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## THE SELF-EXPRESSIVENESS OF FOOTPRINTS: UNDERSTANDING THE DRIVERS OF CHECK-IN

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### Abstract

Drawing from the Dramaturgical theory (Goffman, 1959), present study contributes to propose a conceptual model that illuminate the underlying psychological mechanism which faciliate individual's check-in behavior. Goffman (1959) posits that "impression management" impacts the self presentation of individuals, indicating that individuals adopt deliberate decisions to reveal particular aspects of the self. Past studies emphasize on the privacy issue that impacts location sharing (Barkhuus et al., 2008), while present study highlights that socially driven factors portrays a more comprehensive story that disclose the antecedenting drivers of check-in. This contributes in providing a framework to the previous sporadic studies concerning social motives in check-in literatures. Specifically, the findings support the view that individual's public self-consciousness and peer influence, compelled by desirable self-presentation leads to involvment in check-in. This finding extends past researches in identifying two dimensions that drive check-in involvement. Furthermore, the results of this study confirm that driven by psychological proximity, a positive relationship is created between check-in involvement and place attachment, which in turn faciliates continual check-in behavioral intentions and the advocation of check-in.

Keywords: Check-in, Public Self-Consciousness, Peer Influence, Place Attachment

### **1 INTRODUCTION**

As digital communication becomes more social and mobile, the importance of mobile marketing has surged for today's marketers. Social media networking sites such as Facebook, Myspace, Second Life and Foursquare are experiencing massive growth because of its extraordinary popularity. Individuals connect with their friends to share their comments and daily activities, producing proliferated user-generated contents which facilitate even more social interaction in the online environment. Among which location-based online social networking apps, which enable users to share their present locations and activities by "checking-in" websites has grown exponentially in recent years (Lindqvist et al., 2011). Individual share their locations with others through Facebook, Foursquare, Gowalla are just a few samples, as there are around 20,000 real-time location-based mobile apps available to users (Hoffman and Novak, 2011). Individuals shared their locations on Foursquare, 6 million times per day in 2013 (Frier, 2013). However, despite the widespread usage of location sharing devices, our understanding on this phenomenon that is gaining momentum in the dynamically changing social networking environment is far from comprehensive.

Check-in originally was created to establish awareness and facilitate store traffic, where stores encourage users to check-in at the store to receive promotional benefit (Hoffman and Novak, 2011). Furthermore, check-in has evolved to incorporate game elements such as Foursquare, where users can obtain location based points, badges and rewards (Lindqvist et al., 2011). However, a great number checking-ins on social networking sites are current location sharing on personal activities, which are not game driven nor commercial benefit driven. Individuals have control on checking-in to the locations showing up on the semantically named venues or they can self create a personalized name for the location. Furthermore, individuals can also decide to share the location to specific friends only or to all users. Therefore, by location sharing, checking-in allows users to tell friends where they are, track the history of where they have been and also who they have been with (Cramer, Rost and Holmquist, 2011). Self revealing more than just text-based information, the location sharing feature makes check-in distinctive from other social networking sites. Previous researches emphasize on the privacy issue that impacts location sharing (Barkhuus et al., 2008; Lindqvist et al., 2011; Vicente et al., 2011, Tang et al, 2010), however why privacy has not impeded the popular adoption of check-ins warrant further investigation. Lindqvist et al., (2011) assert that socially driven factors sustains the continual adoption of check-in, thus drawing from social interaction perspective, present study seeks to gain further insight and investigate into the underlying psychological factors that facilitate the adoption of check-in.

Research in social psychology on the dramaturgical theory (Goffman, 1959) forms the theoretical basis for present study's examination. According to the dramaturgical theory (Goffman, 1959), individual's social interaction are similar to the theater, where individuals are conscious at how we present our selves to the others. Previous studies in social interaction assert that individual's public self-awareness and group normative values impact the way individuals establish desired impressions

to others (Joinson, 2001). Because delivering a desirable self presentation is a deliberate action, thus high involvement is also likely to occur in the process. On the other hand, the act of virtual check-in to location is similar to "like" (Hoffman and Novak, 2011), which we suggest may facilitate place attachment which creates positive affects driving continual check-in behaviors. Therefore, drawing from the Dramaturgical theory (Goffman, 1959), present study empirically investigates a conceptual model to illuminate the underlying psychological mechanism which facilitate individual's check-in behavior.

### 2 THEORETICAL FOUNDATION AND HYPOTHESES

#### 2.1 Check-In Motivations

Past research on check-in can be categorized into two types (Tang et al., 2010). The first is the purpose driven motivated location sharing, which account for the major focus of previous studies (Hsieh et al., 2007). The purpose driven location sharing are employed for functional purpose such as coordination, and privacy features such as plausible deniability, real-time feedback, and audit logs in purpose driven location sharing are essential themes of discussion. However, these privacy features are not an issure for general purpose information sharing sites such as Facebook, because users have full control over the location sharing of their activities. Thus the second type of studies in check-in literatures examines the socially driven motivations. This type of location sharing is not about the practicality of information sharing, but is related to how the information are used and read, which is more associated with emotional sharing (Brown et al., 2007). It not only shows the locations of the activity, but more importantly it reveals the emotions, lifestyle which supports the depiction of a story (Barkhuus, 2008). The ongoing storyline provides a platform for interpersonal interactions on the tangible checked-in locations, which facilitates fun and enjoyment. Lindqvist et al., (2011) asserts that the game elements of seeking badges are initial driving motivation for using Foursquare, but this motivation declines as novelty effects declines, yet social factors such as seeking fun and synchronization with friends continue to trigger check-ins. Other studies show that check-ins to locations can enhance the sense of bonding, we-ness to the group one belongs, as self revealing of location can deliver the message of assurance that all is well (Iachello et al., 2005). Furthermore, studies also show that people can selectively choose to check-in to locations that increase self image and enhance self presentation (Scellato et al., 2011).

### 2.2 Dramaturgical Theory

According to the dramaturgical theory (Goffman, 1959), the interaction between individual resembles social interaction to the theater. Therefore, individuals can be perceived as either performers acting on the stage, audience that watch the performance, or outsiders that function in certain "stages" or social environment. Goffman(1959) posits that "impression management" impacts the way individuals

present themselves, indicating that individuals adopts a deliberate decision to reveal particular aspects of the self and conceal other parts, just as actors do on stage performance. The expressive element of social life is the source of impressions that individual provide to others. The impression that one portrays on stage is the character that one attempts others to hold. Past research in social psychology indicates that factors that influence interpersonal interaction are also reflected in computer mediated environment. Therefore, it is clear that impression management is adopted in social networking interactions. In face-to-face social interactions, physical interactional cues send clear message on the impressions one attempts to build. But in online environment, there are no physical interactional cues, as text-based communication is prevalent. By adopting checking-ins to locations, one can deepen the tangible cues and send a stronger message to create intended impressions to the audience. Therefore, we draw on the dramaturgical theory to provide theoretical reasoning that drives individual's location sharing in check-in.

#### 2.3 Public Self-Consciousness and Check-In Involvement

Public self-consciousness concerns with the self as a social object and is a construct used in the interpersonal contexts. When a person is aware of the perspective of other people, public self-consciousness emerges (Fenigstein et al. 1975). Goffman (1959) describes that the interactions between humans are analogized to performances and actors in performances seek to provide an impression of self to other people. The self manages the interactional ventures strategically and projects his image in a manner that the audience will find credible or appropriate. People high in public self-consciousness are more sensitive to the rejection by a peer group and tend to focus their attention on the manner to present the self in a group-accepted manner (Fenigstein et al. 1975). In the contexts of check-in, past studies indicate that people use online check-in services (e.g., Foursquare, Facebook) for self-presentation purposes (Cramer, Rost, and Holmquist 2011; Lindqvist et al. 2011; Scellato et al. 2011). Based on dramaturgical theory (Goffman,1959), check-in allows a person to make desirable self presentation in front of others (e.g., friends, colleagues..), thus a person with high self-consciousness tends to become involved in check-in to prevent projecting inappropriate self-images to others.

H1: Public self-consciousness positively influences check-in involvement.

#### 2.4 Peer Influence and Check-In Involvement

Peer influence is a person's belief that his/her peers think that one should use check-in (Taylor and Todd 1995). Peer influence may trigger a normative pressure on a person to conform to the expectations of peers. The self seeks to convey an identity consistent with the expectations formed by the audience and with the situation, or stage that frames the interaction (Goffman 1959). In the contexts of check-in, past studies indicate that people use online check-in services for developing and maintaining friendship by checking in interesting places and sharing stories (Barkhuus et al. 2008; Scellato et al. 2011). Based on dramaturgical theory, if the peer influence to check-in is strong, people

tend to be more involved in check-in, because this makes them conform to the norms and expectations of peers.

H2: Peer influence positively influences check-in involvement.

### 2.5 Check-in Involvement and Place Attachment

Involvement is defined as a person's perceived relevance of the object based on inherent needs, values, and interests (Zaichkiwsky 1985). This definition adopts the general view of involvement that a person can be involved in any object as long as that object has personal relevance (Greenwald and Leavitt 1984; Krugman 1967). Following this general view of involvement, a person can establish involvement to check-in. Check-in involvement is a person's perceived relevance of check-in based on inherent needs, values, and interests.

Place attachment represents a positive connection or bond between a person and particular places and has two dimensions-place dependence and place identity (Giuliani and Feldman 1993; Williams and Patterson 1999). Place dependence is the functional aspect of place attachment and concerns about whether the places can provide important features or conditions that support specific goals or desired activities (Williams and Vaske 2003). On the other hand, place identity is the emotional aspect of place attachment and represents the symbolic importance of the places as repository for emotions and relationships that give meaning and purpose to life (Williams and Vaske 2003). Because location-sharing in check-in is not just about practicality or one's activity there but more about emotional affair (Brown et al. 2007), thus place attachment is defined as the emotional aspect of attachment (i.e., place identity) to specific check-in locations in this study.

High involvement makes a person to have special preference to specific object, whereas low involvement results in indifferent preference among objects (Zaichkiwsky 1985). High involvement to check-in makes a person develop special preference for particular locations and this facilitates the establishment of place attachment to check-in locations. Conversely, if a person has low involvement to check-in, he tends to exhibit indifferent preference among locations.

H3: Check-in involvement positively influences place attachment.

### 2.6 Place Attachment, Check-In Intention, and WOM Intention

Place attachment is the emotional attachment between a person and particular locations (Giuliani and Feldman 1993; Williams and Patterson 1999). When people develop high attachment to locations they check-in, they are likely to develop psychological proximity that facilitates psychological ownership to these locations. Psychological ownership is defined as the state in which individuals feel as though the target of ownership (material or immaterial in nature) or a piece of it is theirs (i.e., "It is mine!"; Pierce et al. 2003). Psychological ownership results in a psychological bond between the object and self, and the object is considered as an extended self of the individual. The psychological ownership should provide a sense of satisfaction which in turn facilitates continual check-in intention and

advocacy in check-in intention.

H4: Place attachment positively influences check-in intention.

H5: Place attachment positively influences WOM intention.

### **3 RESEARCH METHODOLOGY**

#### 3.1 Samples

An online survey was conducted to collect data. A questionnaire link was posted on facebook. People who have check-in experiences on facebook are invited to join the online survey. 199 usable data was obtained. Sample characteristics are as follows. 34% of our respondents are male. Of all the respondents, 17% are below 20 years old, 51% are between 21 to 30 years old, 22% are between 31 to 40 years old, and 10% are above 41 years old. Our sample is not restricted to student sample. 33% of our respondents are students and 67% are office workers.

#### 3.2 Measures

All the measures are adapted from established scales to suit the context of online check-in. The items for measuring public self-consciousness are adapted from Fenigstein, Scheier, and Buss (1975). Six items are used to measure public self-consciousness. Peer influence is measured using items developed by Taylor and Todd (1995). It is measured using three items. The items for measuring check-in involvement are adapted from Zaichkowsky (1985). Ten items are used to measure check-in involvement. Place attachment is measured using the scale developed by Williams and Vaske (2003). Because place attachment is defined in this study as the emotional aspect of place attachment. Six items measuring place identity are used. The places that participants could form attachment are not limited to one place because a person could be attached to several places. The items for measuring check-in intention are adapted from Taylor and Todd (1995) and Karahanna, Straub, and Chervany (1999). Two items are used to measure check-in intention. Word-of-mouth intention is measured referring to the items used by Goodwin, Cathy, and Ross (1992) and Hartline, Michael, and Jones (1996). It has three items. All of items except for check-in involvement are measured with five-point Likert scales. Check-in involvement is measured using seven-point semantic-differential scale.

### 4 **RESULTS**

### 4.1 Measurement Model

The CFA results are reported in Table 1. Model fit was found to be acceptable ( $\chi^2 = 829.64$ , df = 390, p < 0.001,  $\chi^2/df = 2.13$ ; CFI = 0.97; NNFI = 0.97; RMSEA = 0.08; SRMR = 0.06). All constructs are significantly converged (p < 0.001) and they are correlated but distinct in that none of the 95% confidence intervals for the population correlations for all pairs of constructs includes one. The alpha coefficients and CR estimates for public self-consciousness ( $\alpha$ =0.87, CR=0.88), peer influence

( $\alpha$ =0.77, CR=0.78), check-in involvement ( $\alpha$ =0.94, CR=0.94), place attachment ( $\alpha$ =0.88, CR=0.88), WOM intention ( $\alpha$ =0.81, CR=0.82), and check-in intention ( $\alpha$ =0.71, CR=0.71) are all greater than 0.70, indicating acceptable reliability.

### 4.2 Structural Model

Analytical results of the structural model by using SEM are reported in Figure 1. Model fit is acceptable ( $\chi^2 = 944.70$ , df = 399, p < 0.001,  $\chi^2/df = 2.37$ ; CFI = 0.96; NNFI = 0.96; RMSEA = 0.08; SRMR = 0.08). The paths in our conceptual model are all significant. Specifically, public self-consciousness positively influences check-in involvement. Peer influence positively influences check-in involvement. Place attachment positively influences check-in involvement. Place attachment positively influences check-in intention. Therefore, all the hypotheses are supported by our data.

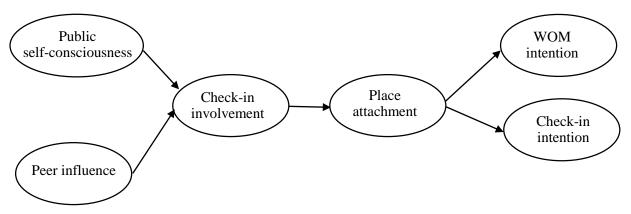


Figure 1. Research Framework

Hypothesized relationship	Estimate	t Value	Conclusion
H1 Public self-consciousness→	0.19	2.56	Supported
check-in involvement (+)			
H2 Peer influence→check-in	0.45	5.35	Supported
involvement (+)			
H3 Check-in involvement→place	0.91	9.86	Supported
attachment (+)			
H4 Place attachment→WOM	0.81	8.24	Supported
intention (+)			
H5 Place attachment→check-in	0.88	9.42	Supported
intention (+)			

Table 1.Structural Model Estimates

### 5 CONCLUSION

#### 5.1 Discussion

Drawing from the Dramaturgical theory (Goffman, 1959), present study contributes to propose a conceptual model that illuminate the underlying psychological mechanism which facilitate individual's check-in behavior. Goffman (1959) posits that "impression management" impacts the self presentation of individuals, indicating that individuals adopt deliberate decisions to reveal particular aspects of the self. Past studies emphasize on the privacy issue that impacts location sharing (Barkhuus et al., 2008), while present study highlights that socially driven factors portrays a more comprehensive story that disclose the antecedenting drivers of check-in. This contributes in providing a framework to the previous sporadic studies concerning social motives in check-in literatures. Specifically, the findings support the view that individual's public self-consciousness and peer influence, compelled by desirable self-presentation leads to involvement in check-in. This finding extends past researches in identifying two dimensions that drive check-in involvement. Furthermore, the results of this study confirm that driven by psychological proximity, a positive relationship is created between check-in involvement and place attachment, which in turn facilitates continual check-in behavioral intentions and the advocation of check-in.

#### 5.2 Managerial Implications

Check-in allows a tighter integration of virtual and real life which provides substantial managerial implications. Based on the results of this study, there are two managerial implications for check-in behaviors. Firstly, from peer influence perspective, social media website can show the number of check-ins per time of day, for instance which individual has checked-in most and what locations are the most favored check-in places. By showing these information, encourage peer influences that stimulate others to join in the check-in activity. Secondly, from self expressiveness perspective, practitioners can pay close attention in creating engaging events that involve the individuals with the store in some form of interactive story. Not only should these fun events should provide shared experiences with the store, moreover it should allow individuals to make a personal statement or show off their favorable images. These interactive events that creates a stage for individual to make desirable self presentations, are likely to faciliate individuals to perform check-in in the store, which in turn facilitates place attachment to these stores.

#### 5.3 Limitations and Future Research

Most of our respondents are collected from the online platform, which grants some commonality on respondent profiles. Since the place attachment plays an important role in check-in activities, future study can investigate the other driving factors that affect place attachment. In addition, future study can also examine what consumers characteristics promote individuals to engage in check-in activities.

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