

The Exploration of Effects of Chinese Cultural Values on the Attitudes and Behaviors of Chinese Restaurateurs Toward Food Safety Training

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Abstract Foodborne illness is a challenge in the production and service of ethnic foods. The purpose of the study described in this article was to explore variables influencing the behaviors of U.S. Chinese restaurant owners/operators regarding the provision of food safety training in their restaurants. Seventeen major Chinese cultural values were identified through individual interviews with 20 Chinese restaurant owners/operators. Most participants felt satisfied with their previous health inspections. Several expressed having difficulty, however, following the health inspectors' instructions and in understanding the health inspection report. A few participants provided food safety training to their employees due to state law. Lack of money, time, labor/energy, and a perceived need for food safety training were recognized as major challenges to providing food safety training in Chinese restaurants. Videos, case studies, and food safety training handbooks were the most preferred food safety training methods of Chinese restaurant owners/operators, and Chinese was the preferred language in which to conduct the training.

Introduction

The Asian population in the U.S. is continually increasing. In 2000, 3.6% of the total U.S. population identified themselves as Asian. By 2010, that number had increased to 4.6%, and it is expected to reach over 8% by 2050 (Ortman & Guarneri, 2011). With the ethnic minority population increasing and people traveling outside the U.S. more often, Americans have become further exposed to and interested in ethnic foods. Chinese food is considered one of America's favorite ethnic cuisines as evidenced by the existence of nearly 41,000 Chinese restaurants in the U.S. (Chinese Restaurant News, 2007). Over 90% of Americans have tried Chinese food, and 63% eat Chinese food at least once a month (George, 2001).

Despite the progress made in the reduction of food safety risks in the U.S., foodborne illnesses remain a challenge, especially in ethnic food production and service. The Centers for Disease Control and Prevention reported that foodborne outbreaks associated with ethnic foods increased from 3% in 1990 to 11% in 2000 (Simonne, Nille, Evans, & Marshall, 2004). Restaurant inspection results of ethnic restaurants also revealed the need for further training in these establishments, as ethnic restaurants had more critical and non-critical food code violations than nonethnic restaurants (Kwon, Roberts, Shanklin, Liu, & Yen, 2010).

Several food safety training programs are available for restaurants, including the most widely used ServSafe® program. Roberts

and co-authors (2008) found that the four-hour ServSafe® food safety training program improved knowledge and food safety behavioral compliance associated with hand washing, the use of thermometers, and handling of work surfaces. They also noted, however, that improved knowledge alone did not increase behavioral intention to handle food properly (Roberts et al., 2008).

Health inspectors play an important role in protecting the public from foodborne illness outbreaks by carrying out duties such as routine health inspections, food safety training programs provision, and investigations in suspected foodborne illness cases (Pham, Jones, Sargeant, Marshall, & Dewey, 2010). Findings from an online survey of health inspectors, however, indicate the self-identified needs of health inspectors in Canada, such as a lack of food safety knowledge in different cultures (Pham, Jones, Sargeant, & Marshall, 2012). The increasing number of Chinese restaurants and the cultural differences may present unique food safety challenges for Chinese restaurateurs. Limited research has been conducted to assess the needs and challenges related to food safety training in Chinese restaurants as well as the possible cultural influences on food handling and food safety training at these restaurants.

Therefore, the purpose of our qualitative study was to explore variables influencing the behaviors of U.S. Chinese restaurant owners/operators regarding the provision of food safety training in their restaurants. The influence of Chinese cultural values (CCVs) on these behaviors was also investigated. Other variables, such as attitudes, past experiences, and perceived barriers related to health inspection and food safety training

TABLE 1

Respondents' Demographic Characteristics (N = 20)

Characteristic	#	%
Gender		
Male	13	65
Female	7	35
Education		
Less than high school	8	40
Bachelor's degree or higher	9	45
Declined to answer	3	15
Years of U.S. residency		
<10	3	15
10–20	12	60
>20	5	25

were also explored as they might also shed light on issues concerning the provision of food safety training in Chinese restaurants. In addition, the most preferred food safety training method(s) for this population was investigated for future research.

Methods

Approval of the research protocol to use human subjects in research was obtained from the university institutional review board prior to contacting participants for this research.

Participants and Recruitment

The target population of this study was Chinese restaurant owners/operators currently operating independent, traditional, full-service Chinese restaurants in the U.S. A list of Chinese restaurants was obtained through ChineseMenu.com, a suborganization of Chinese Restaurant News. Those subscribing to Chinese Restaurant News include owners and operators of Chinese restaurants in the U.S. who share their restaurant information online for marketing purposes. Only full-service, nonbuffet Chinese restaurants (N = 1,031) were selected to minimize variations due to different restaurant settings and styles of service. From the list, 50 Chinese restaurants were selected from various municipalities and regions and contacted by telephone to request an interview. When an owner/operator did not wish to participate in our study, a replacement from the same municipality was obtained to ensure the

inclusion of participants from different communities. The number of participants we planned to include in this qualitative study was 20 or more.

Development of Interview Questions and Pilot Study

Individual interviews with Chinese restaurant owners/operators were conducted to (a) investigate the core CCVs that influence Chinese restaurant operation and food safety training; (b) explore attitudes, past experiences, and barriers related to health inspection and food safety training; and (c) identify the most preferred food safety training method(s). The interview questions for our study were developed based on a literature review and input from three Chinese restaurant owners, food service systems–management educators, and food safety experts.

Prior to finalizing the interview protocols, a pilot study was conducted with three local Chinese restaurant owners/operators. The results of the pilot study were reviewed by experts, whose feedback served as the basis for revising and finalizing the interview questions. The revision process included the removal of questions that generated redundant responses, and the sequence of interview questions was changed to yield a logical interview process.

Data Collection

Participants were contacted by telephone and asked to participate in a 45-minute

interview. The informed consent form was read aloud to them via telephone by the researchers. Upon participant agreement, an interview was conducted, audio recorded, and transcribed verbatim.

Interviews were conducted by a bilingual researcher, who offered participants the choice of being interviewed (using identical questions) in English or Mandarin. The Chinese interviews were translated into English before being analyzed. All participants were encouraged to continue discussing each topic until no new ideas were generated. The researcher used a probing technique to stimulate new ideas and to get participants to elaborate on comments and clarify opinions.

Analysis

Common themes were identified from the transcribed data by two researchers, who coded each transcription independently. Codes with similar meanings were grouped together under the same categories. Themes were identified related to various CCVs; attitudes, past experiences, and perceived barriers related to health inspection and food safety training; and the most preferred food safety training methods in Chinese restaurants.

Results

Demographic Characteristics of Respondents

Out of 50 Chinese restaurant owners/operators from the list, 20 participants in different locations agreed to be interviewed. The majority (n = 13) of participants were male, and eight participants had a high school education or less, while nine had a bachelor's degree or higher (Table 1). Three participants refused to answer the question concerning education level because they felt the question was intrusive. The majority (n = 17) of participants had been residing in the U.S. for 10 years or longer. Among the 20 Chinese restaurants, eight had 100 seats or less, five had 101–200 seats, and four had more than 200 seats (Table 2). Three participants did not provide this information. Eleven Chinese restaurants had 10 or fewer full-time employees, and 15 Chinese restaurants had 10 or fewer part-time employees. More than half (n = 13) of the Chinese restaurant owners/operators used Chinese as the main language to communicate with their employees.

Past Experiences With Health Inspections and Food Safety Training

Past Experiences With Health Inspections

When asked how satisfied they were with previous health inspections, the majority of respondents indicated that they were satisfied, but a few participants stated their dissatisfaction, saying, “The inspector was very strict and picky.” One participant with over 20 years of restaurant operation experience also mentioned communication issues during the health inspection. “It [the health inspection] was OK. We don’t have critical violations or only a few, if any, that we overlooked. But different places have different standards, and there may be some communication problems,” he stated.

Difficulty understanding the health inspection report was a concern for Chinese restaurateurs due to language barriers. One participant who could only speak Chinese, stated, “If they write down the violations, I don’t know what they are talking about in the report.” By contrast, other participants who could speak a limited amount of English felt fully confident about following the health department’s instructions even without reading the report. “Even [though] my English is not that good, I understand what they [the health inspection reports] are talking about based on my experience,” stated one participant.

Some participants expressed their concerns about the health inspectors not understanding differences between Chinese and American cooking methods. One participant, who had more than 20 years of restaurant operation experience, stated, “The health inspector said we left the food [at] room temperature when cooking. But some foods need to be left at room temperature to cook in the traditional way.”

When asked about whether they agreed with the health inspectors’ comments, some participants stated that they fully agreed with their suggestions because they thought the comments made sense and were fair. Others had a different view, however, as reflected in one of the participant’s comments, “If the recommendations make sense, we have nothing to say. But if something is so ridiculous, or [if they are] saying we (Chinese restaurants) cannot use some types of containers when the one [restaurant] across the street can, this doesn’t make any sense.”

TABLE 2

Operational Demographic Characteristics (N = 20)

Characteristic	#	%
Number of restaurant seats		
0–50	5	25
51–100	3	15
101–150	3	15
151–200	2	10
>200	4	20
Declined to answer	3	15
Number of full-time employees		
1–10	11	55
11–20	3	15
>20	2	10
Declined to answer	4	20
Number of part-time employees		
1–10	15	75
11–20	1	5
Declined to answer	4	20
Number of kitchen employees		
1–10	6	30
11–20	2	10
>20	1	5
Declined to answer	11	55
Number of servers		
1–10	7	35
11–20	1	5
>20	1	5
Declined to answer	11	55
Communication language		
Chinese	7	35
English	2	10
Spanish	2	10
Both Chinese and English	6	30
Both English and Spanish	3	15

Past Experiences With Food Safety Training

Among the 20 participants, 15 had attended food safety training in the U.S. since food safety training was required for restaurant managers in certain states before opening a restaurant. When the researcher asked how effective they thought the food safety training was, all 15 participants felt that food safety training was very effective. “You don’t understand anything if you don’t go. It [the food safety training] is a must,” one participant who has been in the U.S. for a relatively short time (<10 years) stated.

Regarding food safety training for employees, however, different results were yielded. Nine of the 20 participants stated that none of their employees had participated in formal food safety training in the U.S. Many of them only provided their employees “ongoing training in the restaurants.” Ten participants provided formal food safety training for “some of their employees” and stated that they did not think it was necessary for all employees to participate in food safety training. Out of the 20 participants, only one, who had more than 10 years restaurant operation experience and

TABLE 3

Chinese Cultural Values (Chinese Culture Connection, 1987)

CVS I Integrity and Tolerance (Development of self)	CVS II Confucian Ethos (Relationships with others)	CVS III Loyalty to Ideals and Humanity (Social responsibility)
Filial piety	Loyalty to superiors	Observation of rites and rituals
Industry—working hard	Benevolent authority	Reciprocation of greetings and favors, gifts
Tolerance of others	Noncompetitiveness	Solidarity with others
Harmony with others	Keeping oneself disinterested and pure	Moderation, following the middle way
Humbleness	Contentedness with one's position in life	Ordering relationships by status and observing this order
Kindness (Forgiveness, compassion)	Being conservative	Resistance to corruption
Knowledge (Education)	Protecting your "face"	Patriotism
Self-cultivation	Chastity in women	Thrift
Sense of righteousness	Having few desires	Having a sense of shame
Personal steadiness and stability	Respect for tradition	
Sincerity		
Patriotism		
Persistence (Perseverance)		
Patience		
Adaptability		
Prudence (Carefulness)		
Trustworthiness		
Courtesy		

CVS IV Moderation and Moral Discipline (Worldly wisdom)
Repayment of both the good and the evil that another person has caused you
A sense of cultural superiority
Wealth

Note. CVS = Chinese Value Survey.

a college degree, asked all employees to attend formal food safety training, mainly because it was mandatory in their state.

Perceived Barriers to Providing Food Safety Training for All Restaurant Employees

Lack of Money, Time, Labor, and Energy

Chinese restaurant owners/operators shared their perceived barriers to providing food safety training for all restaurant employees. Four of the 20 participants identified lack of money as one of the challenges to providing food safety training for their employees. Several participants, especially the owners/operators of small restaurants, felt that the following comment rang true: "We can't afford to pay for those [employee training] expenses now. So we can only afford internal training."

Lack of time was another challenge some Chinese restaurant owners/operators faced when providing food safety training for all employees. One participant who had been operating restaurants for more than 10 years replied, "We need to squeeze time to provide training."

Two participants with 10 years of restaurant operation experience stated that a lack of labor was the main barrier they faced concerning food safety training in the restaurant. "There are difficulties in providing food safety training to all employees. [We] don't have a fixed schedule, and we don't have enough staff," one participant stated.

Another participant with more than 20 years of experience in the restaurant did not want to provide employees training for food safety because, as he commented, "They are super tired after each work day. [We have] no extra time or energy [for food safety training]."

Lack of a Perceived Need for Food Safety Training

In addition to the lack of time, money, and adequate staff mentioned by many food service management staff, seven Chinese restaurant owner/operators stated that they did not feel the need to provide food safety training for all employees. One participant with 10 years of restaurant operation experience stated, "No. It [food safety training for employees] is not necessary. We have internal training for employees; they don't need to go to any training." Another participant also stated, "[The training is] not necessary. We have

four trained employees, so it's enough." These responses showed that participants did not perceive a need to provide food safety training, partially due to having confidence in their ability to provide safe food. They did not seem to have a complete understanding of the importance of food safety or its relevance to their establishments. Such an attitude may prevent Chinese restaurant owners/operators from providing food safety training to all employees.

Other Barriers for Chinese Restaurateurs

Two participants perceived that employees were not willing to attend food safety training, even though the food safety training was provided free of charge. Others ($n = 4$) felt that their employees' education levels were too low for them to understand the food safety training. "Some employees are not qualified for food safety training. They don't understand it anyway," one participant stated. Other participants mentioned employees' language barriers and lack of transportation as a barrier. Additionally, perceived difficulty in changing employees' behaviors was noted as another barrier by one of the Chinese restaurant owners/operators: "It's not easy to change to good [food safety practice] habits only by training."

TABLE 4

Chinese Cultural Values

Chinese Cultural Values	Frequency*	Questions and Examples of Responses
Respect	29	<p>“What are some major differences between American and Chinese cultures?”</p> <ul style="list-style-type: none"> • <i>Mutually respect to different people.</i> • <i>We should respect ourselves first, and then other will respect you. If you don't respect yourself, you can't ask others to respect you.</i> • <i>Chinese tradition is to respect the elderly and care for the young, respect parents, and other people's life value.</i> <p>“Please describe the relationship between the owner and employees.”</p> <ul style="list-style-type: none"> • <i>Our boss is the best in town. He treats employees equally well. If you respect others, they will respect you as a return.</i>
Authority	28	<p>“Do you agree with health inspectors' comments?”</p> <ul style="list-style-type: none"> • <i>You have to follow their [health inspectors] recommendations.</i> • <i>We have to follow, because it's mandatory by state law.</i> • <i>Of course I will agree anything they [health inspectors] said. I can't argue with them.</i> <p>“How easy was it for you to follow the health inspector's instruction?”</p> <ul style="list-style-type: none"> • <i>Although I feel it's not necessary, we have to follow [inspector's instruction].</i>
Tolerance	23	<p>“What Chinese cultural values affected your attitude and behaviors on dealing with difficult customers?”</p> <ul style="list-style-type: none"> • <i>Patience, patience, and more patience. Since we are in the service business, just like what you've heard, “customers always right!”</i> • <i>Whatever customers did, they are always right. You need to make them come back.</i> • <i>We need try to satisfy them [customers] as well as possible.</i> • <i>You can't argue with them [customers], directly.</i>
Self-confidence	19	<p>“How confident are you to provide safe food to your customers?”</p> <ul style="list-style-type: none"> • <i>I am fully confident, 100%.</i>
Harmony	11	<p>“What Chinese cultural values affected your attitude and behaviors on dealing with difficult customers?”</p> <ul style="list-style-type: none"> • <i>There is a principle for Chinese restaurant: first, customers are always right. Even if you think it's the customers' fault, the wait staff still needs to act as if customers are always right.</i>
Courtesy	11	<p>“What are some major differences between American and Chinese cultures?”</p> <ul style="list-style-type: none"> • <i>If you need anything, you should say “Excuse me, could you help me...”</i> • <i>From a polite prospective, you also need to talk to your customers with courtesy.</i>
Friendship	10	<p>“What is your relationship with customers?”</p> <ul style="list-style-type: none"> • <i>Most of customers are our friends.</i> • <i>You should say every customer is your friend.</i>
Power distance	9	<p>“What is your relationship with your employees?”</p> <ul style="list-style-type: none"> • <i>[We have] Very good relationships! Just like the relationship between [a] boss and employees.</i>
Sincerity	9	<p>“What is your relationship with customers?”</p> <ul style="list-style-type: none"> • <i>Customers are the number one... [We provide] good food and service and [we are] honest to customers.</i> <p>“What makes your restaurant unique or competitive?”</p> <ul style="list-style-type: none"> • <i>We are honest in providing service. We don't cheat our customers.</i> • <i>I think honest to customers is very important.</i>
Reciprocity	7	<p>“What is your relationship with other Chinese restaurant owners/health inspectors?”</p> <ul style="list-style-type: none"> • <i>Having a good relationship makes mutually benefits.</i> • <i>They are friends. We could help each other.</i> • <i>Sometimes we discuss with each other about restaurant operation. And we can help each other, whenever we need help. We could have mutual benefits.</i>
Family trust	6	<p>“Whose opinions impact your business practices the most?”</p> <ul style="list-style-type: none"> • <i>I trust my people, my family.</i> • <i>I only trust my family.</i>
Thriftiness	6	<p>“What are some major differences between American and Chinese cultures?”</p> <ul style="list-style-type: none"> • <i>Chinese people like making and saving the money and developing their business.</i> • <i>Some customers throw a whole plate full of food out with only one bite eaten. I told them it's such a waste.</i>
Humbleness	5	<p>“What makes your restaurant unique or competitive?”</p> <ul style="list-style-type: none"> • <i>(Regarding their business success) It's not very good.</i> • <i>Actually I don't have any strategies.</i> • <i>How do you know our restaurant is very successful? (Rephrased question followed by a laugh and no answer).</i> • <i>Not very successful.</i>

continued ▶

TABLE 4 *continued***Chinese Cultural Values**

Chinese Cultural Values	Frequency*	Questions and Examples of Responses
Face	4	"What are some major differences between American and Chinese cultures?" <ul style="list-style-type: none"> • <i>As a Chinese, we love to keep our "face."</i> • <i>I can't serve food in the dining room, because I want to protect my "face." I rather working in the kitchen and no one could see me.</i>
Diligence	4	"What are some major differences between American and Chinese cultures?" <ul style="list-style-type: none"> • <i>I worked with three or four restaurants during the year; I just wanted to have some experience. I had lots of difficulties such as some work-related injuries because of hard work.</i> • <i>I think that diligent is on the top of the list.</i>
Carefulness	2	"What are some major differences between American and Chinese cultures?" <ul style="list-style-type: none"> • <i>Chinese are more careful and think more like "why things are like this or that?" They have more concerns and never take things granted.</i>
Adaptability	1	"What are some major differences between American and Chinese cultures?" <ul style="list-style-type: none"> • <i>[We] just follow American way to do things and adapt to their life style.</i>

*The total frequency of each value exceeds 20 because of repeated responses to a variety of questions by participants.

Chinese Cultural Values

A total of 17 major CCVs were identified through the individual interviews. The 17 CCVs from our participants were included among the previously identified 40 CCVs (Chinese Culture Connection, 1987). CCVs were captured when participants answered various interview questions (Table 3). When researchers asked participants to identify the major differences between the American and Chinese cultures, comments related to "friendship" were mentioned the most ($n = 12$), followed by "respect" ($n = 9$), "humbleness" ($n = 7$), and "thriftiness" ($n = 6$). Additionally, "courtesy," "carefulness," "diligence," "face," and "adaptability" were identified as CCVs that differed from those of U.S. mainstream culture.

When participants were asked about their relationships with difficult or regular customers, "tolerance" was identified as the major CCV ($n = 19$) followed by "sincerity" ($n = 9$) and "harmony" ($n = 7$). In answering the questions about their relationships with health inspectors, "authority" ($n = 18$) and "reciprocity" ($n = 7$) were mentioned most frequently. Six Chinese restaurant owners/operators mentioned "power distance" when asked about their relationships with their employees. "Power distance" was applied to measure the degree of inequality in power between a less powerful individual and a more powerful person (Mulder, 1977). "Family trust," "adaptability," and "self-con-

fidence" were other CCVs related to participants' business practices. Table 4 summarizes the Chinese values identified during interviews and provides examples of direct quotations from participants.

Preferred Food Safety Training Method and Language of Chinese Restaurant Owners

In an effort to identify the most suitable food safety training methods for this population, participants were asked about their preferred food safety training method and language of instruction. Eleven participants mentioned video as their preferred training method. "Watching [a] video is simple and easy to understand," one participant replied. Eight participants mentioned case studies as a preferred training method because, as one participant stated, "case studies will let my employees see [the] types of mistakes they commonly make that will make people sick." The third most preferred food safety training method ($n = 6$) was the use of a food safety training handbook. "I think a food safety training handbook is a good way for people to learn. It's convenient and flexible for employees to learn by themselves," one participant responded.

Most of our participants ($n = 13$) preferred the use of the Chinese language rather than English for food safety training materials. "[Chinese is] easy for us to understand," one of the participants stated. Six participants

said that they liked to use English because as one participant responded, "We have many employees from different countries, so we need to speak English to make sure everyone understand[s] one another."

Discussion

A total of 17 CCVs were identified as factors affecting Chinese restaurant operation. These 17 CCVs were a part of the 40 CCVs identified by the Chinese Culture Connection (1987). CCVs have been studied for many years, especially in the business setting. Confucianism is one of the largest influences on CCVs, and "trust, reciprocity, face, time, harmony, hierarchy, power distance, and long-term orientation" have been identified as major CCVs (China-biz.org, 2002).

"Respect" and "(saving) face" were frequently mentioned by our participants during the interviews. Face is defined as "the respect, pride and dignity of an individual as a consequence of his/her social achievement and the practice of it (Leung & Chan, 2003)." To Chinese people, face means not disgracing oneself or one's family, and it is an important element in the Chinese culture (King, 1988). Face not only encourages Chinese people to function properly within the community, but also represents a reputation that people make great efforts to build up during their lives (Huang, Davison, & Gu, 2011). Therefore, respect and face are two

important CCVs for health inspectors to consider for improving food safety practices in Chinese restaurants.

Given the importance of these two items as reflected in the interviews for our study, Chinese restaurant owners/operators might be more willing to cooperate and follow health inspectors' recommendations if the latter make additional efforts to show respect to this population. This, in turn, will improve the food safety practices in those food service establishments. Since face is the foundation of the Chinese culture, health inspectors need to utilize this unique characteristic to improve food safety practices among Chinese restaurants. If health inspectors disclosed health inspection results to the public, Chinese restaurant owners/operators would pay more attention to their health inspection/food safety performance due to the fear of losing face for having poor health inspection reports.

"Authority" and "power distance" were identified as major CCVs that affect Chinese restaurant operation and interactions with health inspectors. Authority was an important value as Chinese restaurant owners expressed a willingness to follow the orders/requirements of health inspectors, who are considered as authority figures in Chinese culture. One of the Confucian virtues is respect for authority or individuals who have a good reputation and considerable power (Kirkbride, Tang, & Westwood, 1991). Chinese restaurant owners/operators perceived that their operations were fully controlled by health inspectors (due to their position of power) and that they had to follow their instructions at any cost. Therefore, health inspectors may enforce specific regulations on food safety training for Chinese restaurants. Thus, Chinese restaurant owners/operators may be more motivated to provide food safety training to their employees if deemed mandatory by state law.

"Power distance" was another major CCV researchers identified as influencing dynamics in Chinese restaurants. Participants described a "good relationship" with their employees as "just like the relationship between [a] boss and employees." This is a good example of how the Chinese culture views power distance as a cultural norm, and as a result, they may consider themselves authority figures. Understanding this CCV may be useful when health inspectors are developing food safety training programs for this population. Employees in Chinese res-

taurants will improve their attitudes toward food safety training and be willing to attend food safety training if the health inspector or owner/operator asks them to do so.

"Sincerity" and "trust" are critical components to consider when Chinese people establish social networks. Sincerity indicates that communication can be taken at face value as it actually reflects people's thoughts and feelings (Tao, 2005). Showing sincerity allows individuals to gain trust from the other party. In our study, however, some participants implied that they did not trust people other than their family members or close friends. Chinese people often establish trusting social networks first with family members, relatives, friends, classmates, and colleagues. Since health inspectors interact with Chinese restaurant owners/operators regularly, they should be encouraged to establish trusting relationships with them. One way to establish such relationships might be for health inspectors to initiate displays of trust toward Chinese restaurant owners/operators. Health inspectors may gain trust from them in return, which could help to improve the level of collaboration between the two parties on restaurant food safety.

"Reciprocity," or "*guanxi*" in Mandarin, serves to establish relationships between two parties. Although a universal concept, reciprocity has particular salience for Chinese people. According to the principle of reciprocity, the person who first receives a benefit needs to repay it in the future. For most people in China, a transaction will only take place when it is mutually beneficial for both parties involved. Therefore, reciprocity is what sustains a network relationship in a business setting. Without reciprocity, established *guanxi* disappears (Chen & Chen, 2004). Thus, if health inspectors could provide information on the mutual benefits for Chinese restaurant owners/operators and health inspectors in terms of preventing foodborne-illness outbreaks, Chinese restaurant owners/operators might understand the importance of food safety practices and be motivated to provide food safety training to all employees in their foodservice establishments.

Individuals who follow the Confucian "Doctrine of the Mean" prefer to avoid competition and conflict and maintain harmony (Chen, 2002). "Harmony" plays a critical role in a two-party relationship. Without harmonious and reciprocal relationships, face and trust cannot continue to exist and *guanxi* will not be estab-

lished (Chen & Chen, 2004). "Tolerance" is an essential aspect of harmony. To avoid conflict, our study showed that tolerance and patience are frequently used by Chinese people in the business setting. Moise (1995) indicated that Chinese people tend to avoid conflicts and prefer resolving issues in an "implicit and mild" manner. Direct conflict hurts the relationship with the other party, especially when the other party is of a higher social status. Since Chinese people are more sensitive to the concepts of hierarchy and power distance in comparison with Americans, Chinese people avoid conflicts more frequently than Americans do (Friedman, 2006). If health inspectors could provide Chinese restaurant owners/operators with more details on the importance of food safety training as well as the negative consequences of foodborne-illness outbreaks (e.g., poor restaurant reputation and increased customer arguments and lawsuits), the awareness and attitude toward providing food safety training to employees in Chinese restaurants would improve in this population.

"Relationships" are also valued by the Chinese people. That is, once a relationship is established between the Chinese, it is unlikely to be broken. Once a relationship is severed, however, it is extremely difficult to repair (Huang et al., 2011). In other words, long-term relationships are essential for the Chinese people and their culture. Thus, by establishing long-term relationships with Chinese restaurant owners/operators, health inspectors can work with them more easily to prevent foodborne-illness outbreaks and improve food safety practices in Chinese restaurants.

According to Kwon and co-authors (2010), Asian and Mexican or Latin American ethnic restaurants had significantly more critical violations and inspections than nonethnic restaurants. In our study, most participants felt very satisfied with their previous health inspections. Several Chinese restaurant owners/operators expressed concern, however, about following the health inspectors' instructions in their restaurants. In our study, language barriers were reported to have occurred during health inspections. Several participants noted that they had experienced difficulty understanding the health inspection report and had questions about the health inspectors' comments, which may be partially due to the participants' lack of food safety knowledge (Mauer et al., 2006). Food safety training has been found to be an

effective way to improve food safety knowledge and food safety behavioral compliance related to hand washing, the use of thermometers, and handling of work surfaces (Roberts et al., 2008). The majority of our participants received food safety training in the U.S. and felt this training was effective in that they gained specific knowledge. Only a limited number of participants provided food safety training to their employees, however. Previous studies have presented similar results. Ram and co-authors (2000) reported that only 26% of independent ethnic restaurant operations provided food safety and personal-hygiene training to their employees and that the training was not given unless required by law.

Food safety knowledge and behaviors could be improved by food safety training (Roberts et al., 2008). A lack of resources, time constraints, and employees' attitudes have been identified as barriers to providing food safety training to restaurant employees (Roberts et al.; Youn & Sneed, 2002). In terms of the barriers to providing food safety training for employees in Chinese restaurants, our participants mentioned lack of money, time, labor, energy, and employee motivation/qualification as the biggest challenges in the Chinese food-service industry. Language barriers may also influence employee motivation and qualification for food safety training, similar to findings from a previous study in an ethnic restaurant (Mauer et al., 2006). Additionally, the attitudes of our participants toward food safety training were also found to be rather negative.

Our study also identified the food safety training method and language most preferred by participants. Videos, case studies, and food safety training handbooks using the Chinese language were most frequently mentioned by our participants. Based on these data, if health inspectors could provide food safety training programs to Chinese restaurants using videos, case studies, and food safety training hand-

books, their willingness and level of collaboration to participate in food safety training would increase. By presenting food safety training programs in Chinese, health inspectors could improve Chinese restaurant food handlers' learning capability of food safety knowledge.

Conclusion

A total of 17 CCVs associated with providing food safety training among U.S. Chinese restaurant owners/operators were identified. The values identified were consistent with general CCVs identified in previous research (Chinese Culture Connection, 1987). Recommendations for health inspectors on how to incorporate CCVs into the food safety practices in Chinese restaurants have been discussed previously. If health inspectors apply the CCVs identified in this study when inspecting and providing training in Chinese restaurants, the awareness, attitude, and motivation among Chinese restaurant owners/operators and their employees may be improved.

The majority of participants expressed satisfaction with previous health inspections, but several expressed concerns about their ability to follow the health inspectors' instructions in Chinese restaurants. Most participants attended food safety training in the U.S. and noted that they found the training effective in increasing their food safety knowledge. Only a few Chinese restaurants provided food safety training to their employees, however.

Our study has revealed several perceived barriers to the implementation of food safety training in Chinese restaurants, including lack of money, time, labor, energy, and employee motivation/qualification. Moreover, our study showed that Chinese restaurant owners/operators lack full recognition concerning the necessity to provide food safety training. Videos, case studies, and food safety training handbooks were found to be the most preferred food safety training methods of Chinese

restaurant owners/operators, and Chinese was found to be the preferred language for food safety training. Future quantitative research may validate these findings and provide a basis for developing effective food safety training materials for Chinese restaurants.

The results of our study have significant implications for both theoretical and practical applications. Our study, to the best of our knowledge, is the first to investigate cultural values and their influence on restaurant operations and food safety training in Chinese restaurants. Some food safety training programs have been developed for this population, but the lack of cultural sensitivity hampered program effectiveness (Mauer et al., 2006). By understanding traditional cultural values and preferred training methods, health inspectors and food safety educators may develop strategies to reach and influence Chinese restaurant owners/operators more effectively. The Chinese community may also utilize the research findings to recognize the need for food safety training and investigate ways to improve food safety in their restaurants, such as by providing food safety training to Chinese restaurant owners/operators using their preferred training materials and methods.

Limitations

The individual interviews were applied to gather in-depth data from a small number of participants ($N = 20$). Therefore, due to the nature of qualitative research and the limited number of participants, the data may not be generalizable to all Chinese restaurant owners in the U.S. The results are not intended to be representative of the opinions of all Chinese restaurant owners. ☹️

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Managing Editor's Desk

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time NEHA raised dues was in 2005—eight years ago! And at that time, we raised them by a whopping \$10. To this day, NEHA's dues remain one of the lowest to be found among national professional societies. And unlike that president whom I referred to above, we take pride in NOT raising our dues frequently!

I think it is important that NEHA members know these particulars when it comes to the cost of being a member of this association.

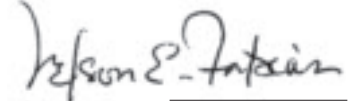
While still on the issue of dues and to ensure that this presentation is as complete and transparent as possible, I should also bring the membership up to date on where we stand with a multiyear dues option, which I first talked to you about over a year ago.

That opportunity—together with the publication of an e-journal—is still very much alive and sitting on the launch pad ... waiting for launch. The holdup has been due to the exasperating difficulty that we have been having in finishing up a conversion process from an archaic association management system to a much more modern and capable one. The good news is that we are almost done.

Once we have the conversion complete and depending on which membership option the member prefers, it is possible that the member will see an even lower NEHA dues fee. If a member prefers to continue to receive a hard-copy *Journal*, that member will see a dues increase.

We hope to be able to announce this new system of dues within the next several months.

In the meantime, please know that we take the matter of dues very seriously. You can be assured that our commitment to keeping NEHA's dues as low as possible will endure. It is embedded in our concept of whom and what NEHA is. Even during our worst year during the recession when NEHA lost almost \$200,000 (which for us was a huge sum of money), the issue of a dues increase never once came up. I can't imagine a stronger statement about NEHA's perspective on dues and the value we attach to having you as a member of this wonderful association. 🐼



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