EXAMINING NEW OPPORTUNITIES IN CHICAGO'S RESTAURANT INDUSTRY: THE CORRELATION BETWEEN SOCIAL MEDIA AND CHINESE EATING HABITS IN CHICAGO

Abdullah Alshboul[1], Yaoming Pei[2], Shwkar Abousweilem[3]
[1]Argosy University , 225 N. Michigan Ave, S.1300, Chicago, IL 60601, USA. Alshboul12@yahoo.com
[2]Argosy University , 225 N. Michigan Ave, S.1300, Chicago, IL 60601, USA. brightpei@gmail.com
[3]Argosy University , 225 N. Michigan Ave, S.1300, Chicago, IL 60601, USA. abshwkar@yahoo.com

ABSTRACT

Purpose -   This study was designed to investigate the relationship between social media usage and the eating habits of the Chinese population in the Chicago area. To be more precise, this study provides insight into what kinds of social media affect the Chinese diet in Chicago. The social media sites included Facebook, Twitter, YouTube, Myspace, LinkedIn, and Chinese social media such as WeChat.

Methodology -   A self-administered online questionnaire survey was designed and used to examine the relationship between the eating habits and social media usage of the Chinese population in the Chicago area. This study involved the use of a survey that contained three sections. The first section was a demographic questionnaire. The second section was a food-related behavior questionnaire based on eating habits studies. The third section was a social media usage questionnaire constructed from consumer behavior research. The participants were Chinese individuals who were 18 years or older and living in the Chicago area. The data were collected through an online self-administered survey www.surveymonkey.com. Statistical Package for the Social Sciences (SPSS) software was used to analyze the data, and an alpha significance level of 0.05 was used.

Findings- Based on the data from the current study, the Chinese population in Chicago is strongly affected by Chinese culture, as 90% speak Chinese and 53.7% eat Chinese food every day. The researcher found that Chinese diet change in Chicago is significantly influenced by the number of reviews from non-Chinese friends on social media, and diet change has a significant positive correlation with the number of non-Chinese friends. This confirms that the constructs of interaction and electric word-of-mouth (eWOM) of social media marketing have a significantly positive effect on purchase intentions (Chen, Leu, & Su, 2016). In this research, the number of food reviews and non-Chinese friends represented social interaction and eWOM level on social media. The results from this research indicate that the market opportunity among the Chinese population in the Chicago area is promising. Therefore, it is worthwhile for non-Chinese restaurant owners in Chicago to invest in and develop specialized marketing strategies to attract Chinese customers.

Conclusion- Based on a quantitative analysis, this research showed that for the Chinese population in the Chicago area, the more non-Chinese friends they had, the more likely it was that their eating habits would change. This supports that interactions with friends on social media is a contributing factor to changes in eating habits.

Keywords: Eating habits, social media, restaurants, Chinese food, electric word-of mouth.
JEL Codes: M30, K11

1. INTRODUCTION

The complex question of why people eat is a research topic that can be used to investigate the relationship between lifestyle and culture background. Many professionals and policymakers advocate for changes in Americans' food practices for health, safety, or environmental reasons, yet success in achieving these planned changes is often elusive (Bisogni, Connors, Devine, & Sobal, 2002).

As a country with large immigrant population, the United States is rich in ethnic and cultural diversity, especially when it comes to food culture. Extensive research has been conducted into the eating habits of different racial groups in the United States. From the past decades of research into ethnic culture in the United States, few scholars have focused on people's eating behaviors.

As eating habits are a complex human behavior, the factors that influence people's diets are also complicated. Lee (1998) summarized the eight categories of factors that influence people's eating habit. They include social, economic status, family structure, friends, media, knowledge value beliefs, demographic features, and ethnicity (Lee, 1998).

Social media entered peoples' daily lives approximately 10 years ago, and has become an important influence on users' positive or negative attitudes toward a purchase decision (Akar& Topcu, 2011). Social media influences people's attitudes and decision-making when it comes to consumer behavior. With the development of Web 2.0 and Web 3.0, the use of online social media has become an accepted part of daily life. Social media, especially social networking sites, provides a virtual space for people to communicate through the Internet, which also might be an important agent of consumer socialization (Vinerean, Cetina, Dumitrescu, & Tichindelean, 2013). For instance, Mohr (2013) indicated that social media encourages customers to interact with luxury fashion brands. The emergence of social media has boosted interest in word-of-mouth and viral marketing among luxury brand marketers (Mohr, 2013). Also, Witkemper, Lim, and Waldburger (2012) indicated social media is a low cost and timely communication tool compared to traditional tools. Additionally, social media sites have been predicted to grow and maintain relationships between athletes and fans (Witkemper et al.,2012). Social media has transformed the interactions and communications among individuals throughout the world, causing people to be able to interact in a virtual space. In recent years, social media has affected many aspects of human communication, as well as affecting how businesses operate. Social networking has become a daily practice in some users' lives (Edosomwan, Prakasan, Kouame, Watson, & Seymour, 2011). People spend more time on social media, and social media has influenced people's daily behaviors, especially consumer behaviors.

In the 2010 U.S. Census report, the Chinese population was noted to be the largest detailed Asian group. Those who reported Chinese alone or in any combination, the largest comprehensive Asian group, was four million. There were 3.3 million people who reported Chinese alone with no additional details (U.S. Census Bureau, 2010).

The population of Illinois is 12,868,747 and the Chinese population is 117,600 (U.S. Census Bureau, 2014c). Chicago is the third most populous city in the United States, after New York City and Los Angeles, with 2.7 million residents (U.S. Census Bureau, 2014a). In the Chicago metropolitan area (Chicago-Naperville-Joliet, IL-IN-WI Metro Area), there are 104,667 Chinese individuals (U.S. Census Bureau, 2014b).

In summary, Chinese consumer behavior and Chinese culture are important components of the social, economic, and daily life in Chicago, which is a fast growing big city. The Chinese market in Chicago is also attractive to investors. According to the 2010 Census, the median family income of the Chinese population in the Chicago area was $82,948. A total of 56.1% of the population is in management, professional, or related occupations, and 58.7% of the population has a bachelor's degree or higher. Reseearchers developed the following Research Questions

1. Is there a significant relationship between social media usage (frequency and duration) and changes in the Chinese diet in the Chicago area?
2. Is there a significant relationship between the number of non-Chinese friends' reviews on social media and changes in the Chinese diet in the Chicago area?
3. Is there a significant relationship between the number of non-Chinese friends on social media and changes in the Chinese diet in the Chicago area?

The following hypotheses were developed:

$H1_0$: There is no relationship between social media usage and the eating habits of Chinese people in the Chicago area.

$H1_a$: There is a relationship between social media usage and the eating habits of Chinese people in the Chicago area.

$H2_0$: There is no relationship between the number of non-Chinese friends' reviews on social media and the Chinese diet in Chicago.

H2$_a$: There is a significant association between the number of non-Chinese friends' reviews on social media and the Chinese diet in Chicago.

H3$_0$: There is no relationship between the number of non-Chinese friends on social media and the Chinese diet in Chicago.

H3$_a$: There is a relationship between the number of non-Chinese friends on social media and the Chinese diet in Chicago.

This study involved the use of a survey that contained three sections. This research presented a study into the impact of social media usage on the eating consumer behavior of the Chinese population in the Chicago area using a quantitative approach. The researcher studied the patterns and features of how Chinese individuals in the Chicago area used social media. The researcher also studied the demographic features of the Chinese population in the Chicago area, considering their potential impact on eating habits. Changes in eating habits were categorized by the frequency of food eaten (Chinese food or non-Chinese food), types of people with whom Chinese Chicagoans dined (Chinese friends and non-Chinese friends), and the frequency of dining in different kinds of restaurants (Chinese restaurant and non-Chinese restaurant). This study involved the use of a questionnaire to answer the research questions, addressing the following demographic factors: age, time in the United States, education level, and individual income level. Regarding social media usage, the questions surrounded the time spent on social media and frequency of social media use. For this purpose, the researcher surveyed Chinese Chicagoans with diverse backgrounds. The study received 406 qualified responses, a convenience sampling strategy was used for this research.

2. LITERATURE REVIEW

2.1. Social Media and Social Networks

In recent years, social media has been used as a marketing strategy to influence consumer's purchasing behaviors. It is hard to study social media without encountering the phrase *social networking*. Social networks have evolved over the years to the modern day variety, which uses digital media (Edosomwan et al., 2011).

The first social networking sites were created in the 1990s. Some examples include Six Degrees, BlackPlanet, Asian Avenue, and MoveOn (Edosomwan et al., 2011). From then on into the 2000s, social media received a boost in growth by the emergence of social networking sites such as Facebook, and YouTube (Edosomwan et al., 2011). Facebook had more than 500 million active users as of July of 2010 (Edosomwan et al., 2011). YouTube, founded in 2005, is the world's most famous online video sharing community. There are more 100 hours of videos updated to YouTube every minute as of January 2015. WeChat, a Chinese social networking mobile application, had 697 million active users by 2015 (Tencent Holdings, 2015). Weibo, a Chinese version of Twitter, had 46 million active users by 2012 (Sina Corporation, 2012).

The term social media refers to the use of web-based and mobile technologies to turn communication into an interactive dialog (Baruah, 2012). It provides ways to engage with other people online and create either long-term or short-term relationships (Evans, 2010).

Social networks are defined as a "web of social relationships and the characteristics of ties among people" (Berkman & Glass, 2000, p. 145). A social network perspective was adopted as an explanation for how large-group interventions work by several social network researcherss. In this view, large group interventions work because of the ability to restructure the networks of social relationships existing within organizations (Clarke, 2014; Garcia, 2008; Tenkasi & Chesmore, 2003).

2.2. Factors Influencing Eating Habits

Eating habits relate to the cultural environment. Food habits are acts accomplished repetitively for nourishment and to complete social and emotional goals (Gifft et al., 1972). Anthropologist Margaret Mead (1943) indicated "Food habits are seen as the culturally standardized set of behaviors in regard to food manifested by individuals who have been reared in a given cultural tradition. These behaviors are seen as systematically interrelated with other standardized behaviors in the same culture." (p. 21)

The factors that influence eating habits include income, education, occupation, family structure, physiological characteristics, psychology, culture, and ethnicity (Lee, 1998). The factors influencing diet can be grouped into several categories. Khan (1981) divided them into six categories: personal, socioeconomic, educational, biological/physiological/psychological, cultural/religious/regional, and extrinsic and intrinsic.

Personal factors include individual personality, appetite, mood, familiarity, level of expectation, and influence of other persons. Socioeconomic factors are family income, food costs, symbolic meanings, and social status. Biological/physiological/psychological factors include age, gender, and sex. Educational factors include the educational position of the individual or family and nutritional education. Cultural/religious/regional factors are cultural origins, religious background, beliefs, race, and geographical regions. Extrinsic factors include environment, time and seasonal

variations, and advertisement and merchandising. Intrinsic factors relate to the food, such as appearance, flavor, odor, and food preparation methods and presentation. All of these factors are related to each other and influence individual preferences.

2.3. Chinese Eating Habits in the United States

The different flavors in Chinese cuisine reflect the diverse cultural backgrounds of the post-1965 Chinese immigrants, who are very different from the early Cantonese immigrants. Coming from Guangdong Province, early Chinese immigrants had similar dietary habits (Liu & Lin, 2009). At the turn of the 20th century, Cantonese immigrants invented dishes like chop suey and generated a stream of Americanized Chinese dishes like chow mein, General Tso's chicken, egg foo yung, and paperwrapped chicken. When hundreds of chop suey houses expanded into the American food market, in 1959, New York City alone had about 750 Chinese restaurants. The Chinese restaurants became Americanized (Liu & Lin, 2009). After that, Chinese cuisine from other parts of China was brought to the United States; however, Chinese food in the United States is generally Americanized Chinese cuisine.

Historically speaking, there was never one "national cuisine" but many regional Chinese cuisines as a result of geographical differentiation and social stratification (Anderson, 2008). The cuisine has been more satisfactorily defined in the foreign global or transnational context in today's global world. In the current research, Chinese food was used to refer to the dishes served in restaurants that had the word "Chinese" in their descriptions. A Chinese restaurant can serve localized versions of Chinese food; for instance, Panda Express serves American style fast Chinese food. This food was also considered as Chinese food.

The Chinese population has distinct eating habits in the United States. As a unique cultural group, their diet changed after their arrival in United States. Because the Chinese population has a long history living in a Chinese network, they have been influenced by Chinese eating habits and traditions. People's tastes in food are shaped by their social context and relationships with other people. Pachucki (2010) found evidence that people's tastes in food are related to the tastes of the people connected to them. Tastes in food are seen to be hemophilic between spouses, friends, and siblings.

3. DATA AND METHODOLOGY

3.1. Research Design

The goal of this study was to describe and investigate the relationship between the eating habits and social media usage of the Chinese population in the Chicago area. This study involved the use of a survey that contained three sections. Quantitative research was appropriate to analyze the correlation between Chinese eating habits in Chicago and possible influential factors that have already been identified by previous research, but not deeply researched. The data were collected through an online self-administered survey through SurveyMonkey. The researchers sent an e-mail invitation with permission to members of the Chinese Christian Fellowship of Chicago (CCFC) and Chinese Student & Scholars Association of DePaul University (CSSA-DePaul) in Chicago. The members of these groups completed the survey online.

3.2. Participants and Selection

The appropriate sample population size was 450 people considering the potential for missing responses. A convenience sampling strategy was used for this research. Convenience sampling is used to select the cases at hand until the sample reaches a desired, designated size (Boxill, Chambers, & Wint, 1997). This research was based on a convenience sample from the north suburbs, west suburbs, and the City of Chicago. Many have been in Chicago for more than 5 years. This sample group represented Chinese individuals who tend to stay in the United States for short duration. A self-administered online questionnaire survey was designed and used to examine the relationship between the eating habits and social media usage of the Chinese population in the Chicago area.

3.3. Descriptive Statistics

The study received 406 responses. Some of the questions in the survey did not receive valid answers from a subset of participants. However, every question received at least 317 valid answers. On average, each question received 345 valid answers. The question on gender received 362 valid answers, which included 160 males (44.2%) and 202 females (55.8%). The question on birthplace received answers from all 406 participants. According to the answers, 79.6% were born in China and 20.4% were born in the United States. A total of 90% spoke Chinese and 53.7% ate Chinese food every day.

Table 1 presents the age distribution of the research sample. The question on age received 363 valid answers out of a total of 406 participants. According to the valid answers, participants' ages ranged from 18 to over 60. Participants were categorized into nine segments, each of which had a range of 5 years. The largest group, representing 27.75% of the sample of Chinese Chicagoans, ranged from 25 to 29 years. The second largest segment ranged in age from 18 to 24,

representing 17% of the sample. The smallest segment of the sample ranged in age from 55 to 59, representing 3% of the participants. The other segments represented proportions of the whole sample ranging from 3.8% to 14.6%

Table 1: Age Distribution of Participants

Age range		*N*	Valid %
Valid	18-24	62	17.0
	25-29	100	27.7
	30-34	53	14.6
	35-39	43	11.8
	40-44	35	9.6
	45-49	21	5.8
	50-54	24	6.6
	55-59	11	3.0
	60 up	14	3.8
	Total	363	100.0
Missing	System	42	
Total		406	

Table 2 presents the distribution of participants' time spent in the United States. The question regarding time spent in the United States received 359 valid answers out of a total of 406 responses. According to the valid answers, participants were categorized into six segments, each of which represented a different duration of stay in the United States. The largest group had been in the United States for 2 to 5 years, accounting for 28.7% of the sample. The second largest group had been in the United States for over 20 years, making up 20.9% of the participants. The smallest group had been in the United States for 16 to 19 years, representing 7.5% of the participants.

Table 2: Duration in United States

Years in United States		*N*	Valid %
Valid	0-2	53	14.8
	2-5	103	28.7
	6-9	62	17.3
	10-15	39	10.9
	16-19	27	7.5
	20 up	75	20.9
	Total	359	100.0
Missing	System	47	
Total		406	

Table 3 presents the regions in Chicago in which the participants reported living. The question on region received 356 valid answers out of 406 total responses. According to the valid answers, participants were categorized into five groups. The largest group was the participants who lived in the "City" area, representing 33.4% of the sample. The smallest group was the participants who lived in the "South suburbs" area, accounting for 3.4% of the sample. The "North suburb" and "West suburb" groups represented 21.6% and 27.2% of the sample, respectively. Most of the participants lived in the first four areas listed in Table 3.

Table 3: Geographical Distribution of Participants

Geographical Location		*N*	Valid %
Valid	Chinatown and BP	51	14.3
	City	119	33.4
	North suburb	77	21.6
	West suburb	97	27.2
	South suburb	12	3.4
	Total	356	100.0
Missing	System	50	
Total		406	

Table 4 presents the participants' education levels. The question on education level received 365 valid answers out of 406 total responses. According to the valid answers, participants were divided into five segments, each of which represented

an education level. The largest group of participants possessed a master's degree, representing 48.5% of the sample. The second largest group possessed a bachelor's degree, accounting for 22.6% of the sample. Finally, 16.3% of the participants had a doctoral degree.

Table 4: Education Level of Participants

Education Level		N	Valid %
Valid	High school	34	9.4
	Associate degree	12	3.3
	Bachelor degree	82	22.6
	Master degree	176	48.5
	Doctorate degree	59	16.3
	Total	363	100.0
Missing	System	43	
Total		406	

Table 5 presents the participants' individual incomes. The question on income received 356 valid answers out of 406 total responses. According to the valid answers, participants were categorized into seven income brackets. The largest group was the participants who earned less than $25,000 per year, representing 38.2% of the sample. The second largest group was the participants who earned $55,000 to $84,999 per year, representing 18.8% of the sample. Two groups each reflected 7.6% of the sample: $25,000 to $34,999 and $85,000 to $99,999. Two groups each reflected 11.2% of the sample: $35,000 to $54,999 and $10,000 to $14,9999. Only 5.3% of the participants earned over $150,000 per year.

Table 5: Individual Annual Income of Participants

Annual Income		N	Valid %
Valid	Less than $25,000	136	38.2
	$25,000-34,999	27	7.6
	$35,000-54,999	40	11.2
	$55,000-84,999	67	18.8
	$85,000-99,999	27	7.6
	$100,000-149,999	40	11.2
	Over $150,000	19	5.3
	Total	356	100.0
Missing	System	50	
Total		406	

Table 6 presents the participants' occupations. The question on occupation received 358 valid answers out of 406 total responses. According to the valid answers, participants were divided into 16 occupation segments. The largest group was students and scholars, which reflected 25.7% of the sample. The second largest group was the occupation of computer science, which represented 14.5% of the sample. The third largest group worked in business and finance, which made up 12.8% of the sample. Details of the other groups are shown in Table 6.

Table 6: Occupations of Participants

Occupation		N	Valid %
Valid	Management	34	9.5
	Business and finance	46	12.8
	Computer	52	14.5
	Legal	10	2.8
	Education	29	8.1
	Arts design	21	5.9
	Medical	28	7.8
	Food	9	2.5
	Office and administration	3	.8
	Construction	3	.8
	Service	7	2.0
	Manufacturing	12	3.4
	Transportation	1	.3
	Public administration	4	1.1

	Student or scholar	92	25.7
	Homemaker	7	2.0
	Total	358	100.0
Missing	System	48	
Total		406	

3.4. Pearson Correlation Analysis

The researchers conducted Pearson correlation analysis for the three research questions based on the survey answers. Research Question 1 was: Is there a significant relationship between social media usage (frequency and duration) and changes in the Chinese diet in the Chicago area?

The researchers calculated the Pearson correlation coefficient between the time spent on social media per day and non-Chinese food intake frequency based on the survey answers. The Pearson correlation coefficient was 0.027. This small number indicates there was no significant relationship between social media usage and Chinese diet change. Research Question 2 was: Is there a significant relationship between the number of non-Chinese friends' reviews on social media and changes in the Chinese diet in the Chicago area?

The researchers calculated the Pearson correlation coefficient between non-Chinese food intake frequency and the number of non-Chinese friends' food reviews on social media based on the survey answers. The Pearson correlation coefficient was 0.316. The coefficient indicated there was a significant relationship between Chinese diet change and the number of non-Chinese friends' reviews. The positive coefficient also indicated a positive relationship—the more non-Chinese friends' reviews a Chinese Chicagoan had, the more likely his or her diet would change.

Research Question 3 was: Is there a significant relationship between the number of non-Chinese friends on social media and changes in the Chinese diet in the Chicago area?

The researchers calculated the Pearson correlation coefficient between non-Chinese food intake frequency and the number of non-Chinese friends on social media based on survey answers. The Pearson correlation coefficient was 0.217. The coefficient indicated there was a significant relationship between Chinese diet change and the number of non-Chinese friends on social media. The positive coefficient also indicated a positive relationship—the more non-Chinese friends a Chinese Chicagoan had on social media, the more likely his or her diet would change.

Table 13 presents a summary of the Pearson correlation coefficients in this study.

Table 13: Pearson Correlation Coefficient

	Pearson Correlation Coefficient	Conclusion from Correlation Coefficient
Time Spent on Social Media Per Day	0.027	No significant relationship
Number of non-Chinese Friends' Food Reviews	0.316	Significant positive relationship
Number of non-Chinese Friend on Social Media	0.217	Significant positive relationship

3.5. Hypothesis Testing

The researchers conducted *t* tests regarding the Pearson correlation coefficient in Table 13. The aim of the *t* tests was to test the null hypothesis that the correlation coefficient was 0.

H0: The Pearson correlation coefficient is zero; there is no association.

Ha: The Pearson correlation coefficient is non-zero; a non-zero correlation could exist.

The statistic was calculated as below, where *r* is the Pearson correlation coefficient as shown in Table 13.

$$t = r\sqrt{\frac{n-2}{1-r^2}}$$

The researchers calculated the Pearson correlation coefficients for three pairs of variables in Table 13, and their *t* test results are presented below:

The first *t* test was with the Pearson correlation coefficient between time spent on social media per day and Chinese diet change.

$H1_0$: The Pearson correlation coefficient between time spent on social media per day and Chinese diet change is zero. There is no association.

$H1_a$: The Pearson correlation coefficient between time spent on social media per day and Chinese diet change is non-zero. A non-zero correlation could exist between time spent on social media per day and Chinese diet change.

The Pearson correlation coefficient was 0.027 between time spent on social media per day and Chinese diet change. Inputting the *r* value into Equation 1 gives a *t* that corresponds to a *p* value of 0.618. The test failed to reject the null hypothesis. There was no linear correlation between time spent on social media per day and Chinese diet change.

The second *t* test was with the Pearson correlation coefficient between the number of non-Chinese friends' reviews and Chinese diet change.

$H2_0$: The Pearson correlation coefficient between the number of non-Chinese friends' reviews and Chinese diet change is zero. There is no association.

$H2_a$: The Pearson correlation coefficient between the number of non-Chinese friends' reviews and Chinese diet change is non-zero. A non-zero correlation could exist between the number of non-Chinese friends' reviews and Chinese diet change.

The Pearson correlation coefficient was 0.361 between the number of non-Chinese friends' reviews and Chinese diet change. Inputting the *r* value into Equation 1 gives a *t* that corresponds to a *p* value < 0.001. The test rejected the null hypothesis. There was a non-zero correlation between the number of non-Chinese friends' reviews and Chinese diet change.

The third *t* test was with the Pearson correlation coefficient between the number of non-Chinese friends on social media and Chinese diet change.

$H3_0$: The Pearson correlation coefficient between the number of non-Chinese friends on social media and Chinese diet change is zero. There is no association.

$H3_a$: The Pearson correlation coefficient between the number of non-Chinese friends on social media and Chinese diet change is non-zero. A non-zero correlation could exist between the number of non-Chinese friends on social media and Chinese diet change.

The Pearson correlation coefficient was 0.217 between the number of non-Chinese friends' reviews and Chinese diet change. Inputting the *r* value into Equation 1 gives a *t* value that corresponds to a *p* value < 0.001. The test rejected the null hypothesis. There was a non-zero correlation between the number of non-Chinese friends on social media and Chinese diet change.

Table 14: Summary

	p value	*t* test result	Conclusion from *t* test on Pearson correlation coefficient
Time Spent on Social Media Per Day	0.618	Fail to reject null hypothesis	no association
Number of non-Chinese Friends' Food Reviews	<0.001	Reject null hypothesis	Non-zero correlation exists
Number of non-Chinese Friends on Social Media	<0.001	Reject null hypothesis	Non-zero correlation exists

3.6. Multiple Regression Analysis

The researchers used a multiple regression analysis to evaluate the significant effects of three predictors: time spent on social media, number of non-Chinese friends' reviews, and number of non-Chinese friends. The first regression (See Tables 16 and 17) analyzed the predictors' effects without control variables. The second regression analysis (See Tables 18 and 19) added four relative demographic factors—age, time in the United States, education level, and income level—as controlled variables. Without controlling for the demographic variables, Tables 16 and 17 indicate that time spent on social media (*b* = 0.001, *p* = 0.991) was not a significant predictor of Chinese Chicagoans' diet change. This result was also confirmed by the correlation analysis. The number of non-Chinese friends' reviews (*b* = 0.442, *p* < .001) and number of non-Chinese friends (*b* = 0.158, *p* < .001) were significant predictors of Chinese Chicagoans' diet change in the full model. In addition, these results were confirmed by the correlation analysis.

Table 16: Full-Model Regression Equation Predicting Chinese Diet Change in Chicago Area I

Statistic	Value
R Square	0.147
Adjusted R Square	0.142

Table 17: Full-Model Regression Equation Predicting Chinese Diet Change in Chicago Area II

	Unstandardized Coefficients		
	B	Std. Error	Sig.
Time spent on social media	.001	.012	.991
Number of non-Chinese friends' reviews	.442	.090	< .001
Number of non-Chinese friends	.158	.039	< .001

After controlling for the relative variables of age, time in the United States, education level, and individual income, the regression analysis for predicting Chinese diet change showed similar results to the findings of the first regression analysis. Tables 18 and 19 showed that the number of non-Chinese friends' reviews (b = 0.477, $p < .001$) and number of non-Chinese friends (b = 0.164, $p < .001$) were still significant predicators in the full model. In addition, after controlling for demographic variables, age emerged as a marginally significant predictor of Chinese Chicagoans' diet change (b = -0.980, p = 0.070). The regression analysis showed no significant effects of time in the United States, education level, and individual income level for predicting Chinese Chicagoans' diet change.

Table 18: Full-Model Regression Equation Predicting Chinese Diet Change with Control Variables I

Statistic	Value
R Square	0.168
Adjusted R Square	0.162

Table 19: Full-Model Regression Equation Predicting Chinese Diet Change with Control Variables II

	Unstandardized Coefficients		
	B	Std. Error	Sig.
Number of non-Chinese friends' reviews	.477	.089	<0.001
Number of non-Chinese friends	.164	.039	<0.001
Age	-.980		.070
Time in United States	.029		.620
Education level	.700		.485
Individual income	.060		.253
Time spent on social media	-.016		.770

4. FINDINGS AND DISCUSSIONS

4.1. Implications for Restaurant Marketing

The Chinese population in the Chicago area not only goes to Chinese restaurants, they also like to go to non-Chinese restaurants. In fact, the Chinese population in the Chicago area visits non-Chinese restaurants more often than Chinese restaurants. On average, the Chinese population in the Chicago area visits Chinese restaurants only once a week, but visits non-Chinese restaurants more often during a week. This indicates the Chinese population in the Chicago area has a strong interest in non-Chinese food. In terms of the category of non-Chinese food, the data from the survey showed the top five non-Chinese restaurants. Four served Asian food and one served American food. Additionally, the participants listed Italian food as the fifth of their favorites.

Cross-cultural research has shown that cultural differences can affect consumer information processing (Aaker & Williams, 1998), decision-making (Tse, Lee, Vertinisky, & Wehrung, 1988), and quality expectations (Donthu & Yoo, 1998). The market opportunity surrounding the population of Chinese immigrants, who have very different cultural backgrounds from other local non-Chinese consumers, is very important. The results from this research indicate that the market opportunity among the Chinese population in the Chicago area is promising. Therefore, it is worthwhile for non-Chinese restaurant owners in Chicago to invest in and develop specialized marketing strategies to attract Chinese customers.

Based on this research, the researchers had the following recommendations for non-Chinese restaurants regarding their marketing strategies geared toward the Chinese population in the Chicago area. First, the researchers recommended non-Chinese restaurants encourage their American patrons who have Chinese friends to post reviews on social media. For

example, they can encourage them to post reviews by offering online coupons. Second, the researchers recommended non-Chinese restaurants target the people who have more non-Chinese friends and the younger Chinese. These are the groups of people that are more likely to change their diets, according to the research. Third, the researchers recommended using Facebook and WeChat as platforms for marketing in social media. The research showed that the most popular social media platforms among Chinese individuals in Chicago are WeChat and Facebook. Facebook is familiar to most American companies. WeChat is a popular social media platform from China. WeChat is very different from Facebook and it is important to develop a specific strategy that is suitable for WeChat. A brief introduction of WeChat is presented here for the purpose of discussing potential marketing strategies.

WeChat is a well-known mobile social media app in China. It can be used to send voice and text messages to a friend or a group of friends. It also has "Moments" functionality, which is equivalent to posting on walls in Facebook. Additionally, business accounts can be registered for both communicating with clients and posting on "Moments." According to the research, Chinese individuals in Chicago welcome food recommendations from friends and specialized accounts for food discussions on social media. Friends, interest groups, and business accounts in WeChat are all popular and good ways to promote a restaurant. Restaurants can utilize all available functionalities that fit their marketing strategies.

Last but not the least, it should be noted that the duration and frequency of social media usage were not strongly correlated to diet change. The finding indicates that excessive marketing ads that try to cover more time in social media may not be necessary. The researchers recommended restaurants focus more on the quality of their messages or ads.

4.2. Implication for Chinese Social Media Marketing

Community identification has a significantly positive influence on consumers' community trust. Consumers' community trust can positively affect knowledge sharing and purchase intentions (Chen et al., 2016). According to the survey in this research, WeChat is the most popular social media platform among the Chinese population in Chicago. Chinese individuals in this study had a very high level of trust in this platform because of its enclosed Chinese friends' community.

As of May of 2016, WeChat had over a billion created accounts and 700 million active users with more than 70 million outside of China (Tencent Holdings, 2015). Unlike the social media platforms in the United States, Chinese social media has its own features and advantages. It includes closer relationships and an online community that provides a greater sense of security. The platform has a Chinese culture-based user interface and foundations. Additionally, it has many extension functions that U.S. social media does not have. The most important component is the integrated online payment method, which allows the individual or company to send or receive payments online.

Based on this study, the researchers provided the following suggestions to restaurants or food-related companies that would like to do business with Chinese individuals in the United States and China. First, the researchers recommended the company build a reliable and responsible official account on WeChat. This is the foundation of the company's WeChat e-commerce business. The company can realize the social media marketing and customer purchase at the same time. A reliable payment process and responsible customer service are required for every WeChat e-commerce business account. The research indicated the third specialty party has a positive influence on consumer purchase intentions. In this research, 35.44% of the participants agreed that specialized recommenders gave good recommendations on food. The company can focus on how to promote an attractive and useful advertising message on the business. Moreover, the company can provide a subjective perspective from a patron to present the advantages of the company.

Second, Moments sharing (Moments is a functionality that allows the company's official account to display postings or customers' purchase reviews) may be one of the most important phases to the company on social media marketing. The researchers suggestsed that the company encourage account subscribers to share Moments on their WeChat as a means of promoting customer interactions and the company's electric word-of mouth. According to Chen et al. (2016), the constructs of entertainment, interaction, and electric word-of-mouth of social media marketing show a significantly positive effect on community identification. Community identification increases the community's trust, which helps promote consumers' purchase intentions (Chen et al., 2016). According to the results of in this research, 85.89% of the participants agreed that friends provided good recommendations for food-related products. Only 20% of the participants agreed that advertisements on social media made good recommendations. This implies that recommendations by friends are more powerful in shifting the eating habits of the Chinese population in the Chicago area. Therefore, Moments sharing by customers of the restaurant may be one of the most powerful and valuable phases in marketing the restaurant.

Third, there are three kinds of official public accounts on WeChat: subscription account, service account, and company management account. The subscription account can only send information for marketing, the service account can use the payment platform provided by WeChat, and the company management account can be used for employees' management. The researchers suggested small businesses choose the subscription account to do their marketing based on the higher demand for marketing than for online purchases. Otherwise, the company that would like to realize the online purchase can use the service account. WeChat social media marketing is a free and efferent way to promote a business. Finding out

how to use WeChat is important for restaurant owners who have an interest in exploring the opportunity to reach the market of Chinese immigrants in the United States.

5. CONCLUSION

Culture is a complicated concept. In the United States, a diversified immigration country, different cultures influence daily life. Eating habits and related consumer behaviors are good symbols of a culture. This research quantified that eating habits and consumer behaviors change over time.

The results showed that eating habit change is hard to predict but there is a relationship between eating habits and other factors. Social media usage is a good perspective with which to investigate a specific race's particular characteristics related to food consumption.

Based on a quantitative analysis, this research showed that for the Chinese population in the Chicago area, the more non-Chinese friends they had, the more likely it was that their eating habits would change. This supports that interactions with friends on social media is a contributing factor to changes in eating habits. The results also showed that the number of food reviews from non-Chinese friends had a significantly positive relationship with the diet changes of the Chinese population in the Chicago area. Moreover, most of the Chinese population in the Chicago area considers recommendations for food-related products by friends on social media to be more valuable than recommendations from advertising. Therefore, the researchers encouraged restaurants to use social media as a platform for marketing. In particular, a marketing strategy that involves interactions among friends is more likely to be successful.

This study showed that the Chinese population in the Chicago area continues to have strong ties with their Chinese culture. Many prefer Chinese food or other Asian food, though they do have an interest in non-Chinese food. As revealed from the survey, many participants visited non-Chinese restaurants frequently. It may be promising for non-Chinese restaurant owners in the United States to explore the market of Chinese immigrants.

The strong tie to the Chinese culture was also reflected in the analysis of social media usage. The most popular social media platform among the Chinese population in the Chicago area was a Chinese-based social media platform called WeChat. The researchers encouraged restaurant owners who are interested in potential Chinese customers to develop marketing strategies that utilize the specialized feature in WeChat that involves interactions among friends.

REFERENCES

Akar, E., & Topcu, B. (2011). An examination of the factors influencing consumers' attitudes toward social media marketing. *Journal of Internet Commerce, 10*(1), 35–67. doi:10.1080/15332861.2011.558456

Anderson, B. D. (2008). *How social networks influence attitudes: Social and informational effects of attitude heterogeneity and arguments* (Doctoral dissertation). Available from ProQuest Dissertations & Theses Full Text. (304594835)

Baruah, S. K. (2012, January 30). Govt's TV digitalization campaign on social media. *Hindustan Times*. Retrieved from http://www.hindustantimes.com/business/govt-s-tv-digitalization-campaign-on-social-media/story-QHTlwzWUaRRlyaVjianHRP.html

Berkman, L. F., & Glass, T. (2000). Social integration, social networks, social support, and health. In L. F. Berkman, & I. Kawachi (Eds.), *Social epidemiology* (pp. 137–173). New York, NY: Oxford University Press.

Bisogni, C. A., Connors, M., Devine, C. M., & Sobal, J. (2002). Who we are and how we eat: A qualitative study of identities in food choice. *Journal of Nutrition Education and Behavior, 34*(3), 128–139.

Boxill, I., Chambers, C. M., & Wint, E. (1997). *Introduction to social research: With applications to the Caribbean*. Jamaica, West Indes: University of the West Indies Press.

Clarke, R. (2014). The prospects for consumer-oriented social media. *Organizacija, 47*(4), 219–230. doi:10.2478/orga-2014-0024

Donthu, N., & Yoo, B. (1998). Cultural influences on service quality expectations. *Journal of Service Research, 1*(2), 178–186.

Edosomwan, S., Prakasan, S. K., Kouame, D., Watson, J., & Seymour, T. (2011). The history of social media and its impact on business. *Journal of Applied Management and Entrepreneurship, 16*(3), 79–91.

Evans, D. (2010). *Social media marketing: An hour a day*. Hoboken, NJ: Sybex.

Garcia, S. K. (2008). *Toward a social network-based theory of large-group interventions* (Doctoral dissertation). Available from ProQuest Central, ProQuest Dissertations & Theses Full Text. (304535924)

Gifft, H. H., Washbon, M. B., & Harrison, G. (1972). *Nutrition, behavior, and change*. Englewood Cliffs, NJ: Prentice-Hall.

Khan, M. A. (1981). Evaluation of food selection patterns and preferences. *Critical Reviews in Food Science and Nutrition, 15*(2), 129–153. doi:10.1080/10408398109527314

Lee, H. K. (1998). *Food habits of Koreans in the United States* (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global: Health & Medicine; ProQuest Dissertations & Theses Global: Social Sciences. (304471558)

Liu, H., & Lin, L. (2009). Food, culinary identity, and transnational culture: Chinese restaurant business in Southern California. *Journal of Asian American Studies, 12*(2), 135–162, 238.

Mead, M., (1943). *The problem of changing food habits*. Washington, DC: National Research Council.

Mohr, I. (2013). The impact of social media on the fashion industry. *The Journal of Applied Business and Economics, 15*(2), 17–22.

Pachucki, M. A. (2010). *A 'taste' for tastes: Social influence, food choice, and health behaviors in a social network* (Doctoral dissertation). Available from ProQuest Dissertations & Theses Full Text. (614108088)

Sina Corporation. (2012). *Form 20-F*. Retrieved from http://corp.sina.com.cn/chn/Annual_Report_2012_Final.pdf

Tencent Holdings. (2015). *Annual report 2015*. Retrieved from http://www.tencent.com/en-us/content/ir/rp/2015/attachments/201502.pdf

Tenkasi, R. V., & Chesmore, M. C. (2003). Social networks and planned organizational change: The impact of strong network ties on effective change implementation and use. *The Journal of Applied Behavioral Science, 39*(3), 281–300.

Tse, D. K., Lee, K-H., Vertinisky, I., & Wehrung, D. A. (1988). Does culture matter? A cross-cultural study of executives' choice, decisiveness, and risk adjustment in international marketing. *Journal of Marketing, 52*(4), 81–95.

U.S. Census Bureau. (2010). *Profile of general population and housing characteristics: 2010 United States demographic profile data (Chinese population in U.S.)*. Retrieved from http://factfinder.census.gov/bkmk /table/1.0/en/DEC/10_DP/DPDP1/0100000US

U.S. Census Bureau. (2014a). *ACS DEMOGRAPHIC AND HOUSING ESTIMATES: 2010-2014 American Community Survey 5-year estimates (Chicago City)*. Retrieved from http://factfinder.census.gov/bkmk /table/1.0/en/ACS/14_5YR/DP05/1600000US1714000

U.S. Census Bureau. (2014b). *ACS DEMOGRAPHIC AND HOUSING ESTIMATES: 2010-2014 American Community Survey 5-year estimates (Chicago Metropolitan area)*. Retrieved from http://factfinder.census.gov/bkmk /table/1.0/en/ACS/14_5YR/DP05/310M200US16980

U.S. Census Bureau. (2014c). *ACS DEMOGRAPHIC AND HOUSING ESTIMATES: 2010-2014 American Community Survey 5-year estimates (Illinois)*. Retrieved from http://factfinder.census.gov/bkmk /table/1.0/en/ACS/14_5YR/DP05/0400000US17

Vinerean, S., Cetina, I., Dumitrescu, L., & Tichindelean, M. (2013). The effects of social media marketing on online consumer behavior. *International Journal of Business and Management, 8*(14), 66–79.

Williams, J., & Chinn, S. J. (2009). Using Web 2.0 to support the active learning experience. *Journal of Information Systems Education, 20*(2), 165–174.

Witkemper, C., Lim, C. H., & Waldburger, A. (2012). Social media and sports marketing: Examining the motivations and constraints of Twitter users. *Sport Marketing Quarterly, 21*(3), 170–183.