-in" at Chili's on Yelp is: 1. Foolish-Wise 2. Useless-Useful 3. Waste of Time-Wise Use of Time 4. Negative- Positive 5. Worthless-Valuable 6. Bad- Good	Attitude toward coupon usage: 1. Foolish-Wise 2. Useless-Useful 3. Waste of Time-Wise Use of Time 4. Negative- Positive 5. Worthless-Valuable 6. Bad- Good	Attitude toward coupon usage Shimp and Kavas (1984)
Intention toward engagement with a retailer on a LSCA	1. I would intend to check-in at Chili's on Yelp in the next three months 2. It is likely that I would check-in at Chili's on Yelp in the future. 3. I would be likely to check-in at Chili's on Yelp in the future.	1. I intend to use LB-SNS frequently in the next three months 2. I intend to use LB-SNS in the future 3. I will continuously use LB-SNS in the future	Behavioral Intention to Use Yu et al. (2013)
Privacy risk	1. Disclosing my personal information may bring many unpredicted problems 2. Disclosing my personal information is risky 3. Disclosing my personal information may bring potential losses	1. Disclosing my location information to this service provider may bring many unpredicted problems 2. Disclosing my location information to this service provider is risky 3. Disclosing my location information to this service provider may bring potential losses	Privacy Risks Sun et al. (2015)