Emotional labor in hospitality: Positive affective displays in service encounters

By: Jing Li, Bonnie F. Canziani, Carla Barbieri

Li, J., Canziani, B. F., & Barbieri, C. (2018). Emotional labor in hospitality: positive affective displays in service encounters. Tourism and Hospitality Research, 18(2), 242–253. DOI: 10.1177/1467358416637253

This version © The Authors, 2016. This is not the final version. This article has been published in Tourism and Hospitality Research, published by SAGE Publication. Reprinted with permission. Figures and/or pictures may be missing from this version of the document. The version of record is available at https://doi.org/10.1177/1467358416637253, © The Authors.



This work is licensed under a Creative Commons Attribution-

NonCommercial-NoDerivatives 4.0 International License.

Abstract:

The study used web-based simulated hospitality scenarios to examine cultural differences in emotional cognition of facial expressions among Chinese and American subjects in an exploratory study. Results indicate that the two cultural groups interpreted smiling and direct eye-gaze similarly. Although a smiling face elicited positive emotional affective responses from both cultural groups, smiling alone was not sufficient to stimulate more positive subject reactions: Smiling needs to be accompanied by direct eye-gaze to fully elicit positive reactions from subjects. Study results suggest that global hospitality standards should reflect findings of psychological research on emotional labor and also that business normative guidelines should encourage the display of smiling faces along with direct eye-gaze to motivate a positive customer experience. No support was found for tailoring facial expressions related training to customers' cultural backgrounds.

Keywords: culture | emotional labor | affective facial displays | emotional cognition | customer service

Article:

Introduction

Service quality in the hospitality sector has been linked to business competitiveness and to ultimate success (Giannakos et al., 2014; Yildiz and Kara, 2012). Attention to service quality contributes to high customer satisfaction because it exhibits responsiveness to customers and fosters emotional bonding between customers and service providers (Davidson, 2003; Gustafsson et al., 2005; Hanif et al., 2010). The interaction between frontline service providers and guests is considered a critical determinant of service satisfaction and of brand loyalty because it affects customers' perceptions of service quality (Barger and Grandey, 2006; Hui and Toffoli, 2002; Kandampully et al., 2001; Stauss and Mang, 1999; Tsai and Huang, 2002; Zeithaml et al., 2006).

Given the significance of the provider–customer interaction, the concept of emotional labor has emerged to describe organizational expectations that employees display positive emotions to prompt customers' positive disposition toward the service provided (Groth et al., 2009; Hochschild, 1983; Wharton, 2009). Since service is produced and consumed simultaneously, customers' perceptions of emotional displays impact critical business outcomes in terms of customer purchasing behavior (e.g. intention and amount of purchase) and willingness to commit to future purchases (Chang, 2000; Hochschild, 1983; Tsai and Huang, 2002). Emotional labor has become an important job requirement in the hospitality industry, especially for those positions entailing a direct relationship with the guests, because it builds provider–customer bonding (Chu and Murrmann, 2006). Such bonding, in turn, enhances the competitive advantages of organizations and lead to their long-term survival (Lam and Chen, 2012; Lucus and Deery, 2004).

Due to high expectations for service quality in the hospitality industry, emotional labor has become a critical variable in service performance (Shani et al., 2014). Nevertheless, hospitality scholarship is scant as regards quantitative measurement of emotional displays and their impacts on customers (Chu et al., 2012). Additionally, the literature verifies that the study of emotions is also important as a cross-cultural issue (Shani et al., 2014) given that the hotel sector has been largely influenced by globalization and international franchising trends (Go and Pine, 1995; Guerrier and Deery, 1998). However, there are few studies exploring the role of culture in the performance of or response to emotional displays. Since cultural manifestations (e.g. beliefs, values, traditions) shape people's thoughts and behavior (Furrer et al., 2000; Leu et al., 2011), it is expected that culture also impacts emotional displays and customers' perceptions of providers' emotions (Johanson and Woods, 2008).

This exploratory study responds to the need to better understand emotional labor performance during a provider–customer interaction in the hospitality industry (Chu et al., 2012; Johanson and Woods, 2008; Kim, 2008; Medler-Liraz, 2014; Shani et al., 2014). A better phenomenological understanding of emotional displays is important to identify positive cues that can foster customer satisfaction and expectations, thus clientele retention (Chu et al., 2012; Hochschild, 1983; Kim, 2008). It is especially critical to understand the role of culture since emotional display and perceptions of emotions have been found to be culturally determined (Bello et al., 2010; Ekman et al., 1987; Mesquita, 2003). Thus, this study pursues two objectives: examine subjects' stated emotional perceptions of service providers' facial expressions (i.e. smile and eye gaze) and explore the cultural effect (Chinese versus American) on customers' perceptions of common emotional displays in the hospitality industry.

By addressing the aforementioned objectives, this study moves forward the phenomenological understanding of emotional labor by recognizing the role of cultural influences upon specific nonverbal markers (i.e. customers' perception of presence/absence of smile and direct/indirect eye gaze). In doing so, study results carry important managerial applications, specifically to inform hospitality service global standards and internal organizational normative guidelines that foster positive emotional displays, and thus, improve provider—customer interaction and organizational performance. Although emotional cues are hard to prescribe, fostering employees to display positive emotions (e.g. authentic smile) during service interaction is both possible (Baum and Devine, 2005) and important as they impact service quality (Chu and Murrmann, 2006; Hochschild, 1983; Pizam, 2004).

Literature review

Emotion is the psychophysiological process of experiencing or displaying affect and often involves biological and mental reactions to signals exteriorized through facial expressions, verbal statements, and physical behaviors of others (Tsai et al., 2006). The communication of emotions, referred as emotional display, is a fundamental aspect of the provider—customer interaction because customers' perceptions of providers' emotions determine customer satisfaction (Barger and Grandey, 2006; Chi et al., 2011; Chu et al., 2012; Jack et al., 2014; Tsai and Huang, 2002). This is especially important in service industries, such as in the restaurant and lodging sectors, because the product (e.g. food served in a restaurant) and service (e.g. serving the food to patrons) provided are inseparable (Parasuraman et al., 1985, 1993).

Displaying positive emotions through simulated affection on the part of employees (e.g. respectful expressions, empathy) is associated with organizational objectives such as customer satisfaction, intention to return, and positive word of mouth (Chi et al., 2011; Johanson and Woods, 2008; Söderlund and Rosengren, 2008; Tsai, 2001). Conversely, negative affective displays (e.g. impolite wording, unfriendly attitude) have a negative effect on service satisfaction (Brotheridge and Grandey, 2002; Brotheridge and Lee, 2003; Gross and John, 2003). Thus, certain emotional displays are encouraged by hospitality organizations to maximize the positive outcomes of provider–customer interaction.

Smile and eye gaze are two common nonverbal expressions/features in customer service interactions (Ford, 1998). Smiling employees manifest core service indicators of courtesy, respect, compassion, and hospitality (Barger and Grandey, 2006; Gross and John, 2003; Matsumoto and Hwang, 2012) and thus have become the golden rule for American businesses and have been encouraged since the early 1900s (Barger and Grandey, 2006; Chi et al., 2001; Chu et al., 2012; Hunter, 2011; Johnson and Spector, 2007; Söderlund and Rosengren, 2008). Likewise, the directness of eye gaze is positively associated with comfort, which can foster a sympathetic provider–customer relationship (Exline, 1974).

Emotional labor and positive affective displays

Organizations have developed internal normative standards to encourage their frontline employees to simulate certain emotions through facial (e.g. smile, eye gaze) or verbal (e.g. greetings, farewell) expressions (Shani et al., 2014) to optimize the provider–customer interaction and elicit desirable feelings from customers. Employees who are expected to display positive emotions through observable facial and body expressions (e.g. smile) are assigned "emotional labor," a term originally coined by Hochschild (1983). Thus, emotional labor has been recognized as a key dimension of service quality (Parasuraman et al., 1985) and a key contributor to organizational goals (Grandey and Brauburger, 2002).

The deployment of emotional labor in hospitality organizations is meant to elicit a positive affect from customers (Johanson and Woods, 2008; Kim, 2008; Kim and Han, 2009; Larsen and Ketelaar, 1991; Watson and Slack, 1993). Positive affect is the tendency of an individual to experience positive emotions (e.g. happiness, relaxation) and to be influenced by their positive perceptions of the world (George, 1992; Larsen and Ketelaar, 1991; Watson et al., 1988). Emotional displays facilitate a corresponding (contagion) emotional state in others (Hatfield et al., 1994). This explains, for example, why service providers in the hospitality sector displaying positive affective emotions receive higher tips and positive customer appreciation (Medler-Liraz,

2014). From an exchange value perspective, emotion is an important transactional element in customer relationships.

Smile as a positive emotional display at work

Encouraging service professionals to enact a variety of positive affective displays is a strategy to manage customers' emotional states during provider—customer interaction (Mattila and Enz, 2002). This is especially important in the hospitality industry given the large number (1.86 million) of hotel workers with varied backgrounds and personalities that have to directly interact with customers (American Hotel and Lodging Association, 2014) and the emergent demand for highly skilled service providers (Baum, 2002; Baum and Devine, 2007). Among all emotional displays, smile is especially recommended among all frontline service providers (Cook and Macaulay, 1997; Muir, 2008) because of its strong impact on customers' dispositions (Burns, 1997; Line and Runyan, 2012; Warhurst and Nickson, 2007).

Although service workers are encouraged to display positive and friendly attitudes through certain types of smile features (e.g. authentic, natural, genuine) that customers tend to favor (Ariffin and Maghzi, 2012; Chu and Murrmann, 2006; Ekman, 1992; Grandey et al., 2005), formal training toward such a goal is challenging and controversial. At a minimum, the quest for standardized positive emotional displays requires service providers to modify their nonverbal and verbal displays to meet job requirements. Such training and concomitant performance expectations may often conflict with employees' authentic feelings (Johnson and Spector, 2007; Johanson and Woods, 2008; Kim, 2008; Kim and Han, 2009; Lam and Chen, 2012; Zapf and Holz, 2006). Employee cultural practices may also be a factor in an employee's ability or willingness to display positive affect to customers.

Cultural impact on emotional display and perception

Culture, defined as an intricate system of social concepts and beliefs, norms each individual's emotional display of and expectations for social interaction (Engelmann and Pogosyan, 2013; Leu et al., 2011). Since variations in the display and the perception of emotions are culturally bonded (Bello et al., 2010; Ekman et al., 1987; Mesquita, 2003), interactions between emotional labor and customers are ultimately a cultural issue. Individuals from western individualistic cultures tend to convey their emotions in a more direct way than do people who are engrained in collectivistic cultures; the latter are encouraged to control their emotional expressions to maintain group harmony (Heine et al., 1999; Markus and Kitayama, 1991; Matsumoto et al., 2008). Chinese, as compared to Americans for example, use different linguistic forms and semantic content to express their complaints because of their sensitivity to social power associated with their group-oriented culture (Chen et al., 2011). Similarly, Japanese were found to restrain expressions of power (e.g. anger, contempt, and disgust) more than did Canadians (Safdar et al., 2009). Americans tend to convey their appreciation directly using both verbal and nonverbal expressions, while Chinese favor nonverbal over verbal expressions (Bello et al., 2010).

Research also indicates that cultural background is associated with emotional perception of facial signals (Nagashima and Schellenberg, 1997). For example, Americans tend to rate facial expressions of happiness, sadness, and surprise more intensely than Japanese and Russians do (Engelmann and Pogosyan, 2013), although Japanese infer stronger emotions to neutral facial expressions than do Americans (Matsumoto et al., 2002). Culture also appears to influence

individuals' responses to eye gaze. For example, Adams et al. (2010) concluded that Japanese tend to avert direct eye gaze to a greater extent than Americans, most likely because a direct eye gaze represents a threatening social cue among Japanese.

In brief, the literature suggests that emotional labor influences the provider—customer interaction and that culture affects both the display and perception of emotions. However, evidence to date is scant and previous studies tend to neglect assessment of customer perception of emotions. Although the levels of customer satisfaction based on service agents' hospitable attitudes (e.g. welcoming, courtesy, friendliness) have been explored (e.g. Li et al., 2016; Shani et al., 2014), few studies have investigated customers' perceptions of facial expressions and whether those perceptions are influenced by cultural background. To address this gap in the literature, this study focuses on the following two hypotheses:

Hypothesis 1: Customer's stated emotional perceptions are associated with the type of service provider's emotional display (i.e. smile with direct eye, smile with indirect eye, no smile with direct eye).

Hypothesis 2: American respondents exhibit more intense emotional responses (either positive or negative) to stimulus faces than Chinese respondents.

Methodology

Research design

Following Yücesan et al. (2001), a web-based simulated experimental design of facial expressions was developed to address the study objectives. Although using a web-based simulated scenario within a laboratory environment may not capture the subtle nuanced nature of real social exchanges, this method was deemed suitable for this study to reduce biases associated with research designs involving real-life scenarios (e.g. moods' swings affecting the uniformity of facial displays in field observations), to tailor desired face displays in a consistent manner, and to reduce biases from memory lapses and rationalization processes (Levin and Zickar, 2002; Levy et al., 2004; Smith et al., 1999).

A web-based platform (Qualtrics) was used to describe the simulated scenario (exposure to a stimulus face of a hotel front desk employee) and to prompt two facial expression attributes: presence/absence of smile and direct/indirect eye gaze. Although other attributes (e.g. customers' moods) can influence emotional display and perceptions in "real" provider—customer encounters (Grandey et al., 2004), smiling and eye gaze as static displays were chosen because of their relevance in service industries (Barger and Grandey, 2006; Ford, 1998; Gross and John, 2003; Matsumoto and Hwang, 2012) and being the core exteriorization of the provider—customer relationship (Exline, 1974). Three experimental treatments were designed to garner participants' emotion perception using three images of the same service provider displaying different facial expressions: smile with direct eye gaze, smile with indirect eye gaze, and no smile with direct eye gaze (Figure 1). The high-quality images used were identical in size, 4.8 in. wide (12.3 cm) by 3.2 in. height (8.2 cm), and in resolution (72 pixels/in.; 28.4 pixels/cm).







Smile with direct gaze

Smile with indirect gaze

No smile with direct gaze

Figure 1. Study images representing smile/nonsmile faces with direct/indirect eye gaze.

Sampling and survey development

The sample of this study was composed of female students enrolled in a U.S. higher education institution representing two cultural groups: American and Chinese. Although the study sample is not drawn directly from sampling frames of American and Chinese hospitality customers, using student samples is a common practice in exploratory experimental designs (e.g. Barsade, 2002; Surprenant and Solomon, 1987), especially to evaluate consumers' preferences and perceptions across various kinds of services (Furrer et al., 2000). Two different sampling procedures were followed: American participants were recruited by emailing the 230 students enrolled in the Department of Community and Therapeutic Recreation in a U.S. university; Chinese students were recruited using a snowball sampling technique, initiated with acquaintances of one of the authors (Flick, 2014). Following linguistic design protocols, only female students were sampled to maximize group homogeneity and minimize cross-gender observation bias (Furumo and Pearson, 2007; Mast and Hall, 2004; Mulac et al., 2001).

Participants were asked to imagine approaching a hotel front-desk receptionist. They were presented with one (of three) of the aforementioned images and asked to rate a suite of emotions such an image portrayed. Then, participants accessed another page where a second image was presented and asked to rate the same set of emotions, after which they accessed another page to rate the third image. The order of the images was randomly presented to participants to reduce bias associated with researchers' hypothesized causal relationships and to increase research design validity (Abraham and Wasserbauer, 2006). Informed by the literature (George, 1992; Larsen and Ketelaar, 1991), emotional perceptions were measured through eight indicators: comfort, relaxation, goodness, happiness, courteous, politeness, friendliness, and appropriateness using five-point Likert type scales (1 indicating the lowest score and 5 the highest). Specific scales were built for each emotion; for example Comfort was measured from Extremely Uncomfortable (1) to Extremely Comfortable (5).

The scenarios and questions were stated in English. The use of English was not considered a barrier among Chinese participants because of their certified language competency as college students in an American institution; furthermore, evidence suggests that Chinese English learners and native English speakers have similar abilities to comprehend the emotion concepts being measured in this study (Yu-Cheng, 2011). The survey was launched in December 2013 and data collection spanned to January 2014; two reminders were sent to increase participation. The survey was closed after recruiting 23 female students from Mainland China (n = 23; 52.3%) and 21 from

the United States (n = 21; 47.7%), after securing sample sizes well above the minimum of 10–15 per treatment recommended for experimental studies (Riddick and Russell, 2008).

Statistical analysis

Descriptive and inferential analyses were used to analyze data collected. Descriptive analysis was conducted to examine participants' demographic characteristics and their perceptions of the service provider's facial expressions. Cronbach alphas were computed to test the internal reliability of the eight emotion scales. Repeated Measures Analysis of Variance (RM-ANOVA) was performed to compare emotional perception across the three images (smile direct eye, smile indirect eye, and nonsmile direct eye); assumption of sphericity was examined using Mauchly's test (Howell,2013). Given that likewise method was used to handle missing values when comparing emotional perceptions across the three images, initial mean scores within each image may slightly differ from those resulting from the RM-ANOVAs. Post hoc paired t-tests were then employed to compare all pairs of levels of the independent variable in each significant RM-ANOVA results. The Bonferroni correction (p = 0.05/3 = 0.017) was used to reduce type II statistical error. Independent samples t-tests were conducted to compare the cultural variation on participants' emotional perception of facial expression displayed in the three images.

Results

Demographic profile of respondents

The dominant respondents' age group was between 21 and 25 years (n = 25; 56.8%); those between 26 and 30 years old (n = 12; 27.3%) and between 18 and 20 years old (n = 7; 15.9%) were less represented. Slightly over half (n = 25; 56.8%) were currently enrolled in a graduate program and 43.2% were undergraduate students (n = 19). Education level was significantly different across the two cultural groups ($\chi^2 = 9.031$; p = .003); more Chinese students were enrolled in a graduate program (n = 18; 78.3%) than were U.S. respondents (n = 7; 33.3%). Half (n = 22; 50.0%) of participants had some prior experience working in a position entailing some customer interaction, with an average of five years of experience. The American and Chinese samples were homogeneous in terms of age (t = 2.10; p = .77) and education level (t = 3.29; t = 1.00). Although customer interaction experience was significantly more prevalent (t = 1.023; t = 0.001) among the American participants (t = 1.028) as compared to their Chinese counterparts (t = 0.028), such difference was not significantly different (t = 0.028).

Participants' perception to facial expressions

Reliability tests showed high internal consistency among the eight emotion indicators within the three images, smile direct eye gaze (α = .946), smile indirect eye gaze (α = .975), and no smile direct eye gaze (α = .949). Overall, looking at Hypothesis 1, results suggest that smiling faces elicit high positive affect although to a greater extent when accompanied with direct eye gaze (M = 4.4, SD = 0.6) than with indirect eye gaze (M = 3.2, SD = 1.1); the nonsmile direct eye gaze (M = 1.9, SD = 0.8) evoked negative affect (Table 1). Smile direct eye gaze evoked positive affect in all eight indicators examined (M \geq 4.2) being especially strong in conveying friendliness (M = 4.5). The smile indirect eye gaze image elicited overall neutral affect, although it was somewhat positive to

Table 1. Frequency distribution, mean, and standard deviation of facial expression cognition.

		_					
Emotion indicators	1	2	3	4	5	Mean	SD
Smile direct eye gaze ($\alpha = .946$)							
Friendliness	0.0	0.0	7.0	32.6	60.5	4.5	0.6
Politeness	0.0	0.0	11.4	34.1	54.5	4.4	0.7
Comfort	0.0	0.0	15.9	27.3	56.8	4.4	0.8
Goodness	0.0	2.3	11.4	29.5	56.8	4.4	0.8
Happiness	0.0	0.0	9.1	40.9	50.0	4.4	0.7
Courtesy	0.0	0.0	11.4	40.9	47.7	4.4	0.7
Relaxation	0.0	2.3	13.6	31.8	52.3	4.3	0.8
Appropriateness	0.0	2.3	20.5	34.1	43.2	4.2	0.8
Overall SDEG						4.4	0.6
Smile indirect eye gaze ($\alpha = .975$)							
Friendliness	9.1	25.0	15.9	38.6	15.9	3.4	1.2
Politeness	11.4	27.3	27.3	22.7	13.6	3.0	1.2
Comfort	9.1	20.5	25.0	29.5	15.9	3.2	1.2
Goodness	6.8	11.4	36.4	27.3	15.9	3.3	1.2
Happiness	11.4	18.2	25.0	27.3	22.7	3.4	1.2
Courtesy	9.1	20.5	22.7	29.5	15.9	3.2	1.3
Relaxation	4.5	15.9	29.5	29.5	13.6	3.2	1.2
Appropriateness	13.6	25.0	20.5	27.3	13.6	3.0	1.3
Overall SIEG						3.2	1.1
No smile direct eye gaze ($\alpha = .949$)							
Friendliness	54.5	27.3	18.2	0.0	0.0	1.6	0.8
Politeness	52.3	27.3	15.9	4.5	0.0	1.7	0.9
Comfort	45.5	29.5	22.7	2.3	0.0	1.8	0.9
Goodness	36.4	22.7	38.6	2.3	0.0	2.1	0.9
Happiness	47.7	20.5	31.8	0.0	0.0	1.8	0.9
Courtesy	50.0	27.3	13.6	9.1	0.0	1.8	1.0
Relaxation	34.1	36.4	25.0	4.5	0.0	2.0	0.9
Appropriateness	50.0	22.7	15.9	9.1	2.3	1.9	1.1
Overall NSDEG						1.9	0.8

^a Measured on a five-point scale with "1" indicating the lowest score and "5" the highest score. SDEG = Smile direct eye gaze score; SIEG = Smile indirect eye gaze score; NSDEG = No smile direct eye gaze score

The result of Mauchy's test of sphericity was not significant, thus no corrective measures were applied. In a further test of Hypothesis 1, RM-ANOVA showed significant differences in the overall emotional perception across the three facial images and the eight individual affection indicators examined ($p \le .001$; Table 2). Post hoc paired t-tests resulted in significant differences in participants' emotional perception across the three images. Smiling with a direct eye gaze evoked the most positive subject response while nonsmiling direct eye gaze induced the most negative affect in all eight emotions and overall emotion perception score. Smile indirect eye gaze scored significantly higher than no smile direct eye gaze, but statistically lower than smile direct eye gaze. Altogether, these results showed that smiling was conducive to positive affect. However, results suggested that smile alone was not sufficient enough to evoke positive affect as participants reported relatively neutral emotion perceptions toward smiling with indirect gaze, finding that is surprisingly taking into consideration the preponderant role that smile alone is given to elicit positive emotions.

Table 2. A comparison of emotional cognition elicited across three facial images.

Emotion indicators	Smile direct eye gazeª	Smile indirect eye gaze ^a	No smile direct eye gaze ^a	F statistic	p-value
Friendliness	4.5	3.4	1.7	137.133	<.001 ^b
Politeness	4.4	3.1	1.7	106.403	< .001 <u>b</u>
Comfort	4.4	3.2	1.8	92.799	$< .001^{\underline{b}}$
Goodness	4.4	3.3	2.1	77.803	< .001 <u>b</u>
Happiness	4.4	3.4	1.8	91.640	$< .001^{\underline{b}}$
Courtesy	4.4	3.2	1.8	95.125	$< .001^{\underline{b}}$
Relaxation	4.3	3.2	2.0	81.717	< .001 <u>b</u>
Appropriateness	4.2	3.0	1.9	60.823	$< .001^{\underline{b}}$
Overall mean	4.4	3.2	1.9	7.835	$=.001^{\underline{b}}$

^a Measured on a five-point scale with "1" indicating the lowest score and "5" the highest score.

Cultural variations on emotion perception of facial expressions

In an examination of Hypothesis 2, independent t-tests did not yield significant differences between Chinese (M=4.3) and American (M=4.5) participants in their overall emotion perception of smile direct gaze expressions, nor on their specific indicators (Table 3). The high mean scores reported with this image confirmed that smiling accompanied by direct eye gaze evoked positive affect in both cultural groups without significant differences in intensity. Although American participants (M=3.5) reported an overall higher positive perception of the smile indirect eye gaze than their Chinese counterparts (M=3.0), such difference was not significant.

However, smiling with an indirect eye gaze did provoke more significant positive emotions on Americans than Chinese in terms of friendliness (MUS = 3.7; MCH = 3.0; p = .055), comfort (MUS = 3.6; MCH = 2.9; p = .073), and goodness (MUS = 3.7; MCH = 3.0; p = .040). In addition, Chinese participants (MCH = 2.0) appeared to be overall slightly less negative than their counterparts (MUS = 1.7) on emotional indicators associated with a nonsmiling face with direct eye gaze, although differences were only statistically significant related to friendliness (MUS = 1.3; MCH = 1.9; p = .011) and politeness (MUS = 1.4; MCH = 2.0; p = .033). Thus, Hypothesis 2 was not fully supported in this study.

^b Post hoc Bonferroni adjusted paired t tests showed significant differences across the three images.

Table 3. A comparison of emotional cognition of facial expressions between Chinese (CH) and American

(US)	part	ici	pants.
E	4:	:	1: 4

Emotion indicators	Smile direct eye gaze ^a			Smile indirect eye gaze ^a			No sn	No smile direct eye gaze ^a			
	СН	US	t	СН	US	t		СН	US	t	
Friendliness	4.5	4.6	627	3.0	3.7	-1.974	*	1.9	1.3	2.670	**
Politeness	4.3	4.5	835	2.8	3.3	-1.545		2.0	1.4	2.199	**
Comfort	4.3	4.5	960	2.9	3.6	-1.841	*	1.9	1.8	.406	
Goodness	4.3	4.6	-1.319	3.0	3.7	-2.122	**	2.1	2.0	.139	
Happiness	4.3	4.5	-1.107	3.2	3.8	-1.344		1.9	1.8	.222	
Courtesy	4.3	4.5	-1.043	2.9	3.5	-1.499		2.0	1.6	1.601	
Relaxation	4.3	4.4	686	3.1	3.3	542		2.0	2.0	.000	
Appropriateness	4.0	4.4	-1.520	2.9	3.2	824		2.0	1.8	.828	
Overall score	4.3	4.5	-1.211	3.0	3.5	-1.566		2.0	1.7	1.105	

^a Mean score, where "1" indicating the lowest mean score and "5" the highest mean score.

Discussion and implications

Study results confirmed the importance of smiling as important emotional labor requirement for both Chinese and American (Li et al., 2016; Line and Runyan, 2012; Mattila and Enz, 2002; Muir, 2008); moreover, participants from both countries expressed positive emotional affect in response to a smile with direct eye contact. Study findings verify both the importance of emotional labor as a strategy to maintain and enhance service quality and the idea that enhancing the skills and knowledge of hospitality staff' emotional displays is critical for branding, as well as for repeat business and increased profitability. These findings bring important theoretical and practical implications as detailed below.

Theoretical implications

Study findings are consistent with earlier studies (e.g. Chu et al., 2012; Johnson and Spector, 2007; Söderlund and Rosengren, 2008) that indicate that smiling elicits positive customer emotional responses to emotional labor and thus influences perceptions of service quality. Nevertheless, study findings show that for both cultural groups, smiling required also a direct gaze to evoke customers' most positive emotions; this finding challenges the extant literature suggesting that East-Asian cultural groups (e.g. Chinese) are low-contact cultures, which tend to perceive "direct gaze" as rude (Mehrabian, 1971; Scheflen and Scheflen, 1973). Thus, study findings confirm that multiple facial features interact (e.g. smiling along with direct eye gaze) in influencing customers in interpersonal encounters (e.g. Brotheridge and Lee, 2003; Johnson and Spector, 2007; Zapf and Holz, 2006).

Results also validating prior work demonstrated that cultural groups interpret facial expressions in different ways (e.g. Engelmann and Pogosyan, 2013; Matsumoto et al., 2002, 2005). However, resulting differences between Chinese and American respondents were insufficient to establish culture as a significant driver of emotional responses to facial stimuli. Rather, results suggest that certain facial expressions (i.e. smiling in combination with direct eye gaze) meet universal psychological needs for interpersonal connection described in the literature (e.g. Ariffin and Maghzi, 2012; Chu et al., 2012; Grandey et al., 2005).

^{**}p < .05; *p < .10.

Practical implications

The present study suggests that hospitality companies can make good use of research on facial expressions in service settings to inform organizational service strategies for emotional labor. It is desirable for hospitality organizations to develop internal normative guidelines to encourage the display of smiling with direct eye contact as a universally applicable standard for hospitality emotional labor. This is especially important to implement among front-desk positions in the hospitality industry. Since our study found that the lack of a smile, particularly when accompanied by direct eye gaze, was perceived negatively by study subjects, organizations should foster emotional labor to refrain from exhibiting such facial expressions that might diminish the customer—provider connection.

Considering the role of culture in customer responses to facial expressions, the present study results support the International Labor Organization (1979)'s recommendation that universal skills requirements for the hospitality industry be drawn from the job itself without referencing the cultural setting specifically. Thus, hospitality organizations should deemphasize the importance of cultural differences in displaying facial expressions in customer service, and adopt instead an approach that encourages universal smiling features (Hochschild, 1983). An organization-wide normative standard should be established regardless of the cultural context where service interaction happens and a rewards system devised to recognize employee adherence to these emotional display rules.

Stated recommendations presume that employees will physically engage in direct contact with customers and that employees are expected to attempt to influence customer satisfaction through visible mannerisms in a face-to-face context. Thus, the source of information about employee performance must derive from the customer as well; this requires systems (e.g. using incentives) to be in place to collect customer data involving service encounters. Much customer data have been focused on satisfaction with employee behaviors in general; the present study indicates that feedback that is narrowly focused on customers' emotional responses to specific nonverbal and verbal communication acts may be useful as well.

Generally, when encouraging employees to display certain emotions, other evaluative stakeholders including the employees themselves are not considered. Beyond incorporating emotional display into the organizational reward system, managers will want to assess existing barriers to the transfer of service standards to the actual workplace. Work on emotional labor and burnout research has shown that employees may suffer exceptional stress during customer service encounters due to loss of perceived control over interpersonal behaviors. Organizations may also want to combine the inducement of positive emotional displays (e.g. smile with direct eye gaze) with the suppression of negative emotional displays (e.g. no smile; indirect eye gaze) to foster increased professionalization and manage emotional exhaustion of service staff.

Limitations and future research

Results of this study should be interpreted with caution given three main limitations. First, although the research scenario simulated a customer symbolic interaction (a method used in similar types of linguistics experiments), the study participants' cognitive immersion in the described situation was dependent on their individual abilities to imagine the hypothesized scenario. A second limitation refers to the adoption of a laboratory method simulating face-to-face contact

between employees and customers using pictures. Although this method is suitable to control for biases presented in real life, it cannot capture the nuances and complexities occurring in actual phenomenological studies observing provider—consumer interactions. Lastly, China and the U.S. are diverse culturally within their respective geographies, thus study participants do not necessarily represent unified cultural identities from each of these regions.

Accounting for these limitations, this exploratory study has identified significant rationales for the use of facial displays in hospitality service encounters that need to be further explored. It is suggested that future studies consider replicating this study at a larger scale (sample size) and wider scope (more cultural groups) to allow greater generalizations. Future analyses might also incorporate additional information about demographic qualities of service providers and psychological profiles (e.g. customers' mood) of respondents to assess effects on emotional perceptions. Researchers may want to explore the use of additional technologies to break down smiling and eye contact into meaningful observable units that may be manipulated further. Future studies may also consider the use of other research methodologies (e.g. immersive virtual environments, real-life scenarios) with actual service agents and customers so as to overcome bias associated with the recreation of simulated scenarios using web-based surveys and static images of stimulus faces.

Conclusion

In this study, emotional labor was studied in the form of facial expression—the display of smile and direct eye gaze—through a hypothetical hospitality scenario at a hotel front desk. This study examined perception of emotions among Chinese and American individuals through the display of different stimulus faces (smile with direct eye contact, smile with indirect eye contact, and no smile with direct eye contact) and cultural variation in assessing these faces. In doing so, study results identified scholarly and practical contributions useful to increase the performance of service encounters in the hospitality sector.

Acknowledgement

The authors would like to gratefully acknowledge the editor and the anonymous reviewers for their comments and suggestions on the article.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

- Abraham IL, Wasserbauer LI (2006) Experimental Research, New York: Springer Publishing Company.
- Adams RB, Rule NO, Franklin RG, et al. (2010) Cross-cultural reading the mind in the eyes: An fMRI investigation. Journal of Cognitive Neuroscience 22(1): 97–108. Crossref. PubMed.
- American Hotel and Lodging Association (2014) Lodging Industry Profile. Retrieved from: https://www.ahla.com/content.aspx?id=36332 (accessed 25 February 2016).
- Ariffin AAM, Maghzi A (2012) A preliminary study on customer expectations of hotel hospitality: Influences of personal and hotel factors. International Journal of Hospitality Management 31: 191–198. Crossref. ISI.
- Barger PB, Grandey AA (2006) Service with a smile and encounter satisfaction: Emotional contagion and appraisal mechanisms. Academy of Management Journal 49(6): 1229–1238. Crossref. ISI.
- Barsade SG (2002) The ripple effect: Emotional contagion and its influence on group behavior. Administrative Science Quarterly 47(4): 644–675. Crossref. ISI.
- Baum T (2002) Skills and training for the hospitality sector: A review of issues. Journal of Vocational Education and Training 54(3): 343–364. Crossref.
- Baum T and Devine F (2005) Skills and the service sector: The case of hotel front office employment in Northern Ireland. In: Tourism and Hospitality Research in Ireland: Exploring the Issues Conference, Portrush, pp.14–15.
- Baum T, Devine F (2007) Skills and training in the hotel sector: The case of front office employment in Northern Ireland. Tourism and Hospitality Research 7(3–4): 269–280. Crossref.
- Bello RS, Brandau-Brown FE, Zhang S, et al. (2010) Verbal and nonverbal methods for expressing appreciation in friendships and romantic relationships: A cross-cultural comparison. International Journal of Intercultural Relations 34: 294–302. Crossref.
- Brotheridge CM, Grandey AA (2002) Emotional labor and burnout: Comparing two perspectives of people work. Journal of Vocational Behavior 60(1): 17–39. Crossref. ISI.
- Brotheridge CM, Lee RT (2003) Development and validation of the emotional labour scale. Journal of Occupational and Organizational Psychology 76(3): 365–379. Crossref. ISI.
- Burns PM (1997) Hard skills, soft skills: Undervaluing hospitality's 'service with a smile'. Progress in Tourism and Hospitality Research 3(3): 239–248. Crossref.
- Chang K (2000) The impact of perceived physical environments on customers' satisfaction and return intentions. Journal of Professional Services Marketing 21(2): 75–85. Crossref.
- Chen YS, Chen CY, Chang MH (2011) American and Chinese complaints: Strategies use from a cross-cultural perspective. Intercultural Pragmatics 8(2): 253–275. Crossref.
- Chi MT, Siler SA, Jeong H, et al. (2001) Learning from human tutoring. Cognitive Science 25(4): 471–533.

- Chi NW, Grandey AA, Diamond JA, et al. (2011) Want a tip? Service performance as a function of emotion regulation and extraversion. Journal of Applied Psychology 96(6): 1337. Crossref. PubMed.
- Chu KH, Baker MA, Murrmann SK (2012) When we are onstage we smile: The effects of emotional labor on employee work outcomes. International Journal of Hospitality Management 31(3): 906–915. Crossref.
- Chu KH, Murrmann SK (2006) Development and validation of the hospitality emotional labor scale. Tourism Management 27(6): 1181–1191. Crossref. ISI.
- Cook S, Macaulay S (1997) Customer service: What's a smile got to do with it. Managing Service Ouality: An International Journal 7(5): 248–252. Crossref.
- Davidson RJ (2003) Parsing the subcomponents of emotion and disorders of emotion: Perspectives from affective neuroscience. In: Davidson RJ, Scherer KR, Goldsmith HH (eds) Handbook of Affective Sciences, New York: Oxford University Press.
- Ekman P (1992) Facial expressions of emotion: New findings new questions. Psychological Science 3(1): 34–38. Crossref. ISI.
- Ekman P, Friesen WV, Osullivan M, et al. (1987) Universals and cultural differences in the judgments of facial expressions of emotion. Journal of Personality and Social Psychology 53(4): 712. Crossref. PubMed. ISI.
- Engelmann JB, Pogosyan M (2013) Emotion cognition across cultures: The role of cognitive mechanisms. Frontiers in psychology 4: 118.
- Exline RV (1974) Visual interaction: Glances of power and preference. In: Weitz S (ed.) Nonverbal Communications, New York: Oxford University Press.
- Flick U (2014) An introduction to qualitative research. Sage Publication.
- Ford W (1998) Communicating with Customers: Service Approaches Ethics, and Impact, New Jersey, NJ: Hampton Press.
- Furrer O, Liu B, Sudharshan D (2000) The relationships between culture and service quality perceptions basis for cross-cultural market segmentation and resource allocation. Journal of Service Research 4: 355–371. Crossref.
- Furumo K, Pearson JM (2007) Gender-based communication styles trust, and satisfaction in virtual teams. Journal of Information, Information Technology, and Organizations 2: 47–60. Crossref.
- George JM (1992) The role of personality in organizational life: Issues and evidence. Journal of Management 18: 185–213. Crossref. ISI.
- Giannakos MN, Pappas IO, Mikalef P (2014) Absolute price as a determinant of perceived service quality in hotels: A qualitative analysis of online customer reviews. International Journal of Hospitality and Event Management 1(1): 62–80. Crossref.
- Go FH, Pine R (1995) Globalization Strategy in the Hotel Industry, New York, NY: Routledge Ltd.
- Grandey AA, Brauburger AL (2002) The emotion regulation behind the customer service smile. Emotions in the Workplace: Understanding the Structure and Role of Emotions in Organizational Behavior. 260: 294.

- Grandey AA, Dickter DN, Sin HP (2004) The customer is not always right: Customer aggression and emotion regulation of service employees. Journal of Organizational Behavior 25(3): 397–418. Crossref. ISI.
- Grandey AA, Fisk GM, Mattila AS, et al. (2005) Is "service with a smile" enough? Authenticity of positive displays during service encounters. Organizational Behavior and Human Decision Processes 96: 38–55. Crossref. ISI.
- Gross JJ, John OP (2003) Individual differences in two emotion regulation processes: Implications for affect relationships, and well-being. Journal of Personality and Social Psychology 85(2): 348. Crossref. PubMed. ISI.
- Groth M, Henning-Thurau T, Walsh G (2009) Customer reactions to emotional labor: The roles of employee acting strategies and customer detection accuracy. Academy of Management Journal 52: 958–974. Crossref. ISI.
- Guerrier Y, Deery M (1998) Research in hospitality human resource management and organizational behavior. International Journal of Hospitality Management 17(2): 145–160. Crossref.
- Gustafsson A, Johnson MD, Roos I (2005) The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. Journal of Marketing 69(4): 210–218. Crossref. ISI.
- Hanif M, Hafeez S, Riaz A (2010) Factors affecting customer satisfaction. International Research Journal of Finance and Economics 60: 44–52.
- Hatfield E, Cacioppo JT, Rapson RL (1994) Emotional contagion: Studies in emotion and social interaction. Current Directions in Psychological Sciences 2: 96–99.
- Heine SJ, Lehman DR, Markus HR, et al. (1999) Is there a universal need for positive self-regard? Psychological Review 106(4): 766.
- Hochschild AR (1983) The Managed Heart: Commercialization of Human Feeling, Berkeley: University of California Press.
- Howell D (2013) Fundamental statistics for the behavioral sciences. Cengage Learning.
- Hui MK, Toffoli R (2002) Perceived control and consumer attribution for the service encounter. Journal of Applied Social Psychology 32(9): 1825–1844. Crossref. ISI.
- Hunter JA (2011) A study of consumer perception of smiling customer service within the airline industry. Transportation Security 4: 35–56. Crossref.
- International Labor Organization (ILO) (1979) Tasks to Jobs Developing a Modular System of Training for Hotel Occupations, Geneva: ILO.
- Jack RE, Garrod OG, Schyns PG (2014) Dynamic facial expressions of emotion transmit an evolving hierarchy of signals over time. Current Biology 24(2): 187–192. Crossref. PubMed.
- Johanson MM, Woods RH (2008) Recognizing the emotional element in service excellence. Cornell Hospitality Quarterly 4: 1–7. Crossref.
- Johnson HAM, Spector PE (2007) Service with a smile: Do emotional intelligence, gender, and autonomy moderate the emotional labor process? Journal of Occupational Health Psychology 12(4): 319. Crossref. PubMed. ISI.

- Kandampully J, Mok C, Sparks B (2001) Service Quality Management in Hospitality, Tourism and Leisure, New York, NY: The Haworth Hospitality Press.
- Kim HJ (2008) Hotel service providers' emotional labor: The antecedents and effects on burnout. International Journal of Hospitality Management 27(2): 151–161. Crossref. ISI.
- Kim MJ, Han SY (2009) Relationship between emotional labor consequences and employees coping strategy. Asia Pacific Journal of Tourism Research 14(3): 225–239. Crossref.
- Lam W, Chen Z (2012) When I put my service mask: Determinants and outcomes of emotional labor among hotel service providers according to effective event theory. International Journal of Hospitality Management 31(1): 3–11. Crossref.
- Larsen RJ, Ketelaar T (1991) Personality and susceptibility to positive and negative emotional states. Journal of Personality and Social Psychology 61(1): 132. Crossref. PubMed.
- Leu J, Wang J and Koo K (2011) Are positive emotions just as "positive" across cultures? Emotion 11(4): 994.
- Levin RA and Zickar MJ (2002) Investigating self-presentation, lies, and bullshit: Understanding faking and its effects on selection decisions using theory, field research, and simulation. In: Brett JM and Drasgow F (eds) The Psychology of Work: Theoretically Based Empirical Research, Sage Publications, pp. 253–276.
- Levy M, Grewal D, Mullikin J (2004) An examination of moderators of the effects of customers' evaluation of employee courtesy on attitude toward the service firm. Journal of Applied Social Psychology 34: 825–847. Crossref.
- Li J, Canziani B and Hsieh Y (2016) US and Chinese perceptions of simulated US courtesy. Worldwide Hospitality and Tourism Themes 8(1): 29–40.
- Line ND, Runyan RC (2012) Hospitality marketing research: Recent trends and future directions. International Journal of Hospitality Management 31(2): 477–488. Crossref. ISI.
- Lucas R, Deery M (2004) Significant developments and emerging issues in human resource management. International Journal of Hospitality Management 23(5): 459–472. Crossref.
- Markus HR and Kitayama S (1991) Culture and the self: Implications for cognition, emotion, and motivation. Psychological review 98(2): 224.
- Mast MS, Hall JA (2004) Who is the boss and who is not? Accuracy of judging status. Journal of Nonverbal Behavior 28: 145–165. Crossref. ISI.
- Matsumoto D, Consolacion T, Yamada H, et al. (2002) American-Japanese cultural differences in judgments of emotional expressions of different intensities. Cognition and Emotion 16(6): 721–747. Crossref. ISI.
- Matsumoto D, Hwang HS (2012a) Evidence for a nonverbal expression of triumph. Evolution and Human Behavior 33(5): 520–529. Crossref.
- Matsumoto D, Wallbott HG and Scherer KR (2005) Emotion and intercultural communication. Handbook of applied linguistics 7: 15–37.
- Matsumoto D, Yoo SH and Nakagawa S (2008) Culture, emotion regulation, and adjustment. Journal of personality and social psychology 94(6): 925.

- Mattila AS, Enz CA (2002) The role of emotions in service encounters. Journal of Service Research 4(4): 268–277. Crossref.
- Medler-Liraz H (2014) Negative affectivity and tipping: The moderating role of emotional labor strategies and leader-member exchange. International Journal of Hospitality Management 36: 63–72. Crossref.
- Mehrabian A (1971) Silent messages: Implicit communication of emotions and attitudes, Belmont, CA: Wadsworth.
- Mesquita B (2003) Emotions as dynamic cultural phenomena. In: Davidson RJ, Scherer K, Goldsmith HH (eds) Handbook of Affective Sciences, New York: Oxford University Press.
- Muir C (2008) Smile with customers. Focus on Business Practice 71(2): 241–246. Crossref.
- Mulac B, Btadac JJ, Gibbons P (2001) Empirical support for the gender-as-a-culture hypothesis: An intercultural analysis of male/female language differences. Human Communication Research 27: 121–152. Crossref. ISI.
- Nagashima K, Schellenberg J (1997) Situational differences in intentional smiling: A cross-cultural exploration. The Journal of Social Psychology 137(3): 297–302. Crossref.
- Parasuraman A, Berry LL, Zeithaml VA (1993) More on improving service quality measurement. Journal of Retailing 69(1): 140–147. Crossref. ISI.
- Parasuraman A, Zeithaml VA, Berry LL (1985) A conceptual model of service quality, and its implications for future research. Journal of Marketing 49: 41–50. Crossref. ISI.
- Pizam A (2004) Are hospitality employees equipped to hide their feelings? International Journal of Hospitality Management 23(4): 315–316. Crossref.
- Riddick CC, Russell RV (2008) Research in Recreation, Parks, Sport, and Tourism, Champaign, IL: Sagamore Publication.
- Safdar S, Friedlmeier W, Matsumoto D, et al. (2009) Variations of emotional display rules within and across cultures: A comparison between Canada USA and Japan. Canadian Journal of Behavioral Science 41(1): 1–10. Crossref. ISI.
- Scheflen AE, Scheflen A (1973) Body language and the social order; communication as behavioral control. Englewood Cliffs, NJ: Prentice-Hall.
- Shani A, Uriely N, Reichel A, et al. (2014) Emotional labor in the hospitality industry: The influence of contextual factors. International Journal of Hospitality Management 37: 150–158. Crossref. ISI.
- Smith AK, Bolton RN, Wagner J (1999) A model of customer satisfaction with service encounters involving failure and recovery. Journal of Marketing Research 36(3): 356–373. Crossref. ISI.
- Söderlund M, Rosengren S (2008) Revisiting the smiling service worker and customer satisfaction. International Journal of Service Industry Management 19(5): 552–574. Crossref.
- Stauss B, Mang P (1999) Culture shocks in inter-cultural service encounters? Service Marketing 13(4): 329–346. Crossref.
- Surprenant CF, Solomon MR (1987) Predictability and personalization in the service encounter. The Journal of Marketing 51: 86–96. Crossref. ISI.

- Tsai JL, Levenson RW, McCoy K (2006) Cultural and temperamental variation in emotional response. Emotion 6(3): 484. Crossref. PubMed. ISI.
- Tsai WC (2001) Determinants and consequences of employee displayed positive emotions. Journal of Management 27(4): 497–512. Crossref. ISI.
- Tsai WC, Huang YM (2002) Mechanisms linking employee affective delivery and customer behavioral intentions. Journal of Applied Psychology 87(5): 1001. Crossref. PubMed. ISI.
- Warhurst C, Nickson D (2007) Employee experience of aesthetic labour in retail and hospitality. Work, Employment and Society 21(1): 103–120. Crossref. ISI.
- Watson D, Clark LA, Tellegen A (1988) Development and validation of brief measures of positive and negative affect: The PANAS scales. Journal of Personality and Social Psychology 54(6): 1063. Crossref. PubMed. ISI.
- Watson D, Slack AK (1993) General factors of affective temperament and their relation to job satisfaction over time. Organizational Behavior and Human Decision Processes 54(2): 181–202. Crossref.
- Wharton AS (2009) The sociology of emotional labor. Annual Review of Sociology 35: 147–165. Crossref. ISI.
- Yildiz SM, Kara A (2012) A re-examination and extension of measuring perceived service quality in physical activity and sports centres (PSC): QSport-14 scale. International Journal of Sports Marketing and Sponsorship 13(3): 189–208. Crossref.
- Yücesan E, Luo YC, Chen CH, et al. (2001) Distributed web-based simulation experiments for optimization. Simulation Practice and Theory 9(1): 73–90. Crossref.
- Yu-Cheng L (2011) Cultural expectations and cognitions of politeness: The rude Chinese? Asian Social Science 7(10): 11–23.
- Zapf D, Holz M (2006) On the positive and negative effects of emotion work in organizations. European Journal of Work and Organizational Psychology 15(1): 1–28. Crossref. ISI.
- Zeithaml VA, Bitner MJ, Gremler DG (2006) Services Marketing: Integrating Customer Focus Across the Firm, International ed. Singapore: McGraw-Hill.

Author Biographies

- Jing Li is a doctoral candidate in the Department of Parks, Recreation and Tourism Management at North Carolina State University. Her dissertation research evaluates the performance of associations serving the tourism and hospitality sectors. Jing adopts psychosocial approaches in her studies, which integrates psychological and marketing concepts into social network analysis.
- **Bonnie F** Canziani holds a PhD from Cornell University in Hotel Administration. Dr Canziani has worked with the hospitality and tourism industry for 30 plus years, including her current position at the University of North Carolina at Greensboro. Her teaching and research spans services management and marketing, entrepreneurship, cultural issues and global management, and wine industry strategy and marketing.

Carla Barbieri is an associate professor in Equitable and Sustainable Tourism at North Carolina State University. Her research focuses on specialized forms of tourism associated with natural and cultural resources and their impact on societal well-being. She also investigates agritourism and farm entrepreneurial diversification. Barbieri uses sustainability, sociological, and tourism approaches to frame her studies.