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Investigating How Restaurant Week's Price Promotion Affects Diners' Online Perceptions

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INVESTIGATING HOW RESTAURANT WEEK’S PRICE PROMOTION AFFECTS DINERS’ ONLINE PERCEPTIONS

By

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ABSTRACT

Price promotion is being widely employed in the global restaurant industry. This exploratory study uses online user-generated content (UGC) to investigate how price promotion affects diners’ perceptions. The study uses secondary data extracted from a Chinese third-party review website, Dianping.com. The data was separated into Restaurant Week’s price promotion group and non-price promotion group for comparison. Structured content analysis and further chi-square tests were used to analyze qualitative data, and a two-way MANOVA was applied to analyze quantitative data. Empirical evidence shows that food, service, and environment are the top three determinant attributes for full-service restaurants, and they are not influenced by price promotion. In addition, diners’ perceptions of non-price promotions are significantly higher than Restaurant Week’s price promotion. Restaurant category has a significant effect on diners’ environment perceptions, but not on other attributes. Findings of the study provide diners’ insight on Restaurant Week as well as recommendations to adjust promotional strategies based on restaurant categories and practical instructions for full-service restaurant operators to evaluate price promotions using online UGC.

**Keywords:** Restaurant Week, price promotion, user-generated content (UGC), restaurant online reviews, perceived quality, perceived value.
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CHAPTER 1

INTRODUCTION

Restaurant Week is a promotional culinary event that takes place in 35 cities in the world such as New York, Amsterdam, Cape Town, Shanghai, and Hong Kong. During Restaurant Week, diners have the opportunity to dine at the top restaurant for a discounted and set-price (China Restaurant Week, 2015). The very first Restaurant Week was dated back in 1992 and was started by restaurateur Joe Baum and Tim Zagat who was the co-founder, co-chair, and chief executive officer of Zagat Survey (Zagat, 2010). According to Zagat (2010), one of the original ideas to start Restaurant Week was to help with many restaurants in New York struggling in the aftermath of early 1990s recession, but it became a national as well as international traditional event in cities.

This study focuses on Shanghai Restaurant Week, since it’s the first one in China and it has most restaurant accounts. Shanghai Restaurant Week is held twice a year in both spring and in autumn. Each edition starts from the first Thursday of March and September, and lasts for eleven days. Diners need to search the availability for participating restaurants and make reservations online at Restaurantweek.cn in advance and phone calls are unavailable for reservation. Then, restaurants can check the booking status and use the guest database through the backstage platform. After dining, diners process the transaction in restaurant directly and they can write reviews on any third-party review site such as Dianping.com.
Participating restaurants post either a lunch set-menu or dinner set-menu or both with set prices and basic restaurant information on website. During the seventh edition, there were three restaurant categories: a) 128RMB for lunch and 258RMB for dinner; b) 88RMB for lunch and 198RMB for dinner; c) 58RMB for lunch and 98RMB for dinner.

This study uses the User-generated content (UGC) on Dianping.com to explore diners’ post-dining perceptions. “Dianping is the leading online to offline (O2O) platform in China, as well as the premiere website providing consumer reviews on local services in the world” (Dianping, 2015). Dainping established its headquarter in Shanghai in 2003 and had expanded its operations to 250 cities in China. “As of the third quarter of 2015, Dianping had more than 200 million monthly active users, over 100 million user-generated reviews, and more than 20 million local businesses in approximately 2,500 cities worldwide” (Dianping, 2015). Except for restaurant basic information, ratings for overall satisfaction, food, service, and environment, as well as comment texts and pictures by diners are also available under each restaurant account. Overall, Dianping provides enough data for this research to study, because it is China’s most popular restaurant reviews and group-buying services website (Carew & Osawa, 2015).

**Problem Statement**

Price promotion is the primary and the most common sales promotion strategy being employed in services industry (Nusair, Yoon, & Parsa, 2010). Similarly, Restaurant Week has been widely applied to full-service restaurants in recent years as a promotional culinary event
that takes place in thirty-five cities in the world. Restaurant Week in Shanghai is not only a food and beverage event for diners, but also a new and creative price promotion that offers prix fixe menus for full-service restaurants. Diners usually book seat online, make transaction off-line and write post-dining reviews on a third-party review site.

It’s found that “price promotions are effective tools in generating sales” (Chapman, 1986; Matosian, 1982; Nusair et al., 2010; Raghubir, 2004; Taylor, 2001; Varadarajan, 1984). Within the restaurant industry, it is believed that Restaurant Week is a great price promotion tool because it has restaurants to greatly increase revenue, and even profit (Zagat, 2010). Obviously, restaurant operators use price promotion whenever they need to drive restaurant sales instead of considering anything from diner’s perception.

Besides, price promotion may result in enhancing diners' current perceived value, but lowering their perceived quality. According to a number of previous of studies, price discounts or price promotions can lead to overall higher value perception of the products (Compeau & Grewal, 1998; Nusair et al., 2010; Wakefield & Barnes, 1996), but they also have negative effect on reducing consumer’s future reference prices and damaging the brand image (Campbell & Diamond, 1990; Mela, Gupta & Jedidi, 1998; Monroe, 1971; Raghubir & Corfman, 1999).

Hence, if diners’ perceptions are much lower after Restaurant Week, diner’s overall satisfaction as well as the future dining intention may be influenced. If this theory is tested to be true, this promotional tool may be harmful for the restaurant future business in a long run. Also, if the
effects are different, restaurant operators in different restaurant category should suit the promotional strategies to its own case.

Currently, the information of studying UGC as well the advanced development of Web 2.0 provide us ways to explore diners’ perceptions. “Online reviews are particularly influential in the restaurants” (National Restaurant Association, 2013). The online reviews reflect the perceived quality of product or service, as well as the perceived value from purchase (Li & Hitt, 2010) and they are channels that connect potential diners with many other diners (Zhang, Ziqiong, Zhang, Zili, & Wang, 2013).

Meanwhile, unlike group buying and other kind of price promotions in restaurant industry, Restaurant Week features online booking, off-line transaction, set price, and prix fixe menu. Thus, diners' quality and value perceptions on food, service, environment and others may be different based on this promotion comparing with other style of promotions. Previous researchers found that price was always an important factor to influence customer’s post purchasing perceptions and satisfactions (Beldona & Kwansa, 2008; Dreze & Nunes, 2004; Heo & Lee, 2011; Lockyer, 2005; Nusair et al., 2010; Ye, Li & Wang, 2014), particularly in service. However, in this case, the prices are suggested to use set price to diminish the competitiveness among restaurants in the same category, as well as to eliminate the issue of direct discount. If the prices are offered as the same, other factors such as food, service, environment, brand, popularity may become crucial indicators to diners’ perceptions.
Purpose of Study

The purpose of this study is to investigate how Restaurant Week’s price promotion affects diner’s perceptions within online context. In the following chapter, three general parts: (a) UGC and perceived value (b) Restaurant Week’s price promotion (c) restaurant attributes are reviewed and explained. Since this study is an inductive exploration, author conducts a bottom-up approach from the premises. Thus, the research questions of the study are:

1) Which attributes mostly determine diners’ perceptions for full-service restaurants using Restaurant Week? In contrast, which attributes mostly determine diners’ perceptions for full-service restaurants without using any price promotions?

2) Between using Restaurant Week and without using any price promotion, is there significant difference of the restaurant attributes according to diners’ perceptions?

3) Do diners’ perceptions of food, environment, service and overall satisfaction differ across restaurant category?

4) To what extent, do diners’ perceptions of food, environment, service and overall satisfaction differ during price promotion?

The findings of this study may indicate us whether or not diners can have higher overall perceptions based on Restaurant Week and whether or not restaurants should continue to use Restaurant Week as a promotional tool. This study comes up managerial implications for the full-service restaurant managers to help them to adjust their promotional strategies, which will
further benefit the restaurant’s overall business. Also, this research could offer a practical instruction for restaurants in industry to measure their current price promotions, as UGC is a convenient resource to obtain data.

**Definition of Terms**

**Consumer online reviews:** They are “peer-generated product evaluations posted on company or third-party websites” (Mudambi & Schull, 2010; Ye et al., 2014).

**Full-service restaurant:** It usually includes fine dining restaurant, casual dining restaurant and regular full-service restaurant. The operational definition of full-service restaurant in Shanghai is that its average check for lunch is over 100RMB without service fee and for dinner is over 200RMB without service fee.

**Restaurant attributes:** In the restaurant industry, the intrinsic attributes include food, service, environment, price, and some other extrinsic attributes such as brand, popularity, word-of-mouth, emotion, etc.

**Price discount:** It is “a short-term reduction of the listed price of a service when all buyers are equally eligible for the price reductions” (Chen, Monroe, & Lou, 1998).

**Price promotions:** They are “often used in service industry as the primary sales promotion strategy” (Nusair et al., 2010), which is a direct inducement offering extra value or incentive to consumer in order to increase an immediate sales (Haugh, 1983).
**Perceived quality:** It is a measure of how well the service or product delivered matches customer expectations in the hospitality industry (Ye et al., 2014).

**Perceived value:** It is a trade-off between quality being perceived in product or service and sacrifice by paying the price (e.g., Bolton & Drew, 1991; Li & Hitt, 2010; Slater & Narver, 2000; Ye et al., 2014, Zeithaml, 1988)

**Restaurant Week:** Restaurant Week is an eleven days’ price promotion event in a certain city that provides prix fixe menus by presenting a set “discounted” dollar format price without other reference prices for full-service restaurants and its goal is to create an immediate online bookings.

**Set-price:** Set-price is one unified price that is pre-regulated and displayed on Restaurant Week’s website for either lunch or dinner, which is conducted by any Restaurant Week’s participating restaurant in the same category.

**User-generated content (UGC):** “UGC is written reviews and aggregated consumer ratings contributed by consumers” (Noone & McGuire, 2014).
CHAPTER 2

LITERATURE REVIEW

Introduction

This chapter reviews previous literature, summarizes the crucial points, and explores the connections among theories in order to examine the influence of Restaurant Week’s price promotion on diner’s perceptions of quality and value. The academic meanings of this research could be significant. Firstly, it is the first research related to the Restaurant Week and this study catches the gap between real industry and the academic world. Based on the resource of EBSCO search engine, there is no academic research regarding to Restaurant Week in journals or in books. Although Restaurant Week has been a popular worldwide price promotion event for years, none of academic research studied on that previously. Secondly, it is the first time to explore the relationship between restaurant price promotion and diner’s perceptions within online context. Past literature was about the price promotion and its impact on perception, but none of them used User-generated content (UGC) and applied it with information online. Thus, this research would be an essential study to discuss about the Restaurant Week and diner’s online perceptions.

The following paragraphs of literature reviews could mainly be divided into three parts: 1) UGC and perceived value, 2) Restaurant Week’s price promotion, 3) and restaurant attributes. It is presumed that the perceived price of Restaurant Week can affect customer’s perceived
quality and perceived value. Meanwhile, restaurant segment and price promotion moderate diner’ perceptions of restaurant attributes such as Food, Service, and Environment.

**User-generated Content (UGC) and Perceived Value**

Thanks to the development of web 2.0 and information technology, UGC on the third-party review site provides customers a platform to exchange opinions, evaluate products, and share perceptions with each other. UGC is identified as one of several new media phenomena and restaurant management can take this phenomenon into account when managing consumer relationships (Hennig-Thurau, Malthouse, Friege, Gensler, Lobschat, Rangaswamy & Skiera, 2010; Noone & McGuire, 2014). This study specifically focuses on the influence of UGC on restaurant diners, as UGC is substantially popular at highly visited third-party websites.

Generally speaking, there are two types of reviews: consumer reviews that are based on peer’s personal experience, and professional reviews that are written by editors (Zhang, Ye, Law, & Li, 2010). Customer reviews, being viewed as user-generated content (UGC), can be further separated into specially consumer written reviews and aggregate consumer ratings (Noone & McGuire, 2014). Thus, UGC is defined as evaluation generated by peers in the form of text or rating and posted on a company website or a third-party website (Mudambi & Schuff, 2010; Ye, Li & Wang, 2014). In this study, UGC incorporates the review content and ratings evaluated and contributed by diners on Dianping.com, which is the most widely used restaurant review site in mainland China.
Means-end Model of Price, Quality and Value

Price, quality, value and the relationship between them have been studied in business extensively since 1980’s. Dodds and Monroe (1985) proposed an adaption of model for first time. They provided an overview of the relationship among the concepts of price, perceived quality, and perceived value. Zeithaml (1988) defined “the concepts of price, quality and value from the consumer’s perspective, related the concepts in a model and developed propositions about the concepts”. According to this model (see Figure 1), products are evaluated on the basis of their perception of price, quality, and value, rather than objective attributes (Kashyap & Bojanic, 2000). Zeithaml (1988) also proposed that “perceived value was a higher level of the construct inferring from perceived quality and sacrifice”, which was defined as the difference between perceived monetary price and perceived non-monetary price. In other words, “perceived value was the consumer’s overall assessment of a product based on perception of what is received and what is given” (Zeithaml, 1988).
Figure 1. An overview of the relationships among the concepts of price, perceived quality, and perceived value. Adapted from “The Effect of Brand and Price Information on Subjective Product Evaluations,” by Dodds, W. B., and Monroe, K. B., 1985, Advances in Consumer Research, 28 (3), p. 307-319.

In this study, this classic price-quality-value model is an original base to explore further relationship between price promotion and online perception. Numerous researchers have developed this model in years, so the advanced relationship among price, perceived quality, perceived value and determinant attributes are stated in detail in the following paragraphs.

UGC and Perceived Quality

UGC provides a new and effective way to investigate customer’s perception compared with traditional questionnaires and interviews (Ye et al., 2014), especially in the service industry
(Pantelidis, 2010; Ryu & Han, 2010; Zhang, Ye, Law & Li, 2010). Some disagreements exist in terms of the influence of the text content and ratings. Tsang and Prendergast (2009) found that review text has a significantly greater effect than ratings on consumers’ behavior intention. Chevalier and Mayzlin (2006) also suggest that “consumers read review text rather than relying solely on summary statistics”. However, most scholars find that consumers are likely to use quality assessments, if additional non-price information in the form of UGC is available, and their overall value perceptions are high (Chang & Wildt, 1988; Erickson & Johansson, 1985; Huber, Holbrook, & Kahn, 1986; Noone & McGuire, 2014). No matter in what circumstance, both review texts and aggregate ratings play a significant role in consumers’ evaluations of quality & value (Noone & McGuire, 2014).

**UGC and Perceived Value**

Research shows that price has a significant effect on the evaluation of perceived quality and value, based on data set of online traveler reviews (Ye et al., 2014). Consumer reviews represent the perceived quality of product or service, as well as the perceived value from purchase (Li & Hitt, 2010). Noone and McGuire (2014) found that price and UGC did not have significant impact on perceived quality, but had significant impact on perceived value. Meanwhile, another study found that UGC was influenced by actual product price, as well as the perceived value from purchase (Li & Hitt, 2010).
Restaurant Week’s Price Promotion

Restaurant Week

Restaurant Week is an event price promotion created for participating restaurants. So far there is no relevant previous research that has looked into Restaurant Week. With development of web 2.0, other price promotion patterns like online discounted vouchers, group buying, online bidding and price bundling have been explored in academic world extensively. However, as a new type of promotion for restaurants, the definition and characteristics of Restaurant Week have not been studied yet. Knowing the essence of Restaurant Week is the starting point to learn its influence on customer perception and behaviors.

Obviously, Restaurant Week is a restaurant price promotion run by a third-party marketing company. The sales promotion is defined as “a direct inducement that offers an extra or incentive for consumers with the primary objective of creating immediate sales” (Haugh, 1983). The sales promotion includes a wide variety of promotional tools including price promotions and non-price promotions (Huff, Alden, & Tietje, 1999; Yang, Zhang & Mattila, 2015). Although non-monetary promotions such as free gifts and contests are popular in recent years, price promotions are still dominant form of promotions used in industry (Montaner, Chernatony, & Buil, 2011; Yang et al., 2015). Except for being categorized mainly in the price promotion, other key words of Restaurant Week characteristics are "prix fixe menu - price bundling", "discounted dollar format price", "no reference prices", "time-limited" and "online
booking”. Thus, Restaurant Week can be summarized as a ten days' price promotion event in a certain city that provides prix fixe menus by presenting discounted dollar format price without other reference prices for full-service restaurants and its goal is to create an immediate online bookings. This new and wise tactic effectively performs in market and has already been replicated in many cities. The following context explains each of the characteristics in detail.

**Price Promotion**

“Price promotion is the primary sales promotion strategy and it is the most common form of sales promotion employed in the services industry” (Nusair, Yoon, Naipaul & Parsa, 2010). Price promotions are often used in various service contexts such as restaurants, entertainments, hair salons, laundry and cleaning services, and travel services (Nusair et al., 2010; Peattie and Peattie, 1995). However, the effects of price promotions in the foodservice industry may differ from those in other product categories because the product includes both intangible and tangible characteristics (Huang, Chang, Yeh, & Liao, 2014). In addition, knowledge on how consumers respond to price promotions is essential in making critical decisions concerning price promotions for service industries (Nusair et al., 2010).

Restaurant Week’s price is somewhat a transparent discounted price to customers. Discounted price is one of the effective manifestations in price promotions. It displays a reduction of original listing price of a product or service for all the buyers during a short term (Chen, Monroe, & Lou, 1998; Nusair et al., 2010; Yoon, Nusair, Parsa & Naipaul., 2010).
During Restaurant Week period, prices for set-menus are perceived obviously much lower than
the restaurant's original prices because the displaying prices are almost transparent to the
potential diners. In the hotel context, rate transparency is defined as customers' ability to see the
rate for each night of stay or to compare rates with different hotels easily (Tanford, Baloglu, &
Erdem, 2011). Similarly, in restaurant context, the ability for diners to easily see or explore the
original listing prices is the criterion to judge whether the price is transparent or not. Thus,
Restaurant Week’s prices are indirect discounted as well as non-transparent.

Most of the restaurants participating Restaurant Week is to increase sales. Researchers
found that short-term price promotions generate tangible extra sales immediately due to larger
purchase volumes (Christou, 2011; Ehrenberg, Hammond, & Goodhart, 1994; Helsen &
Schmittlein, 1992; Huang et al., 2014; Morphis, 1978; Nusair et al., 2010; Raghubir &
Corfman, 1999; Susskind, Reynolds, & Tsuchiya, 2004; Yoon et al., 2010). Price promotions are
effective tools in influencing not only in sales, but also in playing roles in consumer purchase
behavior in services (Chapman, 1986; Matosian, 1982; Nusair et al., 2010; Raghubir, 2004;
Taylor, 2001; Varadarajan, 1984;). However, sometimes when the sales generated, whether or
not customers’ perception of price, perception of values, perception of qualities, and satisfaction
can be enhanced at the same time remains unknown.
Time-Limited Price Promotion

The opening window for Shanghai Restaurant Week’s price promotion is only ten days every half a year so it can be recognized as a time-limited price promotion, which is similar like a retail “flash sales”, but the transactions are to be completed off-line. Also, a countdown banner of days display at the top of website homepage. Time-limited pricing offer is a form of restriction on an offer, which increases the perceived unavailability or scarcity of the offer (Devlin, Ennew, McKechnie, & Smith, 2007; Inman, Peter, & Raghubir, 1997). Consumers usually perceive pressures of product scarcity under the restricted timeframe.

Pricing Bundle and Perception

“Packages or bundling are tools of price promotions used to motivate the demand” (Campo & Yague, 2006). A package tour can be classified as a bundling strategy, as it is the sale of different products in a package (Campo & Yague, 2006; Stremersch & Tellis, 2002). One common method of price bundling that has received recent attention in academic research is in the segment of foodservice (Tanford et al., 2011). Restaurant Week is a good example using price bundling strategy.

Restaurant Week is viewed as a new form of price promotion, meanwhile it also contains characteristic of price bundling. Prix fixe menu with one set price is an important element. Fixing the price of a package is a price bundling strategy, since the price of the package is less than the sum of the prices of the products that make up the package (Campo & Yague,
The prix fixe menu is literally a set menu including two to three courses and each course usually corporates two to three options of dishes. Also, the set price of prix fixe menu is obviously much lower than the sum-up of these dishes’ individual price listing on regular a la carte menu.

Prix fixe menu simplifies the diner’s dish-selecting process, but consumers still need to compare the package with other different alternatives. In this fact, price often comes an external indicator in order to compare and take a decision. However, in Restaurant Week’s price promotion case, prices are suggested to set to diminish the competitiveness among restaurants at the same segment. If the prices are offered as the same, other factors such as food, service, environment, brand, and popularity become crucial indicators.

**Price Promotion & Perception**

There is numerous research related to price promotion’s influence in perception, but it is insufficient in hospitality industry, especially in restaurants. Yoon et al. (2010) mentioned that consumers perceived and evaluated price promotions differently in hospitality and non-hospitality industries. The unique characteristics of services such as intangibility, heterogeneity, perishability, and inseparability, cause consumers to perceive and evaluate price promotions differently in services from products. (Nusair et al., 2010; Yoon et al., 2010). Among the numerous sales tactics applied in sales promotions, price discounts and coupons are by far the most common forms of sales promotions employed in various services settings such as hair
salons, restaurants, laundry and cleaning services, and travel industries (Narasimhan, 1984; Nusair et al., 2010; Peattie & Peattie, 1995; Yoon et al., 2010), but some other new forms of price promotion are rising in market right now.

The appearance of Restaurant Week is an example of new and creative tactics of price promotion. It actually hides the discount level from original price and only shows the dollar format of price online. Also, it offers the one set price for each participating restaurant. This new promotion tactic may mediate diner’s overall post-dining perceptions, satisfaction and repeat-purchase intention.

**Restaurant Attributes**

The attributes are descriptive features characterizing a product and service (Keller, 1999) and are useful marketing tool to understand consumer's behavior and perception. According to the Means-End Model (Zeithaml, 1988), the attributes affecting perceived quality include intrinsic attributes and extrinsic attributes. Price is one of the most extensively studied extrinsic cues in the perceived quality literature (Brucks, Zeithaml, & Naylor, 2000). In the restaurant industry, the objective price is the price printed on menu for both food and beverage. Sometimes, it also associates with other price information such as tax, tips, service charge or other relating fees. In this study, *price* is the set-price being listed on the Restaurant Week’s official website and this price usually contains a two or three courses’ lunch or dinner for one person without any beverages. Also, since the background is Mainland China, tax has been included in this price and
most of the participating restaurants do not include service charge or tips. After dining in the
restaurant, the diners need to pay the set-price amount to restaurant directly and plus any
incremental consumption of other products. Author concludes that diners' perceived quality and
value come from their perceptions of price, their current knowledge of original prices and other
relating attributes.

Except for price, brand and advertisement level are other extrinsic cues. Intrinsic
attributes refer to product-related cues and depend on whether they can be evaluated or not
(Nelson, 1970). In restaurant industry, the attributes that all restaurant segments have in common
include location, ambience, cleanliness and menu variety (Kivela, 1997). Pantelidis (2010) also
showed that intrinsic attributes including food, service, ambience, and menu had effect on
customer perception. In short, all the attributes may have direct or indirect influence on diner's
overall perception of value and quality, but these determinant attributes stay inconsistent in past
studies.

Customers' perceptions of quality originally stem from the difference of their evaluation
between what they experienced and what they expected in product and service. Several previous
studies have attempted to measure the product and service attributes. For example, SERVQUAL
instrument has been widely used in hospitality settings to measure service quality (Chow, Lau,
Lo, Sha, & Yun, 2007; Chen & Hu, 2009; Parasuraman, Zeithaml, & Berry, 1991). SERVQUAL
consists five service dimensions, which are tangibility (the physical appearance), reliability in
performing service dependably and accurately, responsiveness in providing prompt service, assurance (the ability to convey trust and confidence), and empathy (the individualized attention provided to customers (Chen & Hu, 2009; Chow et al., 2007; Parasuranman, 1988). Although there are substantial disagreements of the level and dimension of attributes except from traditional SERVQUAL scale, most of scholars agree that the determinant attributes of perceived quality base on multifunctional natures of the hospitality service (Chen & Hu, 2009).

In the restaurant industry, the principal choices of determinant attributes are food and beverage, service and environment (e.g. Auty, 1992; Chen & Hu, 2009; Tripp, Greathouse, Shanklin, & Gregoire, 1995). Based on the theory of the mean-end model relating price, quality, and value, the lower-level attributes have impact on the higher-level attributes. Thus, food and beverage, service and atmosphere may have influence on both quality perception and value perception.

Perceived Quality Based Attributes

Food.

Food is primary in operation and it occupies the most part of total revenue. Although most restaurants sell beverages as well to enrich the product variety, beverage sales is still a small portion and can be contained with foods. Besides, on the online reviews on Dianping.com. There is no option to rate beverages, so most diners include them into foods because they are all products from restaurant. Thus, in this study, the term food is representing the actual food
consumed, as well as the beverages. Besides, according to the nature of food being served in full-service restaurant, the dimensions to measure food are food quality, quantity, tasty, presentation and variety.

**Service.**

Service is also an important attribute to perceive quality and value, and it is particularly influential in the full-service restaurants. In this study, all services occurred in the restaurant during dining, and they include taking reservations, hosting, seating arrangement, dishes ordering, serving the dishes and beverages, communicating with customers, processing the bills and more. Based on the scale of SERVQUAL, Service represents the server's appearance such as clean and tidy (tangibility), service speed (responsiveness), professionalism (reliability), interaction (assurance), and personalization (empathy).

**Environment.**

Environment may also play a role in the price perceptions, quality perceptions, value perceptions, satisfaction and behavior when customer is dining in an upscale restaurant context (Berry & Well, 2007; Han & Ryu, 2009; Kim & Moon, 2009; Liu & Jang, 2009; Pullman & Gross, 2004; Pullman & Robson, 2007; Ryu & Han, 2010; Ryu & Jang, 2007). The DINESCAPE scale including man-made physical and human surroundings in upscale restaurants' dining area is a widely used measurement to explore how diner perceives the environment (Ryu & Jang, 2007). The DINESCAPE comprises six dimensions: facility
aesthetics, lighting, ambience, layout, table setting and service staff (Ryu & Han, 2010). The facility aesthetics means architectural design, interior design, and décor that contribute to the attractiveness of dining environment (Ryu & Han, 2010; Wakefield & Blodgett, 1994). Since service staff has been included in the service attribute, environment in this study primarily represents facility aesthetics and ambience. Facility aesthetics represent the visual elements such as layout, table setting and lighting, interior design and décor. Ambience contains intangible background characteristics affecting customers' non-visual senses such as music, scent, and temperature (Ryu & Han, 2010).

**Price promotion and perceived quality.**

Price promotions would have positive impact on current perceived value, but they may influence negatively on consumers' perceived quality. Previous studies found that price promotions lower consumers’ perceived quality of the discounted item (Chandon, Wansink, Laurent, 2000; Dodson, Tybout, & Sternthal, 1978; Nusair et al., 2010; Raghubir & Corfman, 1999; Scott & Yalch, 1980). Campo and Yague (2006) analyzed the formation of tourist loyalty to tour operators and found that “price promotions had indirect and negative effects on perceived quality”. Consumers tend to interpret higher prices with higher quality, and low prices are perceived as an indication of inferior quality (Nusair et al., 2010; Rao & Monroe, 1988).

In contrast, a few empirical studies reported that, instead of decreasing perceived quality, price promotions have a positive effect on perceived quality. In restaurant industry, the
perceived quality may be different because of their unique characteristics of service. Based on the well-known SERVQUAL model, which has been explained in the last section of this chapter, Huang et al. (2014) designed an experiment with survey to test the relationship among price promotions, food quality and service quality and further found that “price promotions activities at Starbucks in Taiwan had a positive effect on customer quality perception”.

Other Attributes

According to the discussion of above sections, the determinant attributes to quality perception in restaurant industry are food, service and environment. There are also some other relating attributes including restaurant segmentation, brand, extra benefits and popularity can moderate the overall perception value. Other attributes embody in each diner’s text content. The variables regarding to the attributes are explained in detail in the next chapter.

Perceived Value

“In the service industry, the value perceived by customers could be investigated by related service quality and paid price” (Ye et al., 2012). Correspondingly, customer’s perceived value is viewed as a trade-off between quality being perceived in product or service and sacrifice by paying the price (e.g., Bolton & Drew, 1991; Li & Hitt, 2010; Slater & Narver, 2000; Ye et al., 2012; Zeithaml, 1988).

Some of the scholars contain that the traditional perceived value is a single-item scale, which is not enough to address the concept of perceived value (Al-Sabbahy, Ekinci, Riley, 2004;
Chen & Hu, 2010). Then, a number of researchers argued that perceived value should be more complex and should be advanced to be multi-dimensional (e.g. Chen & Hu, 2010; Petrick, 2002; Sweeney & Soutar, 2001). Based on the growing body of literature discussing the functional value and symbolic value, Chen & Hu (2010) proposed that “perceived value can be better understood in terms of functional value and symbolic value”. The functional value is similar as the classic trade-off model, which is based on tangible and objective assessment of attributes such as food quality, service quality, environment and price (Chen & Hu, 2010). The symbolic value is based on subjective and intangible assessment of attributes including brand, extra benefits, restaurant segmentation and popularity and it represents an overall value perception from social, emotional, the aesthetic and reputation aspects (Chen & Hu, 2010; Rust, Zeithaml, Lemon, 2000).

**Price promotion and perceived value.**

Price promotion is a commonplace promotional activity aiming at enhancing consumers perceptions of value and increasing the likelihood of purchase (Devlin et al., 2007; Grewal, Monroe, & Krishnan, 1998). Nusair et al. (2010) defined value as benefits received by consumers from sales discount.

Restaurant Week’s price promotion may result in enhancing diners' current perceived value, which also may associate with lower future value perception. A number of studies have shown that price discounts or price promotions can lead to the overall higher value perception of
the products (Compeau & Grewal, 1998; Nusair et al., 2010; Wakefield & Barnes, 1996). The greater the trade-off between prices and original prices, the higher value perceptions diners can have. However, they also have negative effect on such as reducing consumer’s future reference prices and damaging the brand image (Campbell & Diamond, 1990; Kalwani, Yim, Rinne, Sugita, 1990; Mela et al., 1998; Monroe, 1971; Raghubir & Corfman, 1999). Although participating restaurants may make their diners perceive higher value, they may also make them perceive value negatively because diners have much lower reference prices based on previous promotion's price.

**Repeat-Dining Intension**

It is found that consumer online reviews affect consumers’ purchase decisions (Chevalier & Mayzlin, 2006; Dellarocas, Forman, Ghose, & Wiesenfeld, 2008; Li & Hitt, 2010; Zhang, & Award, 2007). In particular, the perception of dining intension being expressed on UGC would affect diners’ future behaviors. Based on the National Restaurant Association’s 2012 National Household Survey, “more than one-third of diners reported that information on a peer review site such as Yelp, TripAdvisor, or OpenTable is likely to affect their decisions when choosing a restaurant” (National Restaurant Association, 2013). On the online reviews, diners may express if they would like to recommend the restaurant to others, or if they would like to go back to this restaurant. The dining intention in this study contains both meanings.
Price promotion and repeat-purchase intentions.

There are different voices about the price promotion's effect in repeat-purchase intentions in the previous studies. Some researchers believe that price promotions bring down the probability of future purchases (Dodson et al., 1978; Nusair et al., 2010). After experiencing the price promotions with high-perceived value, consumers would automatically or easily expect to enjoy the discounted prices in the future. Based on this situation, if no discounted prices are being offered in the future, consumers, especially new buyers would not be willing to purchase again. Instead, those who don't have a preference of brand probably go to other competitors who offer discounted price. However, Huang et al. (2014) found that price promotions activities at Starbucks in Taiwan had a positive influence on repeat-purchase intentions. Moreover, some other researchers argued that there was no significant relationship between price promotions and repeat-purchase behavior (Ehrenberg et al., 1994). Ehrenberg et al. (1994) did an international study focusing on the after-effect of price-related consumer promotions for packaged grocery products. They maintained that price promotion did not affect a brand's subsequent sales or brand royalty because short-term buyers had almost bought the promoted brand before, rather than that new buyers were being attracted. Based on the above opinions, weather the consumers are new buyers or not may be play a role in their repeat-purchase intentions.
Satisfaction

The online perception of quality and value may have positive relationship with customer's satisfaction. Value is an important factor informing consumer satisfaction responses (Cronin, Brady, & Hult, 2000; Ha & Jang, 2012; Oliver, 1996), so consumer perceived quality and value are important predictors of customer satisfaction (Ha & Jang, 2012). Consumers’ post purchase satisfaction can be affected by the confirmation or disconfirmation of received quality after consuming the product versus their expectation before purchase (Cadotte, Woodruff, & Jenkins, 1987; Churchill & Surpenant 1982; Li & Hitt, 2010; Rust, Inman, Jia, & Zahorik, 1999; Spreng, MacKenzie, Olshavsky, 1996). Also, Ryu and Han (2010) used online review data to show that quality of service and physical environment are significant determinants of customer satisfaction in quick-casual restaurant.

Restaurant segments

Previous research suggests that different restaurant segments offer differentiate attributes in accordance with what their customers pursue (Ha & Jang, 2012). Similarly, in the restaurant sector, it can be presumed that different restaurant segment may be a moderator between perceived quality and perceived price, as well as between perceived value and perceived price. Attribute-value theory is based on the hierarchy value model (Woodruff, 1997). Price has a more significant impact on perception of quality for higher-star hotels than economy establishments (Ye et al., 2014). Consumer’s value perception can be bias by market
segmentations or positioning (Ha & Jang, 2012), so as to the quality perception. Zeithmal et al. (1996) defined service quality as the consumer’s evaluation of judgment about the overall services provided. If prestige is the dimension that consumers most often use to judge product quality, price may be a stronger indicator of perceived overall quality for that product (Brucks et al., 2000). Thus, restaurant segments may play a role in quality perceptions and value perception received from price information.

In this study, restaurant segments referred to Restaurant Week’s restaurant categories. Restaurant category A has the highest set-price; restaurant category B is in the middle; restaurant category C has the lowest set-price. Therefore, restaurant category A represents most premier full-service restaurants, which are fine dining restaurants; restaurant category B represents less premier restaurants, which are casual dining restaurants; restaurant category C represents regular full-service restaurants.

**Price promotion in high-end properties.**

Chen et al. (1998) found that consumers’ perceptions of price discounts are different for highly priced products compared to the low-end price products. Premium prices and a prestigious image are critical features of high-end products or services (Yang et al., 2015). In this study, price promotions are particularly for full-service restaurants so diners’ perceptions for these restaurants are likely to be different with fast-food restaurants. Further, it is demonstrated that consumer perception on quality and purchase intention in low-end services continuously
increased as the discount level increased, while the perceived quality for high-end services dropped at the average of 40% discount level (Drozdenko & Jensen, 2005; Hu, Parsa, & Khan, 2006; Yoon et al., 2010). Thus, the scale or segment of restaurants may moderate the price promotions’ effect on diners’ perceptions.
CHAPTER 3

METHODOLOGY

Research Approach

This chapter introduced methodologies being employed in this study. This research combined both qualitative and quantitative methods to analyze the contexts and ratings of User-Generated Content (UGC). UGC represented diners’ perceptions including quality perception, value perception, overall satisfaction and repeat dining intentions. The primary research questions to be explored were:

1) Which attributes mostly determine diners’ perceptions for full-service restaurants using Restaurant Week? In contrast, which attributes mostly determine diners’ perceptions for full-service restaurants without using any price promotions?

2) Between using Restaurant Week and without using any price promotion, is there significant difference of the restaurant attributes according to diners’ perceptions?

3) Do diners’ perceptions of food, environment, service and overall satisfaction differ across restaurant category?

4) To what extent, do diners’ perceptions of food, environment, service and overall satisfaction differ during price promotion?

The methods using in this study could be primarily divided into two parts, which were content analysis of the user-generated context and two-way MANOVA of the user-generated
ratings. The combination of quantitative and qualitative methods could answer different research questions, and brought together a more comprehensive account of the area of inquiry (Creswell & Clark, 2011). In the following paragraphs, author explained the research strategies, sample selection, data collection, data analysis and validity in detail.

In addition, since this study used secondary data abstracted from public review site, it would not influence the rights and welfare of participating human subjects. Institutional Review Board (IRB) exempted the research protocols during data collecting process for this study.

**Research Strategy**

Researchers believed that analyzing the content of customer comments was the best way to gain a full understanding of the perceptions and feelings of customers about a hotel, and a review of guest comments or user-generated feedback could help hoteliers improve service quality (Stringam & Gerdes, 2010). Previously, researchers usually used survey or case study to test consumers’ perception on product or service quality and value, but these methods were limited to capture consumers’ perceptions out of the structure. Fortunately, thanks to the development of Web 2.0, consumers started to contribute their perceptions online themselves so the data could be obtained easily. Also, the texts contained more information from respondents’ perspective. On one hand, the structure of user-generated ratings provided as a measurement of diners’ perception and operated a similar function like interview. On the other hand, the
user-generated texts displayed a comprehensive image of perceptions, as well as interpreted respondents’ reasons and thoughts regarding to their ratings in detail.

To explore the impact of Restaurant Week’s price promotion on diner’s perceptions, author compared means of diner’s ratings under different factors. Two-way MONAVA can compare the means of multiple dependent variables within two independent variables and it is an appropriate way to test the research questions. This study used structured content analysis and two-way MONAVA as primary methods to explore how Restaurant Week’s s price promotion affects diner’s perceptions in the online contexts.

**Content Analysis**

Content analysis is a classic qualitative method of research. According to the Cambridge dictionary of sociology, content analysis is the analysis of the content of communication, which involves classifying contents in such a way as to bring out their basic structure (Turner, 2004). It originated since 1940s, and it became a more credible and frequently used research method since mid-1950s. Content analysis had been widely employed in the studies of the tourism and hospitality industry, such as the travel blogs and UGC on Online Travel Agencies (OTA), especially in the perspective of media.

In restaurant industry, the content analysis was firstly employed to study user-generated content by Pantelidis in 2010. That article presented a content analysis of over 2000 customer comments regarding to three hundred London restaurants on an online restaurant guide and
compared reviews made during times of favorable economic conditions and economic recession (Pantelidis, 2010). It found a preference structure model suggesting that customer considered food, service, ambience, price, menu, and décor (in order) when reflecting on their experiences. Pantelidis’s study was significant but it also had some limitations. Firstly, researchers coded all the reviews manually instead of using any qualitative software so errors and bias were easily to occur. Secondly, that study had geographic restriction so cannot be generalized to other countries or areas. Culture may change diners’ preference. Thirdly, the data were collected between 2005 and 2009 and were outdated. Since technology and web 2.0 developed fleetingly, results might be affected as well. Hence, this study tried to improve the limitations of previous classic study, as well as to be innovative.

The first part of this study employed a structured content analysis with dictionary-based approaches to identify the most critical success restaurant attributes determining diners’ online perceptions. Both unstructured content analysis and structured content analysis were frequently used in analyzing qualitative media content based on different research objective (Phillip, 2002).

**Unstructured content analysis.**

Unstructured content analysis basically is inductive coding that fractures text into analytic pieces, and categorization. The strategies of coding scheme contained reading for overall content, annotating data, noticing repetition, identifying topic changes, reading analytically, and exploring underlying concepts, could be used to achieve excellent inductive coding (Hennink,
Hutter, & Bailey, 2011). Pantelidis’s study (2010) was a good example of unstructured content analysis.

**Structured content analysis.**

Unlike unstructured content analysis, structured content analysis provided researcher with a deeper and more extended portrayals of research ideas in that it avoided the problem of pre-determining the categories into which respondents’ answers would be divided (Phillip, 2002). In this study, seven themes including perceived quality of food, perceived quality of service, perceived quality of environment, perceived value, perceived extrinsic attributes, overall satisfaction and repeat dining intention and particular parameters were pre-set before coding.

This study employed the structured content analysis with two main reasons. Firstly, the review site using in this study had offered a structure for respondents to rate and write text. To write a review, except for the overall satisfaction rating, other ratings are divided into three categories – food rating, environment rating and service rating. After rating, the respondents were required to write text in the comment box as well. The hint words in box intentionally asked respondent what was his or her perception for food, environment and service (see Appendix A for example of review page). This instruction works as a structure when respondent writes a review text. To be more accurate, author randomly tested some comment texts and most of the respondents did follow the structure of hint to write. Based on this situation, if an open-ended content analysis was employed, more researcher bias might occur during
categorizing. Thus, it was important for researcher to analyze the data from the respondents’ perspective. Secondly, the key points summarized in first part of literature review coincided with the categories divided by review site. Diner’s perceptions included perception of quality and perception of value, and both of them played a critical role in diners’ overall satisfaction and repeat purchase intention. According to the literature reviews above, the determinant attributes to diners’ quality perception were summarized to food, service, environment; the determinant attributes to diners’ value perception were price perception, and other extrinsic attributes such as brand, popularity, word-of-mouth (WOM). Thus, this study coded and analyzed the text per pre-set structure, which included food perception, service perception, environment perception, other extrinsic attributes perception, value perception, overall satisfaction, and repeat dining intention seven themes.

MAXQDA

In this study, MAXQDA 12 was selected to analyze the review text. MAXQDA is a computer assisted qualitative data analysis software (CAQDAS) designed for qualitative and mixed methods analysis. MAXQDA had a long history since 1989 and it had been used by thousands of people worldwide. MAXQDA 12 was the new version released in 2015 with more innovative and powerful features. It can be used in analyze interviews, reports, tables, online surveys, focus groups, videos, audio files, literature, image and more for both Windows and Mac.
This study chose this software for four main reasons. Firstly, manually coding a large quantity of qualitative data was time consuming, so adopting technology could save researcher’s time to a great extent. At the same time, researcher’s bias could extremely be reduced during coding. Secondly, it was convenient to directly use the software to quantify the qualitative data after coding. Thirdly, unlike other CAQDAS, MAXQDA was not designed on the background Ground Theory, so it could go beyond to a mixed methods analysis. The last but not least, comparing with many other qualitative analysis software packages, MAXQDA not only had the main analytical features like others but also supported Unicode, which made it possible to code and analyze texts in different languages. It was also can work with various languages in the same document. This was a significant feature for this study. The review site using for this study was a Mandarin website, so nightly-eight perception of the texts were written in simplified Chinese. Even though some texts were written in English, MAXQDA still made it possible to code and analyze in both languages at the same time.

**SPSS**

IBM SPSS Statistics 23 was applied in the study to analyze quantitative data from the reviews. Except for the texts of reviews, customers’ ratings were also important and had been explored by many researchers previously. In this study, author used SPSS to run a Chi-square test and multivariate general linear model to further test the results of content analysis as well as
the review ratings. Explanation regarding to analyzing the data were addressed extensively in later data analysis part.

**Sample Selection**

As this study was exploring the relationship between Restaurant Week’s price promotion and diners’ online perceptions, author selected the data by two steps. The first was to confirm the list of all participating restaurants from Restaurant Week’s website and then randomly selected the sample restaurants from the population according to an appropriate proportion. The second was to extract diners’ online reviews including both ratings and comment texts from Dianping.com within the time frame.

**Restaurant Week**

**Participating restaurants.**

There were 223 full-service restaurants in Shanghai participating this event, so they were served as the population in this study. The participating restaurants also included some world-famous Michelin fine-dining restaurants such as Nougatine by Jean Georges and Hakkasan Shanghai.

**Restaurant categories.**

Restaurant Week provided three restaurant categories for the participating restaurants to select and attend. The prices per person of Category A restaurants were CNY128 for lunch and CNY 258 for dinner; prices of Category B restaurants were CNY88 for lunch and CNY 198 for
dinner; prices of Category C restaurants were CNY 58 for lunch and CNY 98 for dinner. There were 158 restaurants in Category A, 56 restaurants in Category B, and 9 restaurants in Category C. Since the levels of prices are provided, all the participating full-service restaurants could obviously be separated by the existing categories.

Assuming that 50 restaurant samples were enough to do a further analysis, author selected 22.42% of restaurant samples from each category proportion. The results were rounded into interval since the number of restaurant was interval. Based on this proportion, author randomly selected 35 restaurants in category A, 13 restaurants in category B and 2 restaurants in category C. If the selected restaurant was closed or could not be found on Dianping.com any more, another restaurant in the same category was randomly searched instead.

Reviews on Dianping.com

Sample screening.

This study targeted the seventh edition of Shanghai Restaurant Week, which period of promotion is from September 3rd to 13th in 2015 for a total of eleven days. According to 223 participating Shanghai, author searched each restaurant one by one on Dianping.com. To ensure that all Restaurant Week diners’ reviews were contained, authors picked one month of all the diners’ reviews for each restaurant. Thus, the thirty-day time frame was from September 3rd to October 2nd and a total of 298 pieces of diners’ reviews were randomly selected.
Typically, there were three segments of diners’ reviews, which were reviews with Restaurant Week’s price promotion, reviews with other kind of price promotion such as Dianping group buying, and reviews without any price promotions. Reviews with promotions could easily be recognized because most respondents mentioned the discount or promotion when they wrote comment text. Based on research questions, all the reviews with any other promotions were eliminated when going through all the reviews. In the rest of reviews, based on price promotion, reviews with Restaurant Week’s price promotion and reviews without any price promotions were separately recorded into two sample groups. In order to generate the data more scientifically, author equally weighted the amount of reviews between the two sample groups, as well as in each restaurant category.

Components.

There were six primary components constituted a Dianping review. Firstly, respondent’s information including username, profile picture, website VIP icon and review contribution levels were located on top of the reviews. Secondly, each respondent provided average check. Thirdly, overall satisfaction rating, food perception rating, environment perception rating and service perception ratings were located under personal information. Overall satisfaction rating was displayed with minimum one star and maximum five stars. Other attribute ratings are displayed in points from zero to four. Fourthly, comment texts were in the middle and usually occupied the main body of the review. Fifthly, almost half of the respondents submitted
images of food and environment as an evidence of their comment texts. These pictures were followed by the texts. Sixthly, at the bottom of each review, date that respondent contributed the review was displayed accordingly. This was important information for author to screen samples.

**Data Collection**

**Data Coding for Qualitative Data**

Restaurant’s name, dates, Restaurant Week category and comment texts of each qualified Restaurant Week reviews were entirely copied from Dianping.com and then pre-coded to a structured Excel document (see Appendix B for examples of structured pre-coded data). When the spreadsheets were ready, they were imported to MAXQDA software. Coder generalized the main concept of each sentence of texts, and then manually encoded them into pre-set attribute themes based on their definitions, which were summarized from literature reviews (see Appendix C for definitions and exemplary review texts). After coding all the review texts with Restaurant Week, author coded the other group, the review texts without any price promotions at the same way. Thus, two segments of data were ready to be analyzed.

**Data Coding for Quantitative Data**

Prepared samples, the ratings of reviews with Restaurant Week and reviews without promotions, were separately coded to Excel. Three major attributes, food, environment, and service, as well as the overall satisfaction were coded with respondents’ usernames. The original
scale for attribute ratings was adjusted to code as one to five instead of zero to four. Rating for overall satisfaction was also coded as one to five according to the numbers of stars.

**Adjustment**

Following the established content coding guidelines (Gibbs, 2007), except for author, another two researchers who were also familiar with the review contents and research objectives collaborated in the earlier stage of this coding process to get preliminary findings of emerging categories from the reviews. This study chose native Chinese who speaks English because the review respondents were all native Chinese speakers and used many modern Chinese words or popular cyberwords, which would be difficult for non-Chinese native speakers to understand.

In this research, the second researcher, who was an UNLV graduate with Master of Science Degree in Hotel Administration and was proficient in both English and Simplified Chinese, was introduced to check the accuracy and reliability of the coding. Disagreements between these two researchers were expected to be reconciled during this stage. If any disagreements still cannot be solved, an assistant professor in Hotel College of UNLV, was needed to consult as a third researcher. In addition, author conducted a training about coding acknowledge with MAXQDA, as well as the information of current research to the other two researchers prior to their works.
**Data Analysis**

In this study, data analysis fell into three steps – content analysis of qualitative data, Chi-Square test based on the results of content analysis, two-way MANOVA of quantitative data. The results of data analysis were displayed in the next chapters.

**Qualitative Analysis**

As mentioned above, structured content analysis was employed as one of the primary analyzing techniques in the study. After coding, the frequency report about review texts with Restaurant Week and review text without promotion was exported from the MAXQDA directly according to the pre-set structure. Frequencies of attribute perceptions in Restaurant Week review texts were analyzed all along in order to find out which restaurant attribute mostly determine diners’ online perceptions. In contrast, frequencies of attribute perception in review texts without promotions were analyzed as well to explore which restaurant attribute mostly determine diners’ online perceptions. The difference of restaurant attributes to diners’ online perceptions between using Restaurant Week’s price promotion and without using any price promotions was expected with this approach. Besides, frequencies were used among restaurant categories to see how restaurant category affected the determinism of restaurant attributes to diner’s online perceptions


Quantitative Analysis

Descriptive analysis was used to analyze the ratings. Means of attributes – food, service, environment, and overall satisfaction were extracted from SPSS. Then, author compared means of ratings for purpose of seeking the difference of diners’ online perceptions between Restaurant Week’s price promotion group and non-price promotion group. Thus a two-way MANOVA test was run by SPSS.

Both restaurant category and price promotion were recognized as independent variables and perceptions of food, environment and service and overall satisfaction were recognized as dependent variables. As restaurant category A contained higher set-price, it was viewed as fine-dining restaurants, which was a higher level than category B. Meanwhile, restaurant category B was regarded as casual dining restaurants because it had lower set-price.

Validity and Reliability

Researcher’s Bias and Errors

Although this study constructed a research structure to analyze both qualitative and quantitative data of UGC, many bias and errors still could be emerged when methods employed. Using the CAQDAS could help to avoid many researcher’s errors during coding process, but traditional problems such as subjectivity still could not be totally averted because subjectivity was the common bias in all qualitative research. Besides, large extent of translation from Chinese to English would contort respondents’ original meaning. In addition, some mistakes might also
occur during code and translation when author was tired or bored. Especially, many respondents were millennial, so they used plenty of popular cyber-words when they were writing the comments. Researcher probably could not correctly understand all the meanings of cyber-words. Coding and translation were time-consuming work, so author could easily get fatigued and bored. Therefore, the second researcher, as well as a researcher consultant had been involved during research to minimize the bias and errors coming from researchers.

**Respondents’ Bias and Errors**

The authenticity of online reviews was always viewed as the biggest challenge when researching UGC. Some of reviews might be forged by merchandise instead of contributing by real diners. Also, some respondents might make up the reviews in order to upgrade their website VIP levels, which were based on review contribution.

From diner’s perspective, the other big problem was the inaccurate information on reviews. Not every respondent mentions promotion when they wrote review texts, so some regular reviews might be categorized to Restaurant Week reviews or screened out of the data. Some respondents might write reviews with a strong personal emotion, especially for those extreme reviews. Besides, to be more convenient and to save time, some other respondents might copy other reviews so the review texts have the possibility of duplication. In addition, some respondents could not tell the individual chain restaurant apart because chain restaurant group
normally shared full name or part of name. Thus, they might contribute the review to a wrong restaurant.

**Others Bias and Errors**

There may be other kinds of factors would affect the validity and reliability of the data. For example, diners’ deposable income or price sensitivity may affect their perceptions of price, and then further influence their overall satisfactions and repeat dining intentions.
CHAPTER 4

RESULTS

In this chapter, results of both qualitative analysis and quantitative analysis were organized and displayed. Content analysis was employed to find the answers of first research question and Chi-square test was also carried out based on the results of content analysis to further answer the second research question. They were to discover how restaurant attributes function differently in Restaurant Week’s price promotion group and non-price promotion group. Then, author used two-way MONAVA to explore the answers of third and fourth research questions, which were to discover if restaurant category and price promotion influenced diners’ perceptions.

Data Presentation and Analysis

Content Analysis Results

Frequencies of diner’s perceptions in comment texts were coded, counted and presented in Table 1. The results of structured content analysis were from restaurant category A, B and C, and 50 participating restaurants. Also, a total of 298 pieces of comment text of online restaurant reviews were included and they were equally distributed in each group. In Restaurant Week’s group, Food (n=790) was the most important attribute that diners perceived, and then followed by Service (n=152), Environment (n=140), Value (n=70), Others (n=65), Overall Satisfaction (n=62), Repeat Dining Intention (n=37). In non-price promotion group, Food (n=591)
was also the most important attribute based on diners’ online perception, and Service (n=130) and Environment (n=121) follow. However, the forth place was replaced by Others (n=74) other than Value (n=54).

Table 1

Content Analysis Results

<table>
<thead>
<tr>
<th>Price Promotion</th>
<th>Food (%)</th>
<th>Service (%)</th>
<th>Environment (%)</th>
<th>Others (%)</th>
<th>Value (%)</th>
<th>Overall Satisfaction (%)</th>
<th>Repeat Dining Intention (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurant Week</td>
<td>790 (60.03%)</td>
<td>152 (11.55%)</td>
<td>140 (10.64%)</td>
<td>65 (4.94%)</td>
<td>70 (5.32%)</td>
<td>62 (4.71%)</td>
<td>37 (2.81%)</td>
<td>1316 (100%)</td>
</tr>
<tr>
<td>NON</td>
<td>571 (56.99%)</td>
<td>130 (12.97%)</td>
<td>121 (12.08%)</td>
<td>74 (7.39%)</td>
<td>54 (5.39%)</td>
<td>27 (2.69%)</td>
<td>25 (2.30%)</td>
<td>872 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>1361 (62.20%)</td>
<td>282 (12.89%)</td>
<td>261 (11.93%)</td>
<td>139 (6.35%)</td>
<td>124 (5.67%)</td>
<td>89 (4.07%)</td>
<td>62 (2.83%)</td>
<td>2188 (100%)</td>
</tr>
</tbody>
</table>

Chi-squared test results.

In order to test the difference of frequencies that fell into each attribute theme between Restaurant Week group and the non-price promotion group, author conducted a Pearson Chi-squared test based on the results of content analysis. Chi-square value revealed that all perception frequencies in each theme occurred in Restaurant Week group were significantly different from the perception frequencies occurred in non-promotion group (Chi-square=14.810, DF=6, P=0.02). Results of Chi-square also showed that the likelihood ratios of perception frequencies in Restaurant Week group were significantly different from the ratios in non-promotion group (Chi-square=14.963, DF=6, P=0.02). In addition, Chi-squared results were
raised from the assumption of independent normally distributed data and the sample was large enough to run Pearson Chi-square test.

**Two-way MANOVA**

Two-way MANOVA was used to analyze how restaurant category factor and price promotion factor influence on the diners’ perceptions. Both restaurant category and price promotion were recognized as independent variables and perceptions of food, environment and service and overall satisfaction were recognized as dependent variables. The assumption of this test was that the data was independent and was normally distributed. Since there were only 8 review samples from restaurant category C, they were not enough to run the MANOVA. It was inappropriate to compare category C with other categories, so author eliminated category C from the test. Thus, all the results from two-way MANOVA were to compare restaurant category A with category B.

Descriptive results were displayed in Table 2. The number of ratings, means and confidence interval were all displayed and categorized according to variables. There were 145 ratings to each dependent variable, in which 102 ratings were from restaurant category A and 43 ratings were from restaurant category B. Vertically viewed, means of diners’ perception in restaurant category A were higher than means in restaurant category B respectively. Horizontally viewed, means in Restaurant Week group were all lower than means in non-price promotion group. The results of multivariate tests in Table 3 showed that the restaurant category factor,
price promotion factor and the interaction of restaurant category and price promotion were all significantly different (P<.05).

Table 2

Descriptive Results

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Category</th>
<th>Restaurant Week (n=596)</th>
<th>Non (n=596)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M(SD)</td>
<td>95% CI</td>
</tr>
<tr>
<td>Overall Satisfaction</td>
<td>A</td>
<td>102</td>
<td>3.83(.86)</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>43</td>
<td>3.33(1.27)</td>
</tr>
<tr>
<td>Perceptions of Food</td>
<td>A</td>
<td>102</td>
<td>3.69(.94)</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>43</td>
<td>3.35(1.15)</td>
</tr>
<tr>
<td>Perceptions of Environment</td>
<td>A</td>
<td>102</td>
<td>4.22(.86)</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>43</td>
<td>3.51(1.01)</td>
</tr>
<tr>
<td>Perceptions of Service</td>
<td>A</td>
<td>102</td>
<td>3.89(.99)</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>43</td>
<td>3.47(1.14)</td>
</tr>
</tbody>
</table>

Note. CI = confidence interval.
Table 3

*Multivariate Tests Results*

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurant Category (CTGR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.048</td>
<td>3.597</td>
<td>4.000</td>
<td>283.000</td>
<td>.007**</td>
<td>.048</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.952</td>
<td>3.597</td>
<td>4.000</td>
<td>283.000</td>
<td>.007**</td>
<td>.048</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.051</td>
<td>3.597</td>
<td>4.000</td>
<td>283.000</td>
<td>.007**</td>
<td>.048</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.051</td>
<td>3.597</td>
<td>4.000</td>
<td>283.000</td>
<td>.007**</td>
<td>.048</td>
</tr>
<tr>
<td>Price Promotion (PROMO)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.162</td>
<td>13.724</td>
<td>4.000</td>
<td>283.000</td>
<td>.000***</td>
<td>.162</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.838</td>
<td>13.724</td>
<td>4.000</td>
<td>283.000</td>
<td>.000***</td>
<td>.162</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.194</td>
<td>13.724</td>
<td>4.000</td>
<td>283.000</td>
<td>.000***</td>
<td>.162</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.194</td>
<td>13.724</td>
<td>4.000</td>
<td>283.000</td>
<td>.000***</td>
<td>.162</td>
</tr>
<tr>
<td>CTGR * PROMO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.050</td>
<td>3.695</td>
<td>4.000</td>
<td>283.000</td>
<td>.006**</td>
<td>.050</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.950</td>
<td>3.695</td>
<td>4.000</td>
<td>283.000</td>
<td>.006**</td>
<td>.050</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.052</td>
<td>3.695</td>
<td>4.000</td>
<td>283.000</td>
<td>.006**</td>
<td>.050</td>
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<tr>
<td>Roy's Largest Root</td>
<td>.052</td>
<td>3.695</td>
<td>4.000</td>
<td>283.000</td>
<td>.006**</td>
<td>.050</td>
</tr>
</tbody>
</table>

Note. *p < .05. ** p < .01. *** p < .001.

According to the results of between-subjects effect tests in Table 4, price promotion had significant impact on all the diners’ perceptions (P<.05). Meanwhile, restaurant category only had significant impact on overall satisfaction and perceptions of environment (P<.05), but it did not have significant effect on food and service perceptions. For the interaction of two factors, it also only had significant impact on overall satisfaction and perceptions of environment, but not perceptions of food and perceptions of service.
Table 4

*Between-Subjects Effects Tests Results*

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum</th>
<th>df</th>
<th>Mean</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTGR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Satisfaction</td>
<td>3.665</td>
<td>1</td>
<td>3.665</td>
<td>5.087</td>
<td>.025</td>
<td>.017</td>
</tr>
<tr>
<td>Perceptions of Food</td>
<td>1.450</td>
<td>1</td>
<td>1.450</td>
<td>1.794</td>
<td>.181</td>
<td>.006</td>
</tr>
<tr>
<td>Perceptions of Environment</td>
<td>7.328</td>
<td>1</td>
<td>7.328</td>
<td>12.031</td>
<td>.001</td>
<td>.040</td>
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<tr>
<td>Perceptions of Service</td>
<td>3.088</td>
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<td>3.088</td>
<td>3.414</td>
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<td>.012</td>
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<tr>
<td>Overall Satisfaction</td>
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<td>35.093</td>
<td>48.711</td>
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<td>.146</td>
</tr>
<tr>
<td>Perceptions of Food</td>
<td>35.949</td>
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<td>35.949</td>
<td>44.486</td>
<td>.000</td>
<td>.135</td>
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<tr>
<td>Perceptions of Environment</td>
<td>23.309</td>
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<td>23.309</td>
<td>38.268</td>
<td>.000</td>
<td>.118</td>
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<tr>
<td>Perceptions of Service</td>
<td>22.722</td>
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<td>22.722</td>
<td>25.116</td>
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<td>.081</td>
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<tr>
<td>CTGR * PROMO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Satisfaction</td>
<td>4.141</td>
<td>1</td>
<td>4.141</td>
<td>5.748</td>
<td>.017</td>
<td>.020</td>
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<tr>
<td>Perceptions of Food</td>
<td>2.018</td>
<td>1</td>
<td>2.018</td>
<td>2.497</td>
<td>.115</td>
<td>.009</td>
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<tr>
<td>Perceptions of Environment</td>
<td>7.668</td>
<td>1</td>
<td>7.668</td>
<td>12.589</td>
<td>.000</td>
<td>.042</td>
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<tr>
<td>Perceptions of Service</td>
<td>2.446</td>
<td>1</td>
<td>2.446</td>
<td>2.704</td>
<td>.101</td>
<td>.009</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Satisfaction</td>
<td>206.043</td>
<td>286</td>
<td></td>
<td>.720</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceptions of Food</td>
<td>231.112</td>
<td>286</td>
<td></td>
<td>.808</td>
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<tr>
<td>Perceptions of Environment</td>
<td>174.204</td>
<td>286</td>
<td></td>
<td>.609</td>
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<tr>
<td>Perceptions of Service</td>
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<td>286</td>
<td></td>
<td>.905</td>
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<td>Corrected Total</td>
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<td></td>
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<tr>
<td>Overall Satisfaction</td>
<td>4909.000</td>
<td>290</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Perceptions of Food</td>
<td>4759.000</td>
<td>290</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceptions of Environment</td>
<td>5431.000</td>
<td>290</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceptions of Service</td>
<td>4997.000</td>
<td>290</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Satisfaction</td>
<td>244.969</td>
<td>289</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceptions of Food</td>
<td>269.755</td>
<td>289</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Perceptions of Environment</td>
<td>205.617</td>
<td>289</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Perceptions of Service</td>
<td>284.721</td>
<td>289</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* *p* < .05. **p** < .01. ***p*** < .001.
In Table 5, pairwise comparisons of restaurant category were presented. It showed that category A’s effect on overall satisfaction and perceptions of environment were significantly different from category B’s effect. Also, all the perception means of category A were higher than means of category B (I – J > 0). Moreover, perceptions of environment (P=.025) was more significantly than overall satisfaction (P=.001).

Table 5

**Pairwise Comparisons of Restaurant Category Results**

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>CTGR (I)</th>
<th>CTGR (J)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction</td>
<td>A</td>
<td>B</td>
<td>.246</td>
<td>.109</td>
<td>.025*</td>
</tr>
<tr>
<td>Perceptions of food</td>
<td>A</td>
<td>B</td>
<td>.155</td>
<td>.116</td>
<td>.181</td>
</tr>
<tr>
<td>Perceptions of Environment</td>
<td>A</td>
<td>B</td>
<td>.348</td>
<td>.100</td>
<td>.001***</td>
</tr>
<tr>
<td>Perceptions of Service</td>
<td>A</td>
<td>B</td>
<td>.226</td>
<td>.122</td>
<td>.066</td>
</tr>
</tbody>
</table>

*Note. *p < .05. **p < .01. ***p < .001.

Table 6 showed the results of pairwise comparisons of price promotions. Obviously, regarding to diner’s online perception of food, service, environment and overall satisfaction, Restaurant Week was significantly different (P <.05) from non-price promotion in each group. Besides, perception means of Restaurant Week group were overly lower than non-price promotion’s group (I-J < 0).
Table 6

Pairwise Comparisons of Price Promotion Factor Results

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>PROMO (I)</th>
<th>PROMO (J)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall satisfaction</td>
<td>Restaurant Week</td>
<td>NON</td>
<td>-.762</td>
<td>.109</td>
<td>.000***</td>
</tr>
<tr>
<td>Perceptions of Food</td>
<td>Restaurant Week</td>
<td>NON</td>
<td>-.771</td>
<td>.116</td>
<td>.000***</td>
</tr>
<tr>
<td>Perceptions of Service</td>
<td>Restaurant Week</td>
<td>NON</td>
<td>-.621</td>
<td>.100</td>
<td>.000***</td>
</tr>
<tr>
<td>Perceptions of Environment</td>
<td>Restaurant Week</td>
<td>NON</td>
<td>-.613</td>
<td>.122</td>
<td>.000***</td>
</tr>
</tbody>
</table>

Note. * p < .05. ** p < .01. *** p < .001.

Figure 2 and Figure 3 showed the interactions of restaurant category factor and price promotion factor’s impact on overall satisfaction and perceptions of environment and they were significantly different. It displayed that in restaurant category B, the gap between Restaurant Week and non-price promotion was much bigger than it in restaurant category A. Besides, from the plot of overall satisfaction, marginal means of non-price promotion was much larger than the means of Restaurant Week in a mass. Also, it showed a similar pattern in perception of environment.
Figure 1. Two-way MANOVA plot 1

Interaction of CTGR * PROMO on Overall Satisfaction.
In the next chapter, all the findings relating to results above were summarized and interpreted. Moreover, based on the findings of both qualitative analysis and quantitative analysis, implications and managerial recommendations were provided as an important part of this study. Limitations were also found and listed and corresponding future research directions and advices were stated accordingly as well.
CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

Key Findings and Theoretical Implications

Findings of Qualitative Analysis

Findings of qualitative analysis here answer the first and second research questions.

According to the results of structured content analysis, perception frequencies under Restaurant Week’s reviews are overall much higher than frequencies under no price promotion’s reviews. It means that Restaurant Week’s diners express or emphasize their post-dining perceptions more often than non-promotion diners generally. Also, Chi-square test results mean that the counts and ratios of perception frequencies in two groups are significantly different. Obviously, no matter in which scenario, using Restaurant Week or without using any price promotion, the determinant restaurant attribute is always Food from the perspective of diner’ perceptions. The less important restaurant attributes are Service and Environment and they follow in sequence.

Moreover, determinant restaurant attributes summarized above are consistent with findings from previous research. In the restaurant industry, the principal choices of determinant attributes are food and beverage, service and environment (Auty, 1992; Chen & Hu, 2009; Tripp, Greathouse, Shanklin, & Gregoire, 1995). It also develops previous findings. Using Restaurant Week or not would not affect determinant restaurant attributes. The determinant attributes for full-service restaurants are always Food, Service and Environment.
Except for perceptions of others, frequencies of all the other perceptions in Restaurant Week group are all higher than frequencies in non-promotion group. It means that non-promotion diners perceive *others* including restaurant brand, word-of-mouth, popularity and location as a more important attribute than Restaurant Week’s dinners. This finding matches findings from a number of previous studies, which found that price discounts or price promotions can lead to negative effect on damaging the brand image (Campbell & Diamond, 1990; Mela, Gupta, Jedidi, 1998; Monroe, 1971; Raghubir & Corfman, 1999).

In addition, frequency ratios of food perception and overall satisfaction extensively increase from non-promotion group to Restaurant Week group. Results show that Restaurant Week’s diners would like to pay more perceptions on food, as well as the overall satisfaction than non-promotion diners. Restaurant Week’s dinners and non-promotion diners perceive the importance of restaurant attributes differently.

**Findings of Quantitative Analysis**

Quantitative analysis provides a base to answer the third and fourth research questions. Based on the results from two-MONAVA test, it is found that restaurant category only has significant influence on perceptions of environment and overall satisfaction, but price promotion has significant influence on all other perceptions including perceptions of food, perception of service, perception of environment and overall satisfaction. Furthermore, mainly three findings can be discovered as follows.
Firstly, fine-dining restaurants influence much more significantly to perceptions of environment than casual dining restaurants. It means that when diners have meals in higher scale of restaurants, they care more about the environment. At the same time, diners have higher overall satisfactions for fine-dining restaurants than regular restaurant in general. However, it is found that the restaurant category has no significant impact to food and service. In other words, no matter it is a fine-dining restaurant or a casual dining restaurant, diners pay similar attention to food and service and they are equally important.

Findings above incorporate with the implications from previous studies. Chen, Monroe, & Lou (1998) found that consumers’ perceptions of price discounts are different for highly priced products compared to the lower price products. Moreover, it was previously found environment might also play a role in perceptions when customer is dining in an upscale restaurant context (Berry & Well, 2007; Ryu & Han, 2009; Kim & Moon, 2009; Liu & Jang, 2009; Pullman & Gross, 2004; Pullman & Robson, 2007; Ryu & Han, 2011; Ryu & Jang, 2007). Restaurant segment here does affect diners’ perceptions, but only on environment and satisfaction.

Secondly, for full-service restaurants, diners have overall higher perceptions for restaurants that do not use any price promotion than those use. It means that, no matter what kind of full-service restaurant, using Restaurant Week could lower diners’ perception of food, service, environment and satisfaction.
Thirdly, both restaurant category and price promotion have significant impact on perceptions of environment and overall satisfaction. Also, the influence of price promotion is more significant in fine-dining restaurants than in casual dining restaurants. It means that, when using Restaurant Week, diners have much higher perceptions of environment and overall satisfaction in fine-dining restaurants than in casual dining restaurants. When using no price promotions, the differences between fine-dining restaurants and casual dining restaurants are not obvious.

It is found that price promotions decrease consumers’ perceived quality of the discounted item (Chandon, Wansink, & Laurent, 2000; Dodson, Tybout, Sternthal, 1978; Nusair, Yoon, Naipaul & Parsa, 2010; Raghubir & Corfman, 1999; Scott & Yalch, 1980). This study implies similar finding as most previous research, as well as develops previous findings. Restaurant Week’s price promotion would not only lower diner’s perceptions of quality including perceptions of food, service and environment, but also lower diner’s overall satisfaction. In contrast, this finding is conflict with Huang, Chang, Yeh, & Liao’s study (2014). They found that price promotions activities at Starbucks in Taiwan had a positive effect on customer quality perception. However, Huang et al.’s study focuses on chain stores instead of full-service restaurants.
Recommendations

Whether or not using a price promotion and when to use it are always pitfalls for full-service restaurant operators. Many restaurants only use price promotion such as Restaurant Week whenever they need to drive sales without considering from diner’s perspective. The findings of the study not only provide diners’ insight of using Restaurant Week, but also provide managerial recommendations for full-service restaurant operators to adjust promotional strategies based on restaurant categories.

First of all, *Food* is always a key restaurant attribute to diners, no matter using Restaurant Week or not. The full-service restaurant operators want to increase their diner’s overall satisfaction, as well as the dining intentions, they should pay more attentions to the food. According to this, the restaurant operators should take effort to hire a talented chef, conduct menu tasting, and control quality of raw materials in order to improve the taste and quality of food. In addition, except for *Food*, both *Service* and *Environment* are similarly important attributes to dinners in full-service restaurants. Staff training would be an essential way to improve the overall service, especially to increase staff’s professional skills. At the same time, to improve diners’ perceptions, restaurant layout and integrated ambience can be redesigned if the budgets allow.

For fine-dining restaurants, there is no big difference between using Restaurant Week or not. Whether or not using a price promotion does not have striking difference on diners’
perception, so the decision should depend on other relating factors such as restaurant’s short-time target, operating status, brand, popularity and others. For example, if premium restaurant needs to drive revenue in a short time and it has big inventory currently, employing Restaurant Week is still a considerable promotional tool and worth to try. However, if this restaurant is operating smoothly and the business performance is overly well, it should be better to not use Restaurant Week. Because using it may lower diners’ perceptions slightly, which may have influence on the restaurant’s future business.

For casual dining restaurants, adopting Restaurant Week could be harmful, so restaurant operators should avoid using this promotion tool as much as they can. When the restaurant is not urgently to drive the sales or when restaurant is busy, using Restaurant Week would extensively lower diners’ perceptions, especially on the environment, and the overall satisfaction, which connects directly with their future dining intentions.

In addition, the methods used in this study could also be used by restaurant operators to evaluate diner’ perceptions on Restaurant Week. User generated content (UGC) is a valuable source to explore diners’ perception. It provides both qualitative and quantitative information, and at the same time saves the cost of running the traditional questionnaire, and content of response is more authentic. The restaurant manager can utilize the diners’ online reviews as a channel to evaluate diners’ perceptions and to further improve its promotional strategy.
Conclusion, Limitations and Future Study

Academically, this study is the first time to explore Restaurant Week’s price promotion’s effects and it is also the first study to discuss the price promotion’s influences on customers’ perception in the online context. Practically, the study not only recognizes the determinant restaurant attributes from the diners’ perspective, but also provides implications and recommendations on how to adopt a Restaurant Week to full-service restaurant operators based on restaurant category. It sets up a doable and practical way to evaluate Restaurant Week by using UGC on review site. However, this study has some limitations as well. Based on the limitations, author offers some advices and directions for the future study.

First of all, although UGC is easy to use, the responding layout designed and the words and rating scales used by the review site is not scientific enough. In other words, the data source may be not accurate. For example, the original scale for overall satisfaction is from 1 to 5, but the scale for food, service and environment is from 0 to 4. To uniform the scale and to compare diners’ perception with each other, author has to modify the scale for food, service and environment between 1 and 5 as well. Also, the Food is literally showed as “food” for rating, so author has to assume that the “food” here means food and beverage. Otherwise, the meaning of the rating would not be accurate. To be more scientifically and systemically, other method such as experiment with survey can be considered analyzing similar problem in the future study.
Secondly, this study focuses on full-service restaurants in Shanghai and all the data collected from one session of Restaurant Week. However, Restaurant Week is a global event and this price promotion has been employed by restaurants in many other cities and countries. If the geography and time changes, the results may be different as well. Thus, in the future, this research can be expended to other cities’ Restaurant Week and more sessions so that the results could have a more general and practical meaning.

Thirdly, since the sample reviews for restaurant category C are not enough to run the two-way MANOVA test, author has to eliminate this restaurant category from the quantitative analysis, which means that the sample group for qualitative analysis and quantitative analysis are not symmetrically. In the future, if a bigger data population could be involved and more sample reviews could be obtained, three restaurant categories can be studies at the same time. Thus, the study would be more generalized because it covers wider range of full-service restaurant categories. Then, a further cross-analysis contained the results of both quantitative and qualitative analysis can be considered to conduct in future study.

Fourthly, one of this study’s targets is to explore the price promotion factor’s effect on diner’s perceptions. However, this study only focuses on Restaurant Week’s price promotion, but does not contain other kinds of price promotions. It is meaningful to generalize this study to other restaurant favored price promotions, such as group-buying and discount vouchers for future study. As we known, nowadays, price promotion is one of the most popular promotional tool
preferred to be employed by full-service restaurants. It is useful and meaningful to evaluate the value of adopting a price promotion from the diners’ perspective in the future and it is also a trend.

Finally, customers’ perceptions of quality originally stem from the difference of their evaluation between what they experienced and what they expected in product and service. Also, consumers’ post-purchase satisfaction is influenced by the received quality after consuming the product versus their expectations before purchase (Cadotte, Woodruff, & Jenkins, 1987; Churchill & Surpenant 1982; Li & Hitt, 2010; Rust, Inman, Jia & Zahorik, 1999; Spreng, MacKenzie, Olshavsky, 1996). Based on the findings of previous literature, expectation would have influence on diner’s perceptions. However, this study didn’t involve diner’s expectation during research. In future study, diner’s expectation can also be summarized from online review’s comment texts together with other information. Otherwise, other methodology would be considered to use to involve expectation.
APPENDIX A

Figure 4. Example of Review Page on Dianping.com.
## APPENDIX B

### Table 7

*Example of Structured Pre-coded Data – Review Texts with Restaurant Week.*

<table>
<thead>
<tr>
<th>Document Group (Category)</th>
<th>Document Name (Restaurant)</th>
<th>Date</th>
<th>$V$Variable (Comment texts)</th>
</tr>
</thead>
</table>
| Category A                | Hakkasan Shanghai           | 09/21| 收藏了好久！趁着餐厅周来吃！很不错，环境好，服务好！很值得  
This restaurant has been on my list for a long time. Thanks to Restaurant Week, I got a chance to check the place out.  
Overall, here is a good place. Good environment and good service. Really worth to try. |
| Category A                | Hakkasan Shanghai           | 10/20| 我记得第一次听说他们家是在一年多钱的餐厅周，看到他们家被秒杀才知道原来还有家米其林一星的餐厅，当时就想下一届餐厅周的时候一定要抢一下！因为抢的点是下午五点半，那时候我都还没下班呢太早了，于是打电话过去问下能不能改晚一点，服务员态度很好，说最晚可以调到六点，~@橙皮脆奶鸡酥，这道菜给我留的印象就是…  
[Translation] The first time to hear this restaurant was last year's Restaurant Week. This restaurant was fully booked as soon as Restaurant Week window opened. Then, I realized that it is a Michelin one star restaurant, so I decided to book it during this Restaurant Week. I booked the dinner at 5:30p.m at the first time, but I couldn’t get off work at that time. Thus, I called to ask if I can change the time to be later.  
The receptionist was in a very good attitude, and said that my booking was changed to 6p.m successfully. The most impressive dish was called chicken with orange peel and fried milk. … |
| Category A                | Light & Salt at the Rockbund | 10/04| 餐厅周第一弹，晚上天气不错露天的环境很OK啦！服务态度炒鸡好，柠檬鹅肝，特别腌制过的柠檬皮内包裹着鹅肝，上面再辅一层脆饼，感觉鹅肝像慕斯一般口感很是丰富。扇贝很大很新鲜，银鳕鱼涂上石榴汁在搭配紫薯泥，牛排比较失望，五分熟可是越吃越老是什么意思。甜品大米布丁配柠檬雪芭有点实在，荔枝蛋糕是越吃越喜欢哦。 |

| Category A                | Light & Salt at the Rockbund | 10/04| 餐厅周第一弹，晚上天气不错露天的环境很OK啦！服务态度炒鸡好，柠檬鹅肝，特别腌制过的柠檬皮内包裹着鹅肝，上面再辅一层脆饼，感觉鹅肝像慕斯一般口感很是丰富。扇贝很大很新鲜，银鳕鱼涂上石榴汁在搭配紫薯泥，牛排比较失望，五分熟可是越吃越老是什么意思。甜品大米布丁配柠檬雪芭有点实在，荔枝蛋糕是越吃越喜欢哦。 |

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[Translation] It is the first restaurant to attend during this Restaurant Week. The weather was nice tonight, so I chose the terrace. Server’s attitude was amazing. Foie Gras with lemon: foie gras was warped by a specially preserved lemon peel and was topped with a piece of crispy pastry. The foie gras tasted richly like mousse. Scallop was very big and fresh. Cod fish was coated with grenadine juice. The steak was pretty disappointed to me because the medium meat seemed over cooked. The dessert rice pudding with lemon sorbet was big. I like to eat the litchi cake…

Category B

Basilico

Italian Restaurant

10/25

[Translation] In a windy day, I brought my baby to have a Restaurant Week lunch. The price was 88 RMB per adult, free for baby, which seemed valuable. I ordered salad and Italian vegie soup for appetizers. Nothing special. The main dish was lamb shoulder, pizza and lamb pasta. I could not get used to the taste of lamb. I barely ate, so I was not very into this set-menu. I ordered salami pizza for us and it tasted really good. The dessert was vanilla pudding in a very big bowl. The presentation was bad, but the taste was not that bad. Generally speaking, it was really good bargain that it only cost 88 RMB per person and it even was located in Intercontinental Hotel. I would recommend to have afternoon tea there. The environment was not bad.
### APPENDIX C

Table 8

*Definitions and Exemplary Review Texts to Themes of Perception.*

<table>
<thead>
<tr>
<th>Perceptions</th>
<th>Definitions</th>
<th>Exemplary Review Texts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food</strong></td>
<td>Represents respondents’ perceptions of the taste, presentation, ingredient, variety of set-menu to all foods and beverages mentioned.</td>
<td>“鸭肉沙律，菜很新鲜”，“里面牛肉口感紧实多汁”，“晶莹剔透的，其中的虾仁非常有弹性”… [Translation] “The duck salad was very fresh”, “The beef inside tasted tight and juicy”. “Shrimp meat tasted resilient”.</td>
</tr>
<tr>
<td><strong>Service</strong></td>
<td>Represents respondents’ perceptions of server’s appearance (tangibility), service speed (responsiveness), professionalism (reliability), interaction (assurance), and personalization (empathy).</td>
<td>“女侍应生服务非常好，动作轻柔，细声慢语，添加茶水非常及时”，“所有的工作人员都很专业”，“服务的洋人小哥挺麻利勤快，英语有口音”，“店内菜单上本没有意面提供的，知道我们小朋友要吃，特意让 chef 定制了一盆”。… [Translation] “The female server served really well. She moved and spoke gently, and refilled the water on time.” “All the staff here were very professional “The foreign server worked diligently, but his English has accent.” “The menu didn’t include pasta, but Chef personalized one when he knew our child wanted to eat it.”</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Perceptions</th>
<th>Definitions</th>
<th>Exemplary Review Texts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>Represents respondents’ perceptions of facility aesthetics and ambience, which includes location, sanitation, layout, table setting, lighting, interior design, décor, music, scent, and temperature.</td>
<td>“坐在窗口看黄浦江夜景也是一种享受啊”，“环境不差”，被安排在靠窗的位置，不过外面有露台，露台上北外滩的景致真不错”，“室内色调偏暗，氛围营造还行” 在餐厅设计上，木质桌椅，灯光幽暗，…</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>[Translation]</strong> “Seating next to the window and watching the river view was enjoyable” “The environment was not bad” “Was seated next to window and there was a terrace outside. The view of the Bund was amazing” “The interior color tone was a little bit dark, but the ambience was ok.” “For the restaurant design, it contained wooden tables and chairs and the lighting was dim.”</td>
</tr>
<tr>
<td>Other extrinsic attributes</td>
<td>Represents respondents’ perceptions of restaurant brand, word-of-mouth, popularity and other extrinsic attributes.</td>
<td>“太有名的中餐厅了”，“真的算是闻名已久垂涎已久的米其林餐厅”，“经朋友介绍”，“想到附近这家颇有人气的餐厅” “公司走过去花了15分钟，6楼。…”</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>[Translation]</strong> “The Chinese was just too famous” “It was a well-known Michelin restaurant.” “My friend recommended it” “Was thinking of this popular restaurant nearby” “It took me 15 minutes to walk there from my company. It located at 6th floor”</td>
</tr>
<tr>
<td>Value</td>
<td>Represents respondents’ traditional trade-off perceptions between the quality being perceived in food and service and sacrifice by paying the price.</td>
<td>“有性价比”，“如果原价真是太亏了”，“价格也不贵”，“东西贵得离谱，一点都不值”，“总体性价比很高的店”。…</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>[Translation]</strong> “It was a good bargain” “It was really not valuable if you dine here with the original price” “The price was not high” “Everything was so expensive and not valuable” “In general, it was a highly cost effective restaurant”</td>
</tr>
<tr>
<td>Perceptions</td>
<td>Definitions</td>
<td>Exemplary Review Texts</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>Represents respondents’ overall perceptions between their expectations and the actual food, service, environment, brand, popularity, and price they perceived.</td>
<td>“很好的体验”， “非常棒的餐厅”， “总之是个好地方”， “也不想过多评价，只能说一般般”， “这么高的评论到底是怎么来的其实我很怀疑”。… [Translation] “Very good experience here” “This restaurant was amazing” “Overall, it was a great place” “I don’t want to comment too much. The only thing I wanted to say is just so so” “I really doubt why this restaurant has that high ratings of reviews.”</td>
</tr>
<tr>
<td>Repeat dining intention</td>
<td>Represents respondents’ willingness to visit the restaurant again or recommend to others to visit.</td>
<td>“还会再来”， “这是又一家想再次光顾的餐厅”， “总的来说，体验一次也就够了”， “推荐”， “有机会还要再去吃”。… [Translation] “I would come back” “It was a restaurant that you wanted to come back” “Generally speaking, this kind of experience was enough was once” “Recommend” “I would come back to eat when I get another chance”</td>
</tr>
</tbody>
</table>


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CURRICULUM VITA

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EDUCATION

University of Nevada, Las Vegas (UNLV) Las Vegas, NV
Master of Science in Hotel Administration - GPA: 3.97 Aug. 2014 - May 2016

University of California at Los Angeles (UCLA) Los Angeles, CA
Summer School Program - GPA: 4.00 Aug. - Sep. 2011

Shandong University (SDU) Shandong, China

WORK EXPERIENCE

University of Nevada, Las Vegas (UNLV) Las Vegas, NV
Graduate Assistant & Teaching Assistant, Harrah Hotel College Aug. 2014 - Present

- Led the Hotel College’s Practical Experience Program for 700+ undergrad students.
- Coordinated and supervised student volunteers for UNLVino Events, UNLV Foundation Dinner, Opportunity Village series events and various on-campus events.
- Co-taught with professors in Food & Beverage, as well as Event Management capstone classes.
- Wrote Thesis for completion of M.S. degree: “Investigate How Restaurant Week’s Price Promotion Affect Diners’ Online Perceptions”
- Designed surveys and wrote literature reviews for other academic researches: 1) Trust of Social Recruiting in Hospitality Industry; 2) Chinese food safety project.

Las Vegas Convention & Visitor Authority (LVCVA) Las Vegas, NV
Student Temporary Employment Program (STEP), Leisure Sales & International Sales May - Aug. 2015

- Reported directly to departmental directors and emphasized on effective communications with coworkers and business partners.
- Administred partner/travel professional accounts and incentive/rewards listings through Digital Asset Management System & Distributed Marketing Platform.
Facilitated the “Cash on Las Vegas” - loyalty program for travel professionals. Analyzed 100,000+ data from dashboard and provided solutions to optimize redeeming strategies for the program.

Re-created City Grading system for top 50 air markets/cities, and re-designed the integrated 56-page report for partners.

Presented development strategies of leisure and international sales department in sales missions, related industry events and FAMs.

Participated the “Las Vegas-China” market project and drafted consolidated report for future market development.

Light & Salt, Shanghai Xinhua Media Co., Ltd. Shanghai, China

- Pre-opened 3 properties for a conceptual life-styled brand with offerings in food & beverage, bookstore and art galleries.
- Created annual marketing plan in PR, digital marketing, partnership and generated over 10 million CNY in total sales.
- Launched and executed over 30+ promotion & PR campaigns. Coordinated 200+ events annually.
- Developed marketing & sales’ budget and analyzed financial reports to ensure profitability.
- Set up department internal policy & procedures and external working standards. Also trained 3 people in the marketing team.
- Established and managed guests & media database, meanwhile maintained a good relationship with KEY accounts.

Waldorf Astoria Shanghai on the Bund, Hilton Worldwide Shanghai, China

- Successfully completed the 15-month Hilton GCM Management Trainee Program and was promoted to the Executive position.
- In charge of the F&B marketing and event sales for 6 outlets.
- Directly contributed over 5.3 million CNY of total revenue to hotel in a physical year.
- Oriented 4 team members, planed and managed the biggest F&B yearly project (Moon Cake Project) for 2 years.

Shanghai World Expo 2010, International Venue Group (IVG) Shanghai, China
Intern, U.S Pavilion Jul. 2010 - Sep. 2010
RELATED WORK SKILLS

Language: Proficiency in English, Mandarin Chinese and Shanghai Dialect.


ACTIVITIES/ACHIEVEMENTS

- Awarded Graduate Assistantship, UNLVino Scholarship & UNLV Grad Grant.
- Appointed as Vice President of UNLV Hospitality Graduate Student Association (HGSA).
- Held Certification in Hotel Industry Analytics (CHIA) offered by the American Hotel & Lodging Educational Institute (AHLEI).