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Does Culture Affect the Usage of Digital Disruption Innovations: A Study Using Instagram

Emergent Research Forum (ERF)

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Abstract

Online social networks are growing rapidly. As people from all over the world can use these sites without any geographic boundaries, it becomes difficult for organizations to predict user behavior. Prior literature revealed that most previous studies focused on a single culture and on a single social networking site, mainly Facebook. Also, even if there were cross-national cultural studies, they were primarily based on Hofstede's cultural index scores. In this study, we focus on espoused national cultural values in the usage of Instagram. We propose a model and conduct a pilot test. Results indicate that people who espouse more collectivistic values tend to use Instagram more frequently and are more likely to share more posts.

Keywords

Espoused National Cultural Values, Instagram Usage, Cross-cultural Research.

Introduction

Online social networking is growing at a tremendous pace. Facebook and Instagram have been used widely by people worldwide. A recent study showed that individuals nowadays spend more time in Instagram compared to other social media sites (Alhabash and Ma 2017). As per Statista, a German online portal for Statistics on market data, as of January 2020, Instagram, launched in 2010, had 1 billion active users. Although, Instagram has rapid growth in terms of active users it has been studied relatively less by the research community due to its stringent terms and policies. Seeing the rapid growth of Instagram users, social media giants like Facebook incorporated several features from Instagram and eventually purchased Instagram in 2012. Often business fail to handle digital disruptions caused by online social media platforms. Disruption is defined as "a theory of competitive response. It tells you: If I innovate in this way, then this is what I can expect incumbent competitors to do. If I introduce a sustaining innovation, incumbents will generally try to mount a defense and a try to eliminate me. If it's disruptive innovation, they are likely to ignore me or flee rather than fight" (Denning 2016, p. 11). Kodak failed to understand that online photo sharing platforms like Instagram were a completely a new business (Anthony 2016). The downfall of Kodak to Instagram supported the extensions to Christensen's theory of including the aspect of organizational culture to the existing theory (Lucas Jr and Goh 2009). As cultures from different parts of the world vary widely, people can differ in the way they use these social media platforms. So, in this study, we focus on espoused national cultural values in the usage of Instagram which is rapidly growing.

Literature Review

National culture has been shown to influence the usage of products (Hofstede 1998). The difference in their behavior could be identified based on Hofstede's national cultural dimensions (Rosen et al. 2010). The results from a systematic literature review of culture on different social media platforms could be broadly classified into two categories. The categories are studies that focused only on a single country and studies that compared two different countries.

The main focus of the studies based on a single country was to know the motive behind the usage of various social media platforms (Brandtzæg and Heim 2009; Raacke and Bonds-Raacke 2008). Apart from this, a study that mentioned the influence of culture on Instagram usage examined only on the role of gender in the usage of Instagram (Al-Kandari et al. 2016). The motivation of studies comparing two countries was to find a pattern in the usage of social network sites based on different dimensions (Chu and Kim 2011; Men and Tsai 2012; Qiu et al. 2013; Zhao and Jiang 2011). Only one study, to the best of our knowledge, focused on comparing the role of culture between two countries in the usage of Instagram, it was however based on existing scores from Hofstede's dimensions (Sheldon et al. 2017).

From the above literature review, we found that studies that focused on the role of culture in the usage of Instagram either examined only gender and they did not take into consideration the fact that culture can vary within individuals (Srite and Karahanna 2006). To overcome these issues, we studied the role of espoused national cultural values in terms of usage of Instagram. Particularly, we focus on the four dimensions created by Hofstede (1980) which are shown, and defined, in Table 1 below:

Espoused Cultural Value	Definition
Individualism/Collectivism	Individualism can be seen as a concern for one's self as opposed to a concern for the group to which one belongs. In collectivistic cultures the group is seen as the major source of identity and loyalty.
Power Distance	Power distance is the extent that large differentials in power, and therefore inequality, are accepted in a given culture.
Uncertainty Avoidance	Uncertainty avoidance is the level of risk accepted by a culture. Cultures with high levels of uncertainty avoidance are less willing to accept risk while cultures with low levels of uncertainty avoidance are more willing to accept risk.
Masculinity/Femininity	Masculine cultures tend to emphasize work goals such as earnings, advancement, and assertiveness. Feminine cultures tend to emphasize personal goals such as friendly atmosphere, getting along with the boss and others, and a comfortable work environment.

Table 1. Espoused Cultural Values and Definitions (Hofstede, 1980)

Model Development and Hypotheses

As our study is related to the usage behavior of Instagram users, we modeled the constructs based on the Technology Acceptance Model (TAM) by Davis, in the context of social media. Prior meta-analysis research identified seven construct groupings namely Online Features, Social Components, User Characteristics, User Perceptions, Social Influence, Demographic Variables, and Social Network Drivers as influencing the different constructs of the Technology Acceptance Model in terms of social media context, which then affected the usage behavior (Wirtz and Göttel 2016). Next, coming to the demographic variables, we considered age, gender, marital status, and experience using Instagram. We also think important constructs to include would be Instagram features such as messaging, privacy settings, and sharing posts, as system quality could be considered as an online feature shown to influence perceived ease of use which in turn would affect user behavior (Lin 2007). We included the number of likes and number of followers feature as social components. The espoused cultural values are based on Hofstede (1980) and Srite and Karahanna (2006). The final proposed model is shown in Figure 1.

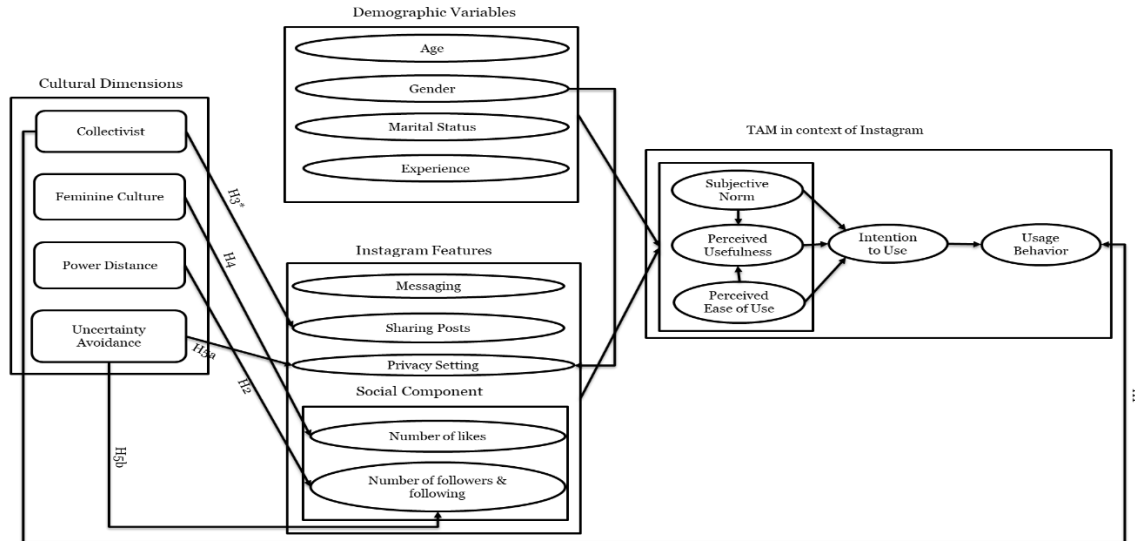


Figure 1. Proposed Model

(* after each hypothesis denotes significance at the .05 level)

The relation of self as defined by an individual with respect to others is termed self-construal (Cross et al. 2009). It could be either independent or interdependent (Markus and Kitayama 1991). Focusing on one's own self and one's goals refers to independent self-construal whereas interdependent self-construal refers to focusing on one's group or shared interests and having a collectivist approach. Collectivistic cultures use social network sites at a higher rate (Kim et al. 2010). Collective self-esteem and group identification has a positive correlation on communication via social networking sites (Barker 2009). Thus:

Hypothesis 1: Users who espouse more collectivistic values will use Instagram more frequently.

People who were less open in social media sites were found to be more authoritarian (Bachrach et al. 2012). In this context, we assume that people who are more authoritarian could be linked to high power distance. They would also have a greater number of followers because people generally tend to follow people with leadership and authoritative qualities. Thus:

Hypothesis 2: Users who espouse higher levels of power distance would have a greater number of followers but would follow fewer people.

Previous research has shown that sharing-oriented attributes were linked to collectivistic cultures (Triandis 1995). People who are more collectivistic tend to be inclined towards their referent group's interests, making them share more posts. People who espouse more individualistic values, in addition to being more independent self-construal, would tend to keep their lives to themselves rather than sharing with the public. Thus:

Hypothesis 3: Users who are espouse more collectivistic values tend to share more posts as compared to users who espouse more individualist values.

Hofstede's femininity stands for a preference for cooperation and modesty. Being inclined towards cooperation, we assume that such people would like to establish good relationships with their friends via Instagram and would like the posts from their friends. As they start liking the posts of what their friends share, their friends would also do the same in return. It is kind of mutual relationship between a user and friends. Thus:

Hypothesis 4: People espousing more feminine cultural values would like other people's post and would have a greater number of likes in their posts.

Individuals with a high level of openness would actively pursue new experiences. People with a low level of openness would tend to avoid any changes or taking any kinds of risk (Bachrach et al. 2012). In this context,

we assume that people not comfortable with change could be linked to high uncertainty avoidance. They wouldn't accept invitations from unfamiliar people most likely making them have fewer followers. So, they would tend to protect their account by keeping their account private. Similarly, they wouldn't send out invitations, making them have fewer people whom they follow. Being less open, they would also not like to share their posts with everyone and would keep their account private. Thus:

Hypothesis 5a: People espousing higher levels of uncertainty avoidance would tend to keep their accounts private.

Hypothesis 5b: People espousing lower levels of uncertainty avoidance would have a greater number of followers but would follow fewer people.

Data

This study will use two surveys. The first survey will be for assessing the individuals based on different dimensions of espoused national culture derived from the items of Srite and Karahanna (2006). We created a second survey instrument to test our hypotheses consisting of at least two questions for each hypotheses based on our proposed model. We will use Amazon Mechanical Turk to collect the data. However, at present we will report findings from a pilot test from 520 respondents also using Amazon Mechanical Turk.

We found Hypothesis 1 and 3 to be true (as shown in Figure 1 and Table 2) from the pilot test. For the final study, we plan to collect and analyze data on a large scale so that we can identify multiple respondents for each of the cultural dimensions. We used t-tests for continuous outcomes and the chi square test for binary outcomes. We plan to present the results of the final study during the conference.

Hypothesis	Sample Size	Test Used	p-value of first question	p-value of second question
H1	46	Chi-square	0.000693*	0.000436*
H2	35	t-test	0.3141	0.4438
H3	46	t-test	0.000009*	0.001596*
H4	30	t-test	0.1937	0.081157
H5a and H5b	23	Chi-square	1.9765	0.3151

Table 2. Results of Hypothesis Testing from Pilot Data

Conclusion, Contributions, Implications and Future Research Directions

The results from our pilot test showed that people who espouse collectivistic values tend to use Instagram more frequently. These users also tend to share more posts. We contribute to the literature by proposing a model that attempts to investigate the influence of espoused national culture in the usage of rapidly growing exclusive photo sharing innovations like Instagram. This study could be used as a reference by others. The main practical implication of this study is that as Instagram is now widely used for marketing purposes, companies could customize advertisements by creating business models specific to individuals based on their espoused cultural dimensions. Currently, we included only some of the main features of Instagram. We plan to include the latest features such as Instagram story, IGTV videos etc. for our future study.

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