Effect on customers' perceptions of dining experiences
due to the promotion of sustainability practices: A
qualitative content analysis of user-generated online
restaurant reviews in Auckland, New Zealand

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Abstract

Although restaurateurs have been gradually adopting sustainability initiatives in restaurants, there is a knowledge gap in understanding the effect of these practices on customers' perceptions of restaurants that promote sustainability. Sustainability practices are mostly visible to customers when they are marketed or promoted. Therefore, it is unclear if sustainability initiatives affect customers' perceptions of a dining experience in a restaurant that promotes its sustainability.

This study collected secondary qualitative data by utilising 130 online reviews from TripAdvisor. Content analysis was used to systematically categorise and understand the underlying meaning of the data. The study used a deductive approach and built a conceptual model based on existing literature. The online reviews were categorised into eight criteria of dining experience: 1) atmospheric experience, 2) culinary experience, 3) service experience, 4) people experience, 5) co-creation experience, 6) dietary experience, 7) online experience, and 8) eco-experience. Despite the fact that the restaurants sampled for this study promoted sustainability practices, the study's findings show that the most salient dining experience value attributes for customers are culinary experience, service experience, and atmospheric experience. However, sustainability practices had some influence on customers' perceptions of their dining experience, especially on the seven quality factors of dining experience: food quality, menu variety, food pricing, word of mouth, customer loyalty, healthy food, and special diet options.

Based on the limitations of the study, future directions for restaurant practitioners and hospitality researchers are recommended. The study also recommends the validation of the quality factors uncovered in this study related to dining experience.
# Table of Contents

Abstract ........................................................................................................................................ ii  
Table of Contents ...................................................................................................................... iii  
List of Figures ............................................................................................................................ vi  
List of Tables .............................................................................................................................. vii  
Attestation of Authorship ........................................................................................................ viii  
Acknowledgements .................................................................................................................... ix  

## CHAPTER 1 INTRODUCTION ................................................................. 1

1.1. Chapter preview .............................................................................................................. 1  
1.2. Research background ..................................................................................................... 1  
1.2.1. The need to understand the dining experience .......................................................... 1  
1.2.2. The role of sustainability in the dining experience .................................................... 2  
1.2.3. Online reviews ........................................................................................................ 2  
1.3. Research aims and questions ......................................................................................... 3  
1.4. Research methodology and methods ............................................................................. 4  
1.5. Structure of the dissertation .......................................................................................... 4  

## CHAPTER 2 LITERATURE REVIEW ................................................... 6

2.1. Chapter preview .............................................................................................................. 6  
2.2. Customer experience and value ..................................................................................... 6  
2.2.1. Restaurant dining experiences .................................................................................. 8  
2.2.2. The attribute-value approach in dining experience .................................................. 9  
2.3. Dining experience value attributes ................................................................................. 10  
2.3.1. Online experience .................................................................................................... 12  
2.3.2. Atmospheric experience .......................................................................................... 13  
2.3.3. Service experience .................................................................................................. 14  
2.3.4. People experience .................................................................................................... 15  
2.3.5. Culinary experience ................................................................................................. 15  
2.3.6. Dietary experience .................................................................................................. 16  
2.3.7. Co-creation experience ............................................................................................ 17  
2.3.8. Inclusion of eco-experience ..................................................................................... 18  
2.4. Development of a conceptual framework ...................................................................... 23  
2.5. Online reviews .............................................................................................................. 26  
2.5.1. The role of online reviews in data collection ............................................................. 27  
2.6. Summary ......................................................................................................................... 27  

## CHAPTER 3 METHODOLOGY ............................................................... 29

3.1. Chapter preview .............................................................................................................. 29  
3.2. Research objective and questions ................................................................................... 29
3.3. Overview and justification of the research paradigm ........................................... 29
  3.3.1. Ontology and epistemology ........................................................................... 30
  3.3.2. Research method ........................................................................................ 31
3.4. Research procedures ......................................................................................... 32
  3.4.1. Data collection process .............................................................................. 32
  3.4.2. Population and sample ............................................................................... 33
    3.4.2.1. Location ................................................................................................ 33
    3.4.2.2. Sustainability practices ....................................................................... 34
    3.4.2.3. Selection of the sample ...................................................................... 35
  3.5. Data analysis procedure .................................................................................. 38
  3.5.1. Data coding process .................................................................................... 38
  3.5.2. Presenting the results ................................................................................. 41
3.6. Summary .......................................................................................................... 42

CHAPTER 4  FINDINGS AND DISCUSSION ........................................................ 43

  4.1. Chapter overview ............................................................................................. 43
  4.2. Main findings related to DEVAs ....................................................................... 43
    4.2.1. Culinary experience .................................................................................. 44
      4.2.1.1. Food quality ....................................................................................... 45
      4.2.1.2. Menu variety ..................................................................................... 46
      4.2.1.3. Food appearance ............................................................................... 46
      4.2.1.4. Innovation in cooking ....................................................................... 47
      4.2.1.5. Food portion size .............................................................................. 47
      4.2.1.6. Available wine selection .................................................................. 47
    4.2.2. Service experience ..................................................................................... 47
      4.2.2.1. Service quality .................................................................................. 49
      4.2.2.2. Pricing ............................................................................................... 49
      4.2.2.3. Waiting time ...................................................................................... 50
      4.2.2.4. Communication with employees ....................................................... 50
      4.2.2.5. Special occasions and additional services .......................................... 50
    4.2.3. Atmospheric experience .......................................................................... 51
      4.2.3.1. Ambience .......................................................................................... 52
      4.2.3.2. Décor and seating ............................................................................. 52
      4.2.3.3. Location ............................................................................................ 53
      4.2.3.4. Noise and odour .............................................................................. 53
    4.2.4. Online experience ...................................................................................... 53
      4.2.4.1. Loyalty ............................................................................................... 54
      4.2.4.2. WOM and expectations ................................................................... 55
List of Figures

Figure 2.1 Nemeschansky’s (2017) Dining Experience Value Attributes ..................19
Figure 2.2 Structure of Literature Review for Development of EFDEVAs ..............20
Figure 2.3 Conceptual Framework for EFDEVAs ................................................34
Figure 3.1 Choice of Paradigm for this Research .................................................39
Figure 3.2 Bengtsson’s (2016) Four Stages of Qualitative Content Analysis ..........40
Figure 3.3 Map Indicating the Restaurants used in this Study .............................42
Figure 3.4 Codes Extracted from Quality Factors .................................................50
Figure 4.1 Frequency Distribution of Quality Factors in the Culinary Experience ....53
Figure 4.2 Frequency Distribution of Quality Factors in the Service Experience ......57
Figure 4.3 Frequency Distribution of Quality Factors in Atmospheric Experience ....61
Figure 4.4 Frequency Distribution of Quality Factors in Online Experiences ..........63
Figure 4.5 Frequency Distribution of Quality Factors in Eco-experiences .............65
Figure 4.6 Effect of Local Food and Wine on Customers' Positive Perceptions of other Quality Factors .................................................................67
Figure 4.7 Effect of Seasonal and Organic Food on Customers' Perceptions of other Quality Factors .................................................................68
Figure 4.8 Effect of Social Conscience on Customers' Service Experiences ..........68
Figure 4.9 Frequency Distribution of Quality Factors in Co-creation ....................69
Figure 4.10 Frequency of Quality Factors in Co-creation .....................................71
Figure 4.11 Frequency Distribution of Quality Factors in People Experiences .........72
Figure 4.12 Quality Indicators of Culinary Experience ........................................75
Figure 4.13 Quality Indicators of Service Experience .......................................76
Figure 4.14 Quality Indicators of Atmospheric Experience ...............................78
Figure 4.15 Venn Diagram of Eco-experiences and Influences on DEVAs ..........84
Figure 5.1 EFDEVA Model ...............................................................................88
Figure 5.2 Quality Factors Uncovered in this Study .........................................90
List of Tables

Table 2.1 Definitions of Customer Value ................................................................. 15
Table 2.2 GRSERV Scale (Chen et al., 2015) ............................................................ 31
Table 2.3 Quality Factors Relating to Conceptual Framework .................................. 32
Table 3.1 Websites Used to Find Relevant Restaurants ........................................... 43
Table 3.2 Restaurants that Promote Sustainability Practices .................................. 43
Table 3.3 Sample Selection Criteria for Sustainability Practices in Restaurants ...... 44
Table 3.4 Sample Restaurants Selected for this Study ............................................. 45
Table 3.5 Frequency Distribution of RU ................................................................. 47
Table 3.6 Example of Reviewers’ Feedback in Relation to DEVAs ......................... 49
Table 4.1 Reviewers' Feedback on Culinary Experience ......................................... 54
Table 4.2 Reviewers' Feedback on Service Experiences ......................................... 58
Table 4.3 Reviewers' Feedback on Atmospheric Experiences ............................... 61
Table 4.4 Reviewers' Feedback on Online Experiences ......................................... 64
Table 4.5 Reviewers' Feedback on Eco-experiences ............................................ 66
Table 4.6 Reviewers' Feedback on Co-creation Experience ................................... 70
Table 4.7 Reviewers' Feedback on Dietary Experiences ......................................... 71
Table 4.8 Reviewers' Feedback on People Experiences ......................................... 72
Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgments), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of high learning.

Mihir Bhargava

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CHAPTER 1     INTRODUCTION

1.1. Chapter preview

This study investigates customers' perceptions of the dining experience in restaurants that promote sustainability practices. To explain the knowledge gap in the existing literature, this chapter first provides a background to the dining experience, sustainability practices in restaurants, and the importance of online reviews collected as data for this study. The research background helps inform the research questions, objective, and significance of this study, which are also explained. Finally, the methodology and structure of the dissertation are highlighted in the last section.

1.2. Research background

1.2.1. The need to understand the dining experience

The restaurant industry is highly competitive in providing a memorable dining experience to customers (Blichfeldt et al., 2010; Nemeschansky et al., 2015). Customers are not satisfied with just buying an individual product or service, and therefore, wish to experience it with an enduring and positive memory that delights (Hemmington, 2007). In other words, customers who retain a memorable dining experience are more likely to revisit the restaurant (Jeong & Jang, 2011). As a dining experience directly impacts on a customers' behaviour and return intention towards a restaurant, many restaurateurs are interested in studies of customers' perceptions of their dining experience (Canny, 2014; Cao, 2016; Nemeschansky, 2017; Tsaur & Lo, 2020). Furthermore, in restaurants, a customer’s purchase decision is profoundly impacted by dining experience attributes, thus creating a need to analyse these attributes (Ban et al., 2019; Nemeschansky, 2017; Stierand & Wood, 2012).

A restaurateur needs to understand the complexity of dining experience attributes perceived by the consumer rather than focusing only on product and service (Bujisic et al., 2014; Nemeschansky, 2017). To conceptualise customers' perceptions of their dining experience, an attribute-level approach has been suggested as a simple yet effective way for hospitality practitioners and researchers to employ (Mittal et al., 1998).
1.2.2. The role of sustainability in the dining experience

Many restaurateurs are gradually implementing sustainable strategies such as diversity in the menu, the use of non-processed and local food, organically grown food, vegetable-based menus, buying from small producers, effective waste management, authenticity, energy and water efficiency, care for employee wellbeing, and community welfare (Tan et al., 2019; Bristow & Jenkins, 2018; Canny, 2014; Higgins-Desbiolles et al., 2019; Kwok et al., 2016; Park et al., 2020; Zanella, 2020). Various studies have proclaimed that sustainable practices in restaurants may be beneficial for better customer relations, support from the community, and the goal of achieving sustainability (DiPietro et al., 2013; Namkung & Jang, 2013; Perramon et al., 2014). Similarly, hospitality researchers have argued that implementation of sustainable practices in restaurants influences customer satisfaction (Brazytė et al., 2017; Gilg et al., 2005; Kim & Hall, 2020). It is suggested in previous studies, that restaurateurs needs to have a better understanding of customers’ preferences for sustainability practices, and promote sustainability practices in restaurants as a competitive advantage (Jang et al., 2017; Kwok & Huang, 2019). However, little is known about the factors related to customers’ perceptions and attitudes towards a restaurant practising sustainability (Jeong et al., 2014; Ottenbacher et al., 2019; Park et al., 2020) and how this affects their perceptions, for example, in terms of the products and services they perceive as sustainable (Peano et al., 2019). Additionally, most sustainability practices are not evident to customers in restaurants, and mostly comes to their notice due to the information promoted by the restaurants (Park et al., 2020), such as through the menu, marketing, website and personal communications (Kwok et al., 2016).

While sustainability initiatives in restaurants are growing gradually, there is therefore a knowledge gap in understanding how customers perceive their dining experience in a restaurant that practises sustainability. However, sustainability practices are mostly visible to customers when they are marketed or promoted.

1.2.3. Online reviews

This study investigates online reviews provided by customers, who expressed their dining experience perceptions of a restaurant that promotes sustainability practices. Online reviews provide individual opinions that explain customers’ attitudes towards and experiences of a product or service (Constantinides & Holleschovsky, 2016). Previous
studies have proposed that customers’ level of involvement for these dining experience attributes may influence the content of their online reviews (Park et al., 2020). Online reviewers express their honest views of perceived experiences and what may interest others, as they are not influenced by financial or other rewards. Their posts therefore help researchers to source and extract legitimate data (Brazytė et al., 2017). Studies have examined the impact of sustainability practices on customers’ return intentions and aspirations to leave online reviews of sustainable restaurants; these studies have made a significant contribution using self-administered surveys (e.g. Han et al., 2009; Hu et al., 2010; Huang et al., 2014; Kwok et al., 2016). However, social desirability bias remains a significant concern when collecting data through survey methods. Therefore, to minimise the concept of social desirability bias (Akbarabadi & Hosseini, 2020), this study uses online reviews that consist of unstructured textual data voluntarily written by customers post experience (Constantinides & Holleschovsky, 2016).

Online reviews are considered an intriguing way of expressing detailed information, and many consumers are now highly dependent on these to gather information about services and products (Akbarabadi & Hosseini, 2020; Ban et al., 2019), and seek practical information about products to minimise loss (Ban et al., 2019). Thus, online reviews provide an advantage for companies, that can extract information about customers’ experiences after service consumption (Li et al., 2013).

1.3. Research aims and questions

This study aimed to identify the attributes of the dining experience that were most important for the customers of restaurants that promote sustainability practices. The study investigated the influence of promoted sustainability practices on customers’ perception of their dining experience. To acknowledge the problem and achieve this research aim, two research questions were proposed:

**RQ1.** What are the key dining experience attributes that customers evaluate when they visit a restaurant that promotes sustainability practices?

**RQ2.** How does the promotion of sustainability practices by Auckland restaurants affect customers’ perceptions of the dining experience?
1.4. Research methodology and methods

To achieve the research aim, the study applied an interpretivist paradigm using a relativist view, to gain an exploratory understanding of customers’ perceptions of dining experiences. The interpretive paradigm was a logical choice because the lens of interpretivists supposes that people seek understandings of the world in which they live, and therefore, meaning is not automatically visible in objects or social situations. Meaning has to be constructed and created by an individual (Dyson & Brown, 2006).

This study focused on five well-known restaurants based in Auckland, New Zealand, that promote sustainability practices. TripAdvisor was the source of the 130 online reviews collected for this study. TripAdvisor has been suggested as a reliable source from where to collect data on customers’ perceptions (Ayeh et al., 2013). Once collected, the online reviews were organised, segregated, and analysed using the content analysis method to understand customers’ perceptions about each dining experience attribute discussed in their online reviews. Content analysis helped understand the underlying meanings of the online reviews (Erlingsson & Brysiewicz, 2017).

1.5. Structure of the dissertation

The structure of this dissertation is split into five chapters: Introduction, Literature Review, Methodology, Findings and discussion, and Conclusions. The current chapter introduced the research background, research aim and questions, and methodology adopted for the study.

Chapter 2: Literature review. This chapter first presents a review of literature relevant to customers’ experiences, value, and dining experiences in restaurants. Nemeschansky (2017) suggested seven Dining Experience Value Attributes (DEVAs) that are valued by customers. Therefore, the literature regarding these seven DEVAs is discussed in detail to help understand the attributes of valued restaurant dining experiences. Secondly, as this study focuses on restaurants that promote sustainability practices, this chapter investigates the literature on sustainability practices in restaurants, and the assessment tools used to analyse customers’ perceptions of a sustainable restaurant. This creates a context against which to build the conceptual model for the study, which is focused on understanding the effects on customers’ perceptions of dining experiences of promoting the sustainability practices of a restaurant. Thirdly, this chapter explores the literature associated with the significance of user-generated online reviews to understanding the experiences described
Chapter 3: Methodology. The research question and objective of the study is restated first. Then, to explain the internal logic of the research paradigm, the chapter discusses the paradigm from ontological, epistemological, and methodological perspectives. After the justification of the choice of paradigm, the research method used for this study is presented in detail, including sampling and data collection, and method of analysis.

Chapter 4: Findings and Discussion. This chapter presents the overall results of each dining experience attribute, to answer RQ1. Each attribute of dining experience is presented with key findings related to the impacts of the promotion of sustainability practices on customers’ perceptions of dining experiences. Lastly, the key findings of the study are compared to the existing body of knowledge to identify similarities and differences to those in the literature. This discussion helps in understanding and presenting the significant findings of the study.

Chapter 6: Conclusion. This chapter firstly summarises the significant findings of the study and presents the conceptual model of the key findings. It then discusses the implications of this study, then the factors that limited the study are explained, along with recommendations for future research.
CHAPTER 2       LITERATURE REVIEW

2.1. Chapter preview

This chapter presents a critical evaluation of the existing body of knowledge on dining experience, sustainability in restaurants, and the significance of online reviews, to provide the background to the study.

Firstly, the chapter examines the literature related to customers’ experience and value, and dining experiences in restaurants. Because this study aimed to understand customers’ perceptions of dining experiences, it is important to review the literature on how customers perceive their experiences of dining in a restaurant. This study used the Dining Experience Value Attributes (DEVAs) suggested by Nemeschansky (2017), as a base from which to build a context for the conceptual framework of the study.

Secondly, this chapter investigates the importance of sustainability practices and the literature on assessment tools used by researchers to analyse customers’ perceptions of a sustainable restaurant. This existing body of knowledge helped in understanding how these sustainability practices affect customers’ behaviours and attitudes. Further, this section used Green Restaurant Service Quality scale (GRSERV scale) (Chen et al., 2015) to establish “eco-experience” as a DEVA for the analysis of customers’ perceptions specific to sustainability practices. The DEVAs and GRSERV scale were combined to develop the conceptual framework that includes DEVAs valued by customers of restaurants that promote or practise sustainability.

Thirdly, this chapter explores literature discussing the significance of user-generated online reviews in understanding the experiences described by consumers. It is important to investigate the literature regarding online reviews as these were employed in this study to understand dining experiences in green restaurants.

2.2. Customer experience and value

An experience that customers want to repeat and build on, and actively promote through Word of Mouth (WOM), is referred as a “successful experience” (Pine & Gilmore, 1998). Consumer purchase decision-making is influenced by these experiences; thus, the memorable experience which customers are left with should not be undervalued, particularly when combined with the results of advertising, public relations, physical
image, and word of mouth recommendations (Hudson et al., 2015). Brunner-Sperdin et al. (2009) agreed with this notion, stating that the most critical characteristic of an experience is the memory of it. Until making a decision about their purchase decision, consumers create a holistic picture of the good or service they are perceiving, by mentally integrating a range of aspects relating to the factors that they value (Jin et al., 2013).

*Customer value* is the desired outcome for a customer from the process of a consumption experience. This notion reflects customer perception of what they desire and expect to gain from acquiring products or services (Ha & Jang, 2012). Many definitions of customer value have been proposed, as outlined in Table 2.1.

### Table 2.1

**Definitions of Customer Value**

<table>
<thead>
<tr>
<th>Author</th>
<th>Definition</th>
<th>Focus/Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodruff (1997)</td>
<td>“A customer’s perceived preference for an evaluation of those attributes, attribute performances, and consequences arising from use that facilitates (or blocks) achieving the customer’s goals and purpose in use situations” (p. 142).</td>
<td>Broader concept of consumer value.</td>
</tr>
<tr>
<td>Woodall (2003)</td>
<td>“Personal perception of advantage arising out of a customer’s association with an organization’s offering” (p. 21).</td>
<td>Reflects that consumer value is based on the product/service importance and the advantages it provides.</td>
</tr>
<tr>
<td>Gale (2010)</td>
<td>“Customer value is market perceived quality adjusted for the relative price of your product. [It is] your customer’s opinion of your products (or services) as compared to that of your competitors.” (p. 28).</td>
<td>Defining, measuring, and improving market-perceived quality</td>
</tr>
</tbody>
</table>

According to the previous studies, customer behaviours are more easily understood by evaluating the value of a particular product or service (Jensen, 1996; Ostrom & Iacobucci, 1995; Woodruff & Gardial, 1996). From this perspective, customer value is considered to be one of the most crucial indicators of customer satisfaction and consumption behaviours in the service industry.
According to Woodall (2003), customer value depends on the significance and benefits of a product or service. Woodruff (1997) suggested that the desired value of customers serves as a point of reference when they develop opinions about the quality of a particular product or service and/or organisational performance. This indicates that value can directly result in the formation of overall satisfaction with a customer’s consumption experience. Value not only changes the customers’ decision-making processes and helps businesses understand customers’ future behavioural intentions, but it also serves as an essential tool for managing organisations (Ha & Jang, 2012).

The value that each customer seeks is entirely influenced by their purpose for dining out, as customers have different motivations for dining in a restaurant (Woodruff, 1997). According to Park (2004, p. 89), consumers’ value of dining out can be defined as the “value consumers derived from food, service, and restaurants when eating-out,” which implies that dining value is not limited to satisfying hunger, but also needs for convenience, social interaction, or entertainment. There are various motivations for dining out at a restaurant, such as for the food’s taste, fun, and efficiency (Park, 2004). Therefore, when customers dine in a restaurant, they form a desired expectation. If they are satisfied with the value they received in a restaurant, satisfaction of the value attribute will be affected.

### 2.2.1. Restaurant dining experiences

A dining experience occurs when a customer encounters a combination of tangible and intangible interactions with a set of restaurant attributes presented by a service provider (Canny, 2014). The intangible attributes (e.g. physical environment) are linked to service quality, and the tangible attributes (e.g. food quality) are important in determining customer’s perceptions of restaurant quality (Reimer & Kuehn, 2005). Researchers suggest that in order to gain a competitive advantage in this dynamic economy, restaurateurs need to specifically concentrate on customer’s dining experiences (e.g. Markovic et al., 2011; Nemeschansky et al., 2015; Stierand & Wood, 2012; Tsaur & Lo, 2020). Markovic et al. (2011) observed that dining is now very popular, due to improved schooling, societal factors, the growth of a gastronomic community, changes in population, and good food sensitivity. The effect is a revolution in the way people eat, and many consumers prefer different tastes, a friendly environment, and fun memories. Consumers seek dining opportunities that match their changing needs (Wishna, 2000).
reality, they are searching for interactions that go beyond the cuisine itself, according to Gustafsson et al. (2006), as visiting a restaurant has become a social and cultural act of expressing dreams and lifestyles. As restaurant businesses continue to grow, food and appropriate service create unforgettable moments for consumers. As a consequence, restaurateurs need to consider the various factors that influence the entire food experience (DiPietro, 2017; Edwards & Gustafsson, 2008). This is particularly significant, because simultaneous sensory effects can affect food awareness while eating (Edwards, 2013; King et al., 2004). Awareness and observation of restaurant features influence revisit intentions for clients who have unforgettable experience (Jeong & Jang, 2011).

Analysis of customers’ perceptions against attributes such as service quality, food quality, physical surrounding, and price helps to understand customers’ satisfaction (Campbell & Smith, 2016; Hansen et al., 2005; Knutson et al., 2007; Nemeschansky, 2017; Parasuraman et al., 1994). Ribeiro and Prayag (2019) used the Cognitive-Affect-Behaviour (C-A-B) model to evaluate service quality, food quality, and restaurant atmospherics and their relation to post-consumption behaviour. The C-A-B model describes the way consumers and their environment engage in shaping other behavioural outcomes (Dweck & Leggett, 1988). The C-A-B model has helped the restaurant industry understand post-consumption behaviours, as it confirms the theory that service quality, food quality, and atmospheric quality are cognitive evaluations by customers that generate affective responses (Ribeiro & Prayag, 2019). A memorable dining experience affects the emotional aspects of comfort, stimulation, and being cared for (Tsaur & Lo, 2020). Experiences can be usual or exceptional, and the hospitality industry utilises cognitive and emotional aspects to create a complete experience. Uncertainty about how customers perceive their experiences, increases the complexity of understanding the dining experience (Cao, 2016). Additionally, post consumption decisions are largely dependent on a memorable dining experience. Most restaurateurs are concerned about retaining customers in the current fast-paced market. Therefore, they are interested in studies of dining experience that directly impact the behaviours and intentions of consumers (Canny, 2014; Cao, 2016; Nemeschansky, 2017; Tsaur & Lo, 2020).

2.2.2. The attribute-value approach in dining experience

Attribute-value theory, based on the hierarchy value model (Woodruff, 1997, p.142), suggests that “customers determine value based on the attributes” that are present, and how significant those attributes are satisfying their needs. Customers consider the unique
attributes of each restaurant segment when they pursue their ultimate goal of eating out (Ha & Jang, 2012).

Previous studies have suggested to assess customers’ experiences using value attributes such as service quality, product quality, physical surroundings, and price, which helps to explain customer satisfaction (Campbell-Smith, 1970; Knutson et al., 1996; Parasuraman et al., 1994). Although restaurants offer a range of attributes according to customers’ needs and wants, restaurateurs need to examine the advantages and the hidden values customers desire from those specific attributes (Ha & Jang, 2012). A restaurant experience is connected in a direct way to customer loyalty and post-consumption attributes (Bojanic, 2007; Chen & Hu, 2010; Kwun & Oh, 2006; Ryu et al., 2012). Thus, it can be presumed that restaurants that promote sustainability, offer a set of dining experience value attributes to customers, which in turn affect customers’ satisfaction and post consumption behaviours. Accordingly, this study focuses on value attributes for customers’ dining experiences in restaurants that promote their sustainability practices. Therefore, the next section discusses the literature regarding value attributes for customers’ dining experiences, to provide a basis from which to develop a conceptual framework.

2.3. Dining experience value attributes

A customer’s primary goal of dining out, is to enjoy a meal in a restaurant setting. Meal experiences at home are different from those when dining at a restaurant, because customers expect a particular level of food and service quality when dining out – that is, when they dine at a restaurant, they seek satisfaction of experiential values (Blichfeldt et al., 2010). *Dining Experience Value Attributes* (DEVAs) can be defined as the consumers’ expectations of quality and the dining experience as a whole (Ha & Jang, 2012).

Campbell-Smith (1970) suggested that food, atmosphere, and service, are key attributes that influence customer experience and behaviour. Furthermore, researchers have added other factors such as food quality and value, which were considered the most critical of all attributes (Clark & Wood, 1999). Parasuraman et al. (1994) examined reliability, assurance, responsiveness, empathy, and tangible factors of service when assessing the attributes of service delivery. Similarly, Kim et al. (2012) recognised food quality, service quality, atmosphere, convenience, price, and value, as six separate attributes of restaurant quality. Some of these more widely accepted restaurant quality attributes have been
included in well-established theoretical frameworks, such as SERVQUAL (Bojanic (2007); Cronin & Taylor, 1994; Parasuraman et al., 1988) and DINESERV (Kim et al., 2012; Knutson et al., 1995). Multiple studies have argued that food quality, service quality, price value, interpersonal relations, atmosphere, and convenience, have a significant effect on customer satisfaction (Cao, 2016; Markovic et al., 2011; Obonyo et al., 2014; Prayag et al., 2015; Ribeiro & Prayag, 2019; Tsaur & Lo, 2020). Nemeschansky (2017) conducted an in-depth review of existing studies and suggested seven DEVAs: culinary experience, service experience, atmospheric experience, online experience, co-creation experience, people experience, and dietary experience. These DEVAs were selected after investigating the externally defined values that affect customers’ satisfaction and their links to customers’ attitudes (see Figure 2.2).

**Figure 2.1**

*Nemeschansky’s (2017) Dining Experience Value Attributes*
This section reviews literature regarding these DEVAs to deepen an understanding of the DEVAs and identify the factors that affect customers’ perceptions and behaviours. Further, as this study aimed to understand customer perceptions of dining experience in a restaurant that promotes sustainability practices, section 2.3.8 discusses eco-experiences as a DEVA, to incorporate the quality factors related to sustainability practices that affect customers’ behaviour. The literature on the quality factors of DEVAs (Nemeschansky, 2017) and eco-experience (Chen et al., 2015) is investigated in the next section in order to construct the conceptual model for this study. This conceptual framework is referred to as “Dining Experience Value Attributes” (DEVAs) in this study. The existing body of knowledge regarding these DEVAs is presented in the order shown in Figure 2.2.

**Figure 2.2**

*Structure of Literature Review for Development of DEVAs*

![Diagram of DEVAs]

**2.3.1. Online experience**

Customers now become involved in their choice of restaurant experience, choosing
instantaneous communication methods and depending on electronic word-of-mouth (Kim et al., 2020). Current restaurant services utilise the internet as a platform for communication between restaurants and customers, and many businesses are a part of social networking sites. This lets them develop a link with prospective customers before they interact with them while they are purchasing, and is beneficial for maintaining future customer relations.

The upsurge in the utilisation of digital communication technologies globally has made online engagement a vital part of the contemporary customer experience (Nusair et al., 2013). The internet encourages not only consumers, but also restaurateurs, to share knowledge, views, and experiences (Litvin et al., 2018). These interactions emphasise the increasing significance of connecting with customers, before and after their purchase transaction (DiPietro, 2017; Nemeschansky, 2017). The power to build the image of the brand thus passes from restaurateurs to customers (Dunne, 2013). Kim and Park (2017), and Sotiriadis (2016) discussed and suggested eWOM strategies for brand management. Businesses have responded to the digital revolution by assimilating digital marketing, utilising social media, and participating in mobile advertising (Schultz & Peltier, 2013; Vranica, 2013). As a result, restaurateurs have been able to take advantage of social and mobile media marketing opportunities such as personalised marketing messages, real-time gathering of data, constantly available shared communication with consumers, and the co-creation of customer experience (Litvin et al., 2018).

2.3.2. Atmospheric experience

The focus of many researchers has been importance of building a physical environment and restaurant managers who consider it an important factor for strengthening and increasing customer satisfaction in the hospitality industry (Ryu & Han, 2011). Research has identified many dimensions of atmospheric experience such as ambience, spatial structure, architecture, and social factors (Ha & Jang, 2012). Atmospheric experience contains items such as illumination, aroma, temperature, and music, that specifically influence the senses of customers (Mattila & Wirtz, 2001). Spatial planning and design factors include the arrangement of machinery, equipment, furniture, furnishings, and equipment, in an environment that communicates directly or implicitly in a restaurant (Ryu et al. 2012).

Previous research has demonstrated that the physical nature of the atmosphere in the restaurant has a positive impact on customer loyalty (Nasir et al., 2014). As per Canny
the physical environment is a significant marketing element for distinguishing restaurants by giving consumers an exceptional experience in a satisfying and pleasant atmosphere. Therefore, the physical environment has a influential effect on maintaining relations with existing customers as well as drawing attention of new ones. A well-designed physical environment is considered an important means of affecting consumer decisions and post-purchase behaviour, and helping customers assess their satisfaction with the value of products and services from service providers (Bitner, 1992). The physical environment is considered significant in terms of increasing customer satisfaction, and includes odour, colour, physical surroundings, and lighting effects (Filimonau et al., 2020).

2.3.3. Service experience

Research on service quality started in the 1970s in Northern Europe (Sasser, 1978). In order to develop a suitable instrument for assessing service quality, scholars defined it as the difference between customers’ expectation of service and their perceptions of actual service delivered (Gremler et al., 2020; Hussein, 2018; Parasuraman et al., 1994). Sasser (1978), first suggested that service is an intangible attribute of the dining experience, as it refers to the overall quality of experience, service performance, and the customers’ expectations of the quality of the service (Meng, 2010; Sasser, 1978). Overall, service quality is a critical factor that affects customer satisfaction and intentions to return (Anderson et al., 1994; Ban et al., 2019; Jen & Hu, 2003; Parasuraman et al., 1994).

Parasuraman et al. (1988) observed that service quality is the distinction between the service expectations of customers and their service perceptions. Grönroos (1984) stated that service quality, customer expectations, and the opinions that arise after service has been experienced, could be considered as stages of evaluation. Furthermore, Cronin and Taylor (1992) mentioned that the most critical component of service quality, is that of customer opinion. Customers assess and understand elements of the quality of service they perceive they have acquired and make comparisons between their expected and perceived service quality. They will not be satisfied if the perceived service does not meet their expected service quality, but if the perceived service is better than expected, the service quality is considered to satisfy (Markovic et al., 2011). The quality of service perceived by the customer not only improves customer satisfaction and purchasing behaviour, but also has a significant effect on customer loyalty (Caruana, 2002).
2.3.4. People experience

The social factors of “people experience” consist of the other individuals present in a service environment. According to the social facilitation theory, the sheer presence or absence of other individuals in an environment, has an influence on human behaviour (Dweck & Leggett, 1988). Jang et al. (2015) suggested that the effect of other customers on the principal customer is present even without direct or deliberate communications between them. Garay and Font (2012) observed that customers had a more positive view of store image when more social indications were present in the environment. McColl-Kennedy and Sparks' (2003) social servicescape framework, stated that the number of customers within an environment and other customers’ exhibited emotions, affect the reactions of the principal customer. Furthermore, a customer’s satisfaction can be influenced directly or indirectly by other customers present in the same environment. Hence, other customers are generally regarded as an element of the service environment (Bitner et al., 1994; Huang et al., 2014)

Inference theory indicates that in a service environment, other customers give cues which are used by the principal customer to make evaluations of service quality (Baker et al., 2002). The other customers experience services and show emotions, and these exhibited emotions can affect the focal customers’ service evaluations (McColl-Kennedy & Sparks, 2003). Therefore, it is expected that other customers’ positive displays of emotions in the service environment increase the focal customers’ opinions of the restaurant image. Butcher et al. (2016) explained that there is a probability of revisit intention, when genuine respect and interest is shown to the customers by employees. They also emphasised the importance of social connectedness, by stating that a sense of closeness and homophily is an essential value of a dining experience. Several studies have suggested that a friendly relationship between employees and customers enhances service results (Garay & Font, 2012; Hudson et al., 2015; Jang et al., 2015) and repurchase intentions (Hussein, 2018). Customer orientation by service employees and apparent social bonding with other customers and employees are recognised to have a more substantial impact on the restaurant image than do social crowding and other customers’ exhibited positive emotions (Jang et al., 2015).

2.3.5. Culinary experience

“Culinary experience” for customers includes many aspects. The excellence of meal is
thus not determined by the consumer or creator independently, but on the relationship between the quality factors of culinary experience. Previous research has emphasised two different kinds of quality: objective and subjective (perceived) quality (Tsiotsou, 2006). Whilst objective quality is conceptualised as the “excellence of the products” (Zeithaml, 1988, p. 4), perceived quality refers to “the consumer’s judgment about a product’s overall excellence or superiority” (p. 3). Cue utilisation theory argues that “consumers use intrinsic and extrinsic cues to infer the quality of a specific product” (Olson & Jacoby, 1972, p. 172). Accordingly, in order to understand customers’ culinary experience, intrinsic quality cues need to take account of appearance, colour, and shape, and structure that cannot be changed without modifying the physical attributes of a product (Ophuis & Trijp, 1995). However, extrinsic cues are not a component of the physical structure of a product, and include price, brand name, store name, country of origin, nutritional, and production information (Ophuis & Trijp, 1995; Teas & Agarwall, 2000). Furthermore, Namkung and Jang (2013) argued that factors affecting culinary experiences include freshness, healthiness, tastiness, and food presentation. Jacoby (2002) explained that S–O-R theory emphasises that the improvement in customers’ internal evaluation process is triggered by a stimulus, which sequentially influences a reaction or response. From this perspective, food quality attributes such as taste, shape, and appearance, are stimuli that can affect customers’ internal evaluations of organic restaurants, which in turn increase their intent to revisit (Konuk, 2019).

2.3.6. Dietary experience

Along with this grown apprehension for healthy eating behaviour, hospitality scholars have studied the nutritional data on restaurant menus (Hwang & Lorenzen, 2008, Sharma et al., 2018), quality of healthy restaurant food (Kim et al., 2013), nutritional labelling (Kang et al., 2015), and graphical icons for nutritious items (Edwards-Jones, 2010). However, the reasons for seeking healthful options on restaurant menus have been unnoticed.

“Customer value” has been believed to predict clients’ satisfaction and their objectives to revisit a restaurant. (Kim et al., 2013) were the first to analyse customer value in defining healthy food items in a restaurant context. Although Kim et al. (2013) tried to link value to health, value was conceptualised as the contrast between price and quality, instead of psychological aspects related to customer health.
In spite of attempts to make nutritious food options at restaurants, consumers are uncertain to choose healthy menu items if they require to sacrifice taste (Harnack & French, 2008). People put efforts into judging about the purchase regarding what they think is the highly healthy food. Restaurant consumers concerned for their health, expect healthy tasting food (e.g., light and fresh) and make decisions that they presume to deliver the positive outcomes of healthy eating. These expectations persuade customers to buy healthy food items at restaurants (Kang et al., 2015).

2.3.7. Co-creation experience

Co-creation can be defined as to the “joint creation of value by the company and the customer, allowing the customer to co-construct the service experience to suit her context” (Prahalad & Ramaswamy, 2004, p. 8). Consumers play an important role in the experience of co-creation, and the uniqueness of experience determines the meaning of a product or service for each customer (Prahalad & Ramaswamy, 2004). Several studies have shown that adopting consumer co-creation has advantages in the service sector. Co-creation assists businesses to attain higher levels of customer value, customer experience, customer loyalty, and employees' job satisfaction (Chan et al., 2010; Grissemann & Stokburger-Sauer, 2012; Yi et al., 2011). Gwinner et al. (1998) sought to comprehend why consumers might want to create and retain relationships with service firms. The motivations had been well documented (Morgan & Hunt 1994; Reichheld & Teal 1996), but purchasers’ reasons and the advantages that they might derive, had not formerly been very well communicated prior to Gwinner et al’s (1998) work. Using a mix of qualitative and quantitative methods, Gwinner et al. (1998, p. 102) defined relational benefits that “customers receive from long-term relationships above and beyond the core service performance,” and proposed three types: confidence benefits, social benefits, and special treatment benefits. Confidence benefits decrease anxiety and perceived threats associated with purchasing a service, as the consumer has established a relationship with the provider and knows what to expect (Gwinner et al. 1998). Confidence benefits originate from an intimate connection with the service provider and make customers feel secure, increase in their trust level (Wong & Lai 2019). Social benefits extend from personal recognition by employees, to familiarity, to friendship—all gained by cultivating a relationship with the firm (Gwinner et al. 1998). Customers often value their social relationships with frontline service providers that have formed from repeated interpersonal interactions. Special treatment benefits combine customisation (e.g., preferential treatment and extra attention) and economic elements (e.g., price discounts, faster service), so customers with
a relationship with their service provider may get better deals, faster service, or more personalised offerings compared with those who lack a customer-provider relationship (Gwinner et al. 1998). This special treatment might be structured (e.g., with loyalty reward programmes) or unstructured (e.g., with occasional price discounts or special services). The concept of relational benefits produced a constant field of research that has comprehensively investigated customer responses associated with relational benefits. Hypotheses about the consequences of relational benefits are developed next (see Gremler et al., 2020).

**2.3.8. Inclusion of eco-experience**

The concept of *sustainability* revolves around economic, ecological, and societal issues regarding the consumption of natural resources, and relates to a sense of social responsibility (Peano et al., 2019). *Sustainable practices*, also referred to as “green practices” (Bristow & Jenkins, 2018), aim to decrease the carbon footprint, which for a company, means minimising resource usage, utilising non-recyclable products, undertaking a practical recycling approach, and protecting from environmental harm by chemicals (Higgins-Desbiolles et al., 2019). Smith and Perks (2010) defined *green businesses* or *sustainable businesses* as those which are environmentally sound, and which may include the use of organic and natural products to provide protection against emissions, and sourcing environmentally friendly materials. Companies able to acclimate to the needs of the transforming world, including the important demand for sustainability, will be more likely to flourish in the long term and enjoy strategic benefits (Banerjee & Chaudhury, 2010). Environmental influences of the restaurant industry are broad ranging, from disproportionate use of water, energy, and resources, to carbon footprints from the production and delivery of goods, and the transportation of customers and employees. However, there have been efforts to define *green attributes*, there is a lack of agreement between the researchers, managers, and customers, on what these are (Kwok et al., 2016).

Bristow and Jenkins (2018) investigated the importance of local food, food production processes, and sustainable practices, from the perspective of restaurants’ managers. Their study was conducted on a few restaurants in Massachusetts (United States of America), Wales (United Kingdom), and southern Switzerland. The authors reported that restaurant managers preferred buying local food and practising sustainability, but this depended on the cost, quality, and availability of products. Sustainable purchasing can escalate the prices for consumers, and hence, their intention to revisit, and willingness to pay for the
sustainable strategies undertaken by managers (Bristow & Jenkins, 2018; Jang et al., 2017). This relationship between the managements’ and customers’ decision-making, is suggested as a successful component of progress towards a sustainable future (Bristow & Jenkins, 2018; Bruns-Smith et al., 2015). Organic food products are usually highly valued, due to extra production costs. For this reason, the price of organic food in restaurants is inevitably higher than that of conventional food. Previous research has underlined that price is a substantial hurdle to organic food consumption (Hughner et al., 2007; Marian et al., 2014). None-the-less, organic food products are recognized as more nutritious than are conventional ones (Bryla, 2016).

2.3.8.1. Need for practising sustainability in restaurants

The primary purpose of sustainability is to shift from neoliberalism to a value-driven approach that regulates the high cost of operating a business (Faux, 2005). In other words, service providers need to move from the traditional economic model to one that works considerately with nature, by improving climatic conditions and maintaining natural resources (Cozzio et al., 2018; Faux, 2005). The hospitality industry is considered as a high resource consumption sector and also generates a massive amount of waste. Therefore, the hospitality industry needs to focus more on the environmental, societal, and economic responsibilities of their businesses (Canny, 2014; Cozzio et al., 2018; Martinez-Martinez et al., 2019). Hospitality researchers are concerned about ecological sustainability, depletion of natural resources, rising costs, and increasing demand (Bruns-Smith et al., 2015; Cozzio et al., 2018; Peano et al., 2019). The rapid and ongoing depletion of natural resources affects the ecological system that is vital for the survival of the hospitality industry, which relies on it (Ip-Soo-Ching et al., 2019). Restaurateurs need to adopt sustainable purchasing in their daily operations, by purchasing products and services that have minimal negative effects on human health and the environment (DiPietro et al., 2013). There are critical issues regarding sustainable purchasing around energy saving, water conservation, and minimisation of water usage. Effective management of these resources would assist in progressing towards sustainable business management (Cozzio et al., 2018; Higgins-Desbiolles et al., 2019; Legrand et al., 2016). Studies on sustainability practices have reported that these initiatives will (1) attract customers’ attention (Schubert, 2008), (2) have sustainable impacts on the natural environment (DiPietro et al., 2013; Iaquinto, 2014), (3) lower business operating costs (Susskind, 2014), (4) improve brand image and customer ratings (Namkung & Jang, 2013), (5) encourage consumers’ word-of-mouth and purchasing intentions (Hu et al., 2010), (6) motivate consumers to purchase green products or services at a higher price.
(Sánchez-Ollero et al., 2014), (7) drive up the value of the business (Perramon et al., 2014), and (8) foster a company’s long-term success (Pugh & Woodworth, 2014).

Jang et al., (2017) assessed the role of top managers’ values and leadership and stakeholder engagement in advancing environmental sustainability. Their study outlined the variables critical to understanding environmental sustainability, such as those of environmental values, leadership, stakeholder engagement, environmental sustainability, and restaurant performance. Their research contributed to explaining the positive influences of top management’s values, leadership, and sustainable practices, both financially and non-financially (Jang et al., 2017).

2.3.8.2. Importance of consumer knowledge and behaviour around sustainability practices

Sustainability is being vigorously researched in the field of the restaurant industry, but the customers’ perceptions and attitudes toward a restaurant practising sustainability are still under-studied (Ottenbacher et al., 2019). Consumers play an active role in influencing the market through their purchase decisions (Peano et al., 2019). A study by Hernandez (2016) revealed that a strong customer-centric attitude leads to significant profit growths. In the United Kingdom, a few restaurant managers offer takeaway boxes to decrease plate waste, but the trial was not successful as customers felt embarrassed to carry leftovers away (Mirosa et al., 2018). This social behaviour is likely to be demonstrated by consumers who lack awareness and education regarding the adverse effects of careless consumption in restaurants, which can be a substantial cause of food wastage (Filimonau et al., 2020; Zanella, 2020). Similarly, a study in Japan found a lack of awareness of sustainability practices and sustainability policies (Onozaka et al., 2010).

Consumers of a product or service may pay attention to different aspects of the product/service and respond differently according to their personal interests (Celsi & Olson, 1988). In the sustainable restaurant context, it is possible that customers who experience sustainability practices, may have different degrees of interest or recognition of their experiences, depending on their personal values in relation to sustainability. Research has found that customers conscious of sustainability issues are more likely to perceive sustainability practices, as well to have more positive behavioural intentions in relation to these, such as revisit intentions and providing positive word-of-mouth (WOM) recommendations (Park et al., 2020).

Ottenbacher et al. (2019) analysed the significance of sustainable practices to consumers
at quick-service restaurants, using the theory of planned behaviour (TPB) to investigate the behavioural and psychological dimensions of customers’ decisions regarding sustainability (Rivis et al., 2009). The application of TPB helped in discovering the willingness of Gen Z consumers to pay a higher price to dine at a sustainability-oriented restaurant (Ottenbacher et al., 2019b). Although Gen Z customers were found willing to pay more, generally there is uncertainty about customers’ willingness to pay the additional costs of sustainable services and food (Cozzio et al., 2018). Previous studies have reported that consumers who support sustainable practices, are willing to pay higher prices to dine in sustainable restaurants (e.g. Ryu & Han, 2011; Tan & Yeap, 2012).

Hospitality scholars have measured the impacts of restaurants’ sustainable attributes on consumers’ willingness to pay more or revisit a restaurant (e.g., Hu et al., 2010; Jang et al., 2011; Kim et al., 2015), but research has tended to overlook consumers’ other transactional intentions and behaviours. For example, consumers might accept trade-offs for achieving sustainability, such as sacrifices of comfort, time, and money (Sigala, 2013). In a restaurant setting, such trade-offs might also include a willingness to wait longer and/or travel further, if consumers feel that visiting a sustainable restaurant is worth the extra effort (Kwok et al., 2016). However, most sustainability practices are not evident to customers in restaurants, and mostly come to their knowledge only through information provided by the restaurants (Park et al., 2020), for example, in menus, marketing, and website and personal communications (Kwok et al., 2016). Therefore, as there is a lack of research on customers’ perceptions of sustainable restaurants, and sustainability practices are mostly visible to customers only when they are marketed or promoted, research is needed on this topic.

2.3.8.3. Assessment tools for sustainability practices in restaurants

The need for sustainability in restaurants is gaining the attention of various hospitality scholars due to the increasing demands of the environment, investors, and consumers (DiPietro & Gregory, 2013; Hu et al., 2010; Huang et al., 2014). Assessment and practice of sustainability considers multiple factors such as diversity in the menu, the use of non-processed and local food, organically grown food, vegetable-based diet, buying from small producers, effective waste management, authenticity, energy and water efficiency, employee wellbeing, and community welfare (Tan et al., 2019; Bristow & Jenkins, 2018; Canny, 2014; Cozzio et al., 2018; Higgins-Desbiolles et al., 2019; Peano et al., 2019; Zanella, 2020).

A green restaurant framework by Choi and Parsa (2006) suggested three perspectives in
sustainable restaurant practices: health, environmental, and social. Kwok et al. (2016) proposed an alternative framework for green restaurants, which included food, environment, and administration focused green practices, based on health and environmental perspectives. Food-focused green practices are a way to vitalise and provide green practices to consumers in the food and beverage sector (LaVecchia, 2008). The administration-focused practice in this framework measures restaurateurs’ efforts to get a green certification or to train employees. Environmentally-focused green practices were suggested as a combination of three Rs (recycle, reuse, and reduce) and 2 Es (energy and efficiency) (Kwok & Huang, 2019): 1) recycling and composting (First, 2008), 2) renewable power (Fahmy et al., 2012), 3) pollution prevention and reduction (Cordano & Frieze, 2000), and 4) energy and water efficiency and conservation (First, 2008). (Ham & Lee, 2011) outlined eight factors of sustainability practices (1) water efficiency/conservation, 2) waste reduction and recycling, 3) sustainable furnishings, building materials or resources, 4) use of healthy/sustainable food, 5) energy use, 6) use of disposables, 7) chemical and pollution reduction, and 8) organisational sustainability practices) to evaluate restaurants’ sustainability practices.

Chen et al. (2015) developed the GRSERV scale by conducting an extensive review of the literature on sustainable restaurants and service quality, and by performing in-depth interviews with experts in the field (see Table 2.2).
Table 2.2

**GRSERV Scale**

<table>
<thead>
<tr>
<th>GRSERV Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>Energy-saving facilities, devices, and the landscape architecture of a sustainable restaurant.</td>
</tr>
<tr>
<td>Reliability</td>
<td>Ability to perform the promised service dependably and accurately at a sustainable restaurant.</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Willingness to provide the best effort to help customers and provide prompt service at a sustainable restaurant.</td>
</tr>
<tr>
<td>Assurance</td>
<td>Food certification and the knowledge and ability of employees to convey trust and confidence at a sustainable restaurant.</td>
</tr>
<tr>
<td>Empathy</td>
<td>Caring, sense, and individualised attention at a sustainable restaurant.</td>
</tr>
<tr>
<td>Environmental-oriented services</td>
<td>Practices and implementation for environmental protection-related service attributes at a sustainable restaurant.</td>
</tr>
<tr>
<td>Food quality</td>
<td>Design and presentation of meals on the menu.</td>
</tr>
</tbody>
</table>


This GRSERV scale is a suggested assessment tool for analysing customers’ perceptions in sustainable restaurants. However, the current study is focused on the dining experiences of customers in restaurants that promote sustainability practices. Therefore, to develop a conceptual framework, the GRSERV scale was included as a DEVA to incorporate “eco-experience” and understand customers’ perceptions of dining experiences in a restaurant.

### 2.4. Development of a conceptual framework

The extant literature provides a foundation for the conceptual framework for this study, and an understanding what DEVAs might affect customers’ evaluations of dining experiences in restaurants that promote sustainability. The current study used the DEVAs suggested by Nemeschansky (2017), combined with the GRSERV scale to include the sustainability practices that customers are known to value. The DEVAs extracted from the extant literature include online experience, atmospheric experience, service experience, culinary experience, people experience, dietary experience, co-creation experiences.
experience, and eco experience, as shown in Table 2.2. The literature explained the quality factors of each DEVA shown to have an effect on customers’ perception. These quality factors were used to derive the initial code for this study depicted by the arrow (See Table 2.2) (additional codes emerging from the data analysis were developed according to textual data found in online reviews).

Table 2.2

*Quality Factors Relating to Conceptual Framework*

<table>
<thead>
<tr>
<th>DEVAs</th>
<th>Authors</th>
<th>Quality factors</th>
<th>Codes</th>
</tr>
</thead>
</table>
| Online experience      | Constantinides & Holleschovsky (2016); DiPietro & Gregory, (2013); Litvin et al. (2018); Namkung & Jang (2013) | • Instant communication between customer and restaurant  
• Brand image from social media & online reviews  
• eWOM strategies | • WOM  
• Loyalty  
• Expectations |
| Atmospheric experience | Campbell (2011); Filimonau et al. (2020)                             | • Physical surroundings  
• Music  
• Temperature  
• Odour  
• Lighting  
• Theme colour | • Ambience  
• Noise  
• Temperature  
• decor  
• Seating |
| Service experience     | Knutson et al. (1996); Parasuraman et al. (1994)                     | • Waiting time  
• Communication  
• Service quality  
• Pricing |                                                                 |
| Culinary experience    | Namkung & Jang, (2013); Trafialek et al. (2019)                       | • Food quality (freshness, healthiness & tastiness)  
• Menu variety  
• Appearance  
• Food portion | • Food quality  
• Menu variety  
• Food appearance  
• Food portion |
| Social experience      | Anderson-Butcher et al. (2016); Jang et al. (2015)                   | • Social connectedness & homophily with employees and other customer | • Likeminded customer  
• Staff-customer relation |
<table>
<thead>
<tr>
<th>DEVAs</th>
<th>Authors</th>
<th>Quality factors</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dietary experience</td>
<td>Edwards-Jones (2010); Kang et al. (2015); Kim et al. (2017); Markovic et al. (2011)</td>
<td>• Healthy menu options&lt;br&gt;• Nutritional information&lt;br&gt;• Various dietary options</td>
<td>• Healthy menu options&lt;br&gt;• Dietary options</td>
</tr>
<tr>
<td>Co-creation experience</td>
<td>Gremler et al. (2020); Gwinner et al. (1998)</td>
<td>• Relationship benefits&lt;br&gt;• Confidence benefits&lt;br&gt;• Social benefits (discounts, loyalty programmes)</td>
<td>• Involvement&lt;br&gt;• Personalised interaction</td>
</tr>
<tr>
<td>Eco-experience</td>
<td>Chen et al. (2015); Jiménez- Sánchez &amp; Lafuente, (2010)</td>
<td>• Tangibles - Environment-friendly materials&lt;br&gt;• Empathy- concern for environmental protection.&lt;br&gt;• Environmental-oriented practices (organic, local &amp; seasonal&lt;br&gt;• Environmental conscience and growth of community</td>
<td>• Local food&lt;br&gt;• Organic food&lt;br&gt;• Local food&lt;br&gt;• Social conscience</td>
</tr>
</tbody>
</table>

This conceptual framework was modified according to the findings of this study and was called as the “Environmental Focused Dining Experience Value Attributes” model (EFDEVAs), as explained in Figure 2.1.
The next section reviews the literature on the role and importance of online reviews in gathering data related to customers perceptions, as these were the source of data used in this study.

### 2.5. Online reviews

Use of the internet and social media is increasing daily, and online reviews are gaining popularity as a vital source of word-of-mouth that influences the revenue and sales of products (Li et al., 2020). Word-of-mouth communication on the internet is referred as *electronic word of mouth* (eWOM), and reveals the critical attributes of consumers’ perceptions in text. Generally, this kind of eWOM is willingly provided by consumers without any external incentive, and summarises their experiences (Pantelidis, 2010; Rodríguez-Díaz et al., 2018). The experience of a consumer revealed through eWOM helps other buyers to select wisely (Ban et al., 2019; Li et al., 2020a). Therefore, it is crucial to comprehend the factors underlying online reviews and their influence on the growth of businesses and theoretical development (Li et al., 2020a).

The value of online reviews is dependent on the timing of the review (or temporal contiguity), i.e., the delay between the experience and the review. Sharing an online review can be done at any time that is convenient (Akbarabadi & Hosseini, 2020). A few consumers prefer to write a review directly after a service experience, whereas others may
delay for some time (Li et al., 2020a). Customer expectations can vary depending on their experiences, so it is difficult for a restaurateur to forecast how customers will respond to a particular dining experience (Pantelidis, 2010). Therefore, eWOM can assist restaurateurs in ensuring customers’ satisfaction by overcoming problems mentioned by customers. (Pantelidis, 2010). Many prospective customers now refer to online reviews and online guides before consulting their family and friends for recommendations (Akbarabadi & Hosseini, 2020).

2.5.1 The role of online reviews in data collection

Customers utilise online reviews as a source of data on restaurants or hotels, so in this way, reviewers act as opinion leaders. Consumers seek practical information on products to minimise losses (Ban et al., 2019). People research for a diverse and broad group of reviewers, as they may have limited access to information from people around them (Berezina et al., 2016). Online reviews are considered an intriguing way of expressing detailed information (Ban et al., 2019), and many consumers are highly dependent on online reviews to gather information about services and products (Ban et al., 2019; Constantinides & Holleschovsky, 2016). Therefore, an analysis of online reviews can add value to the reputation of a company (Akbarabadi & Hosseini, 2020), and restaurateurs and researchers can benefit by analysing customers’ dining experience attributes (Berezina et al., 2016; Park et al., 2020; Rodríguez-Díaz et al., 2018).

2.6. Summary

This chapter examined the way customers value the attributes of restaurants and perceive their experiences in restaurants. The value of a customer’s dining experiences cannot be underestimated, as value affects a customer’s satisfaction and attitude. Customers’ dining experience can be ordinary or exceptional and the way customers perceive their dining experience differs according to their motivation to dine out. Therefore, each customer values different factors and attributes of dining experience, which increases the complexity of customers’ dining experience in a restaurant.

The literature on DEVAs suggested by Nemeschansky (2017) has been carefully reviewed to understand the quality factors of each DEVA. Previous studies have explored the quality factors of each DEVA which has affected customers’ perception, satisfaction, and attitude. This literature showed that the seven DEVAs of restaurants, were online experience, atmospheric experience, service, experience, people experience, culinary
experience, dietary experience, and co-creation experience. In addition, a DEVA related to sustainability practices (eco-experience) was added to help understand the effects of eco-experiences on customers’ perceptions of dining experiences in restaurants that promote sustainability practices. A synthesis of findings from the literature resulted in the development of a conceptual framework that helped establish codes for this study.

The final section of this chapter discussed the significance of online reviews in capturing customers’ perceptions about products or services, especially those offered in restaurants. This section also explained the role of online reviews for other prospective customers.
CHAPTER 3   METHODOLOGY

3.1. Chapter preview

This study utilised a qualitative interpretivist approach to explore the dining experiences of consumers after visiting a restaurant that promotes sustainable practices.

The purpose of this chapter is to provide information about the paradigm, methodology, sampling, data collection, and method of analysis used in this study. The chapter starts by restating the objectives of the study. It explains the reason for utilising an interpretivist paradigm, qualitative approach and the content analysis method applied in this study to understand customers’ perceptions from online reviews. The data sampling criteria and data collection method used for this study are also explained. The chapter also provides an in-depth explanation of the data analysis procedure used to analyse user-generated online reviews from TripAdvisor.

3.2. Research objective and questions

This study aimed to identify the attributes of dining experiences that were most important for the customers of restaurants that promote sustainability. The study also investigated the influence of promoted sustainability practices on customers’ perceptions of their dining experience. Therefore, to meet the research aim, two research questions were proposed:

RQ1. What are the key dining experience attributes that customers evaluate when they visit a restaurant that promotes sustainability practices?

RQ2. How does the promotion of sustainability practices by Auckland restaurants affect customers’ perceptions of the dining experience?

3.3. Overview and justification of the research paradigm

This study used an interpretivist paradigm to gain an understanding of customers perceptions of dining experiences, when they visit a restaurant that promotes sustainable practices. A paradigm is defined as the viewpoint or framework from which research can understand the human experience (DeCarlo, 2018). Interpretivists seek understandings of the world in which they live, and acknowledge that meaning is not automatically visible in objects or social situations. Meaning has to be constructed and created by an individual
(Dyson & Brown, 2006). An interpretive paradigm was used in this study as a theoretical lens to understand the dining experiences of customers, and helped in constructing meaning from online reviews. An interpretivist researcher moves iteratively between data collection and data analysis, and seeks social patterns and reasoning from the existing literature (DeCarlo, 2018).

A research paradigm is the philosophical underpinning of a study that reveals the assumptions about the nature of reality, which is referred to as the ontology (Richards, 2003). The ways knowledge about this reality are gained are the epistemology (Steup & Neta, 2020). Researchers’ ontological, epistemological, and methodological positions collectively inform the paradigm of their research (Merriam, 2009). An inappropriate selection of paradigm can affect the structural flow of the research, and make it difficult for others to compare the findings with those in other research (Blaikie, 2007). Therefore, the ontology and epistemology of this study are presented before explaining the research method.

### 3.3.1. Ontology and epistemology

The online reviews of customers were viewed from a relativist ontological position that holds that there is no single reality, but there are underlying patterns that can be comprehended by observation (Blaikie & Priest, 2017). This assumption enabled the exploration of customers’ dining experiences through the multifaceted subjective views provided in the form of online reviews. Objective reality was not assumed, as reality is socially constructed as time and life continue. From this perspective, it is understood that the social world cannot be researched in the same way as the natural world, but is made up of the shared interpretations of individuals (Blaikie & Priest, 2017).

To gain an understanding of customers’ dining experiences from online reviews, this study used a constructivist epistemological approach that involved understanding the views of many people and constructing meaning out of these (Blaikie, 2007). The constructivist epistemological assumption helped generate a contextual understanding of customers’ dining experiences. Customer experiences were comprehended by analysing unstructured online reviews, and the underlying meanings were constructed from them (Merriam, 2009).

An interpretivist paradigm is compatible with relativist and constructivist assumptions. Thus, considering the philosophical assumptions and the aim of understanding the
subjective experience (Merriam, 2009), interpretivism was considered the most appropriate paradigm for this study. Furthermore, to maintain internal consistency between the ontology, epistemology, and paradigm, the study employed a qualitative method, consistent with the interpretivist paradigm (See Figure 3.1)

**Figure 3.1**

*Choice of Paradigm for this Research*

| ONTOLOGY | • Relativist - reality is constructed using customer-generated online reviews |
| EPSTEMOLOGY | • Constructivist - meaning is constructed by analysing textual reviews |
| INTERPRETIVIST APPROACH | • Qualitative research method - to understand subjective experiences |

### 3.3.2. Research method

As this was an interpretivist study, qualitative methods were the logical choice to capture the subjective experience of a socially constructed world through text, words, and conversations (see Azungah, 2018). Whereas, a quantitative approach categorises study data in assessment, design, and statistics (Edmonds & Kennedy, 2016), a qualitative method helped to comprehend how individuals perceived their dining experiences and what key attributes signified their experiences in restaurants with sustainable practices.

Morgan and Smircich (1980) explained the significance of a qualitative approach by referring to the social world as an open-ended process that cannot be tested in laboratory. A qualitative approach is less structured than one using quantitative data, and provides an opportunity to interpret the perspectives of participants without any enforcement of preconceived opinions on them (Azungah, 2018). The nature of qualitative research assisted this study to comprehend the discrete views of customers’ experiences from online reviews (Merriam, 2009).
3.4. Research procedures

This study used a deductive approach to analyse qualitative data by utilising content analysis to systematically categorise the data into each DEVA. Using a deductive content analysis approach, a predetermined theory or theoretical model is used to analyse qualitative data to support, challenge, or contribute to them (Young et al., 2020). Content analysis was considered appropriate for this study as it helped in organising, segregating, and processing the information collected from online reviews provided in textual form (see Xu, 2020). Content analysis can be defined as a study of communications or documents such as texts, pictures, videos, or audio recordings (Neuendorf, 2017).

This study adapted four stages of the qualitative content analysis procedure proposed by Bengtsson (2016) (see Figure 3.2). Each stage should be performed several times to maintain the quality and trustworthiness of the analysis (Neuendorf, 2017).

**Figure 3.2**

*Bengtsson’s (2016) Four Stages of Qualitative Content Analysis*

The following section presents the data collection and sampling criteria methods used in the preparation for this study. The coding process is explained according to the four stages of the content analysis procedure (Bengtsson, 2016). Lastly, the presentation of results is also discussed.

3.4.1. Data collection process

The selection of secondary data was considered appropriate due to the time limitation of completing this dissertation in one semester (around 140 days). Ethics approval and the
collection of primary data would have consumed more time than that needed for secondary data collection.

Secondary data can be gathered from government documents, scientific or academic papers, statistical databases, and online reviews (Liubov & Nataliia, 2020; Tripathy, 2013). This study used qualitative secondary data from online reviews written by customers in the form of unstructured textual information on TripAdvisor, one of the largest online travel companies that provides user-generated online reviews (O'Connor, 2008). Ayeh et al. (2013) suggested that TripAdvisor was a reliable source for understanding customers’ perceptions. With the lens of interpretivism, content analysis was helpful for analysing the authentic social experience of consumers without intruding into the simulating online reviews (Constantinides & Holleschovsky, 2016; Thanh, 2015). In the findings and discussion chapter, the user-generated online reviews are referred to as “online reviews.”

3.4.2. Population and sample

This study examined customers’ perceptions of dining experiences, and the population was restaurants in Auckland, New Zealand. The population of interest is an important component of research design that consists of all the objects and events with specific characteristics that are sampled by the researcher to meet the aims of the study (Banerjee & Chaudhury, 2010).

It is often impractical to gather data about each member of a population (Allen, 2017). Therefore, this study used purposive sampling to select a set of sample restaurants and gather a manageable size of data. Purposive sampling is a method used for the identification and selection of information-rich cases for the optimum use of limited resources (Palinkas et al., 2015). For the purpose of this study, sample restaurants were selected based on the following criteria of location and sustainability practices.

3.4.2.1. Location

This study focused on restaurants in Auckland, New Zealand (see Figure 3.3). Auckland was selected for this study as it is largest city and central hub for transportation in New Zealand. It is also the most populous urban area in the country (Google, n.d.)
Figure 3.3

Map Indicating the Restaurants used in this Study


3.4.2.2. Sustainability practices

There are multiple restaurants that incorporate and promote sustainability practices in their daily operations. As New Zealand lacks a dedicated accreditation system for sustainable restaurants, this study sampled restaurants that promoted sustainability practices and were referred to as “sustainable restaurants” on various media and entertainment websites (see Table 3.1).

Table 3.1

Websites Used to Find Relevant Restaurants

<table>
<thead>
<tr>
<th>No.</th>
<th>Website purpose</th>
<th>Website link</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Information on businesses &amp; organisations committed to sustainability</td>
<td><a href="https://www.ecofind.co.nz/location/auckland-region/">https://www.ecofind.co.nz/location/auckland-region/</a></td>
</tr>
</tbody>
</table>
These websites helped in identifying the 30 restaurants used in the study (see Table 3.2).

**Table 3.2**

*Restaurants that Promote Sustainability Practices*

<table>
<thead>
<tr>
<th>Restaurants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pasture</td>
</tr>
<tr>
<td>2. Bird on a wire</td>
</tr>
<tr>
<td>3. Ripe Deli</td>
</tr>
<tr>
<td>4. Hectors</td>
</tr>
<tr>
<td>5. Kokako</td>
</tr>
<tr>
<td>6. Crave</td>
</tr>
<tr>
<td>7. Janken</td>
</tr>
<tr>
<td>8. Food Truck Garage</td>
</tr>
<tr>
<td>9. Mondays</td>
</tr>
<tr>
<td>10. Blend</td>
</tr>
<tr>
<td>11. Bread &amp; Butter Bakery &amp; Cafe</td>
</tr>
<tr>
<td>12. Scarecrow</td>
</tr>
<tr>
<td>13. Federal &amp; Wolfe</td>
</tr>
<tr>
<td>14. Postal Service Café</td>
</tr>
<tr>
<td>15. Sudima Auckland Airport</td>
</tr>
<tr>
<td>16. The Kingsland Unbakery</td>
</tr>
<tr>
<td>17. Take Kind</td>
</tr>
<tr>
<td>18. Cordis hotel</td>
</tr>
<tr>
<td>19. Crowne Plaza</td>
</tr>
<tr>
<td>20. Clooney</td>
</tr>
<tr>
<td>21. Maori kitchen</td>
</tr>
<tr>
<td>22. Orphans Kitchen</td>
</tr>
<tr>
<td>23. Ortolana</td>
</tr>
<tr>
<td>24. Culprit</td>
</tr>
<tr>
<td>25. Cazador</td>
</tr>
<tr>
<td>26. The French cafe</td>
</tr>
<tr>
<td>27. Han</td>
</tr>
<tr>
<td>28. Amano</td>
</tr>
<tr>
<td>29. Clooney</td>
</tr>
<tr>
<td>30. Wise boys burger</td>
</tr>
</tbody>
</table>

**3.4.2.3. Selection of the sample**

The official websites and menus of the restaurants (see Table 3.2) were checked for mentions of sustainability practices to meet the sustainability criteria (see Table 3.3) developed from the GRSERV scale (see Chen et al., 2015). Only restaurants with sustainability practices were included.
Table 3.3

Sample Selection Criteria for Sustainability Practices in Restaurants

<table>
<thead>
<tr>
<th>Tangibles</th>
<th>Materials in the restaurant are environmentally friendly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>Employees demonstrate concern for environmental protection</td>
</tr>
<tr>
<td>Environmental-oriented services</td>
<td>Management promotes ideas and policies of environmental protection</td>
</tr>
<tr>
<td></td>
<td>Uses more organic, local, sustainable, and seasonal food</td>
</tr>
<tr>
<td>Food quality</td>
<td>The nutritional value, calories, and origin of the food are often marked on the menu</td>
</tr>
</tbody>
</table>

Due to the limited time for this study, it was aimed to collect online reviews from five restaurants that had the clearest and most easily identified sustainable practices on their official websites. Five restaurants (Table 3.4) were selected, and online reviews collected from the customers of these restaurants. Table 3.4 shows the five restaurants sampled for this study and the sustainability practices each restaurant showed on its website.
Table 3.4

Sample Restaurants Selected for this Study

<table>
<thead>
<tr>
<th>Name of the restaurant</th>
<th>Sustainability practices promoted on the official website</th>
</tr>
</thead>
</table>
| 1. Amano               | Used seasonal, sustainable and local produce from New Zealand growers and farmers.  
                           Used sustainably caught local and seasonal seafood.  
                           Used everything from nose to tail (minimisation of food wastage).  
                           Artisanal baking. |
| 2. Scarecrow           | Organic and artisanal local products such as New Zealand wines, daily fresh flowers, and gift baskets.  
                           Community responsibility and sustainability in all the operations.  
                           Composted and recycled suitable materials from the café, kitchen, and florist.  
                           Supported the local city community through charitable donations, advocacy and sponsorship.  
                           Selected suppliers with preference for the Auckland region, or New Zealand, wherever possible, and with aligned values.  
                           Promoted minimal energy and water consumption.  
                           Chose compostable packaging for take-away items.  
                           Avoided plastic bags and, when possible, products that are unnecessarily packaged in plastic. |
| 3. Crave               | All profit went towards the community.  
                           Locally crafted spaces.  
                           Weekly updated menu to incorporate seasonal ingredients.  
                           Partnered with “Loyal Workshop” to sell their ethical quality crafted bags and satchels, as well as using their leather straps on aprons (Loyal Workshop is based in Calcutta, India, as part of a programme to help women escape the sex trade). |
| 4. Orphan’s kitchen    | Portrayed sustainable New Zealand’s food culture.  
                           Used regional produce cultivated with care, was high in nutrients, and held the unique terroir of its area.  
                           Promoted the protection of native fish species, and openly championed more sustainable approaches to harvesting food in the forests, farmlands, and rivers. |
| 5. Sidart              | Used seasonal New Zealand produce  
                           Wines selected from regional vineyards of New Zealand |
<table>
<thead>
<tr>
<th>Name of the restaurant</th>
<th>Sustainability practices promoted on the official website</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cultivated worm farm to compost all kitchen scraps from both kitchens, as well as dead leaves and paper, to be as sustainable and organic as they could.</td>
</tr>
</tbody>
</table>

After Covid-19 was detected in New Zealand on 23rd March 2020, there was a lockdown imposed across the entire country, so none of the restaurants was available for dining (Ardern, 2020). Therefore, online reviews from September 2019 to February 2020 were collected.

### 3.5. Data analysis procedure

The process of content analysis helped this study in reducing the volume of texts, identifying the codes, and grouping data into categories. A category is created by grouping together codes that are related to each other through their content or context (Erlingsson & Brysiewicz, 2017). A code in qualitative research is most often a word or short phrase that symbolically assigns a salient, essence-capturing, or latent attribute for a portion of language-based or visual data (Saldaña, 2009). As this study followed a deductive approach, the initial categories (DEVAs) and codes (quality factors) were established based on the conceptual framework presented in Chapter 2. During data analysis, further codes emerged; these emerging codes were identified from analysing significant or recurring data related to dining experiences described by the TripAdvisor users.

#### 3.5.1. Data coding process

For the coding process, this study used qualitative data analysis software called “Atlas.ti.” The first three steps (decontextualisation, recontextualisation, and conceptualisation) suggested by Bengtsson (2016) were systematically carried out using this software. The last step of compilation was done manually by the researcher.

**Stage 1. Decontextualisation**

This stage of content analysis included becoming familiar with the data, identifying codes from the conceptual framework and generating new codes, as more data became available. The collected online reviews were read repeatedly to become familiar with the data and grasp a broad understanding of the answers to the question in the research aim. The data were analysed and segregated into “meaning units” (Bengtsson, 2016, p. 8), according to
their underlying meaning. A *meaning unit* is defined as the smallest unit that contains some of the insights the researcher needs, and is a compilation of sentences or paragraphs containing aspects related to each other (Bengtsson, 2016). To avoid any confusion, “meaning units” are referred to as “Repetition Units” (RU). Each identified RU was linked with a code, which was systematically segregated according to the context. Researchers suggest using a preliminary coding list, including keywords, to minimise the cognitive change and gap where the RU can be skipped (Neuendorf, 2017; Saldaña, 2009). For this study, initial codes were developed from the DEVAs, and new codes added as the analysis progressed. The combination of existing codes and open coding helped identify the frequency of each DEVA in the 130 online reviews, as illustrated in Table 3.5. These codes assisted this study to answer the first research question. The collected RUs were segregated into codes according to their latent meaning. Word frequency is an important indicator of what customers recall; less mentioned (i.e. low frequency) words in general are more difficult to recall, whereas high frequency words are more easily recalled by customers in online reviews (Brysbaert et al., 2018).

**Table 3.5**

*Frequency Distribution of Repetition Units*

<table>
<thead>
<tr>
<th>Dining experience value attributes</th>
<th>RU Frequency</th>
<th>Frequency percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culinary experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atmospheric experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eco-experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-creation experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dietary experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>People experience</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Total frequency of each DEVA / number of MUs (651) x 100 = Frequency of each DEVA

**Stage 2. Recontextualisation**

After the RUs were identified, the data were rechecked for inconsistencies and missed RUs. The original online comments were re-read alongside the final list of RUs, and marked manually to ensure the inclusion of all unmarked text. The unmarked text was
reviewed carefully, and the inclusion of text into codes reconsidered. Due to the descriptive nature of online reviews, irrelevant information that did not assess a dining experience was discarded. Lastly, minor spelling and grammatical errors were rectified.

**Stage 3. Categorisation**

Before segregating the codes into the categories, the codes identified in stages 1 and 2 were condensed to extract the essence of the data. Condensation of data helps transforming the data into a manageable size without losing latent meaning (Graneheim & Lundman, 2004). Then, the data were segregated into initial codes of each DEVA (i.e. online experience, atmosphere experience, service experience, people experience, culinary experience, dietary experience, co-creation experience, and eco-experience). Newly identified codes were repeatedly checked for internal homogeneity and external heterogeneity between RUs and the codes in the DEVAs. This helped in the progressive development of the codes.

The data were further analysed using a feature in Atlas.ti called “sentimental analysis” that helped identify positive, negative, and neutral reactions of customers towards each DEVA (See Table 3.6 that shows reviewers’ sentiments towards service experience). *Sentimental analysis* is the process of detecting the contextual polarity of text and determines whether it is positive, negative or neutral. It is also called “opinion mining,” as it identifies the opinions or attitudes in text (“Sentiment Analysis,” 2016). Each quote in the online reviews was checked again for reactions by customers, and a sentimental analysis conducted to find how each DEVA affected customers’ perceptions of their dining experiences.

**Table 3.6**

*Example of Reviewers’ Feedback in Relation to DEVAs*

<table>
<thead>
<tr>
<th>DEVAs</th>
<th>Positive comment</th>
<th>Neutral comment</th>
<th>Negative comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atmospheric experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culinary experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eco-experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-creation experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dietary experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People experience</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Stage 4. Compilation**

Once the codes were established, the collected data were analysed using an interpretivist approach to exploring customer perceptions related to each DEVA. The analysis identified the underlying meaning in the online reviews. Each category was justified by the emergent RUs to verify the meaning of customers' experiences. This stage helped in compiling the results and answering the two research questions.

**3.5.2. Presenting the results**

The data used for this study came from 130 online reviews posted between September 2019 and the end of February 2020, about experiences at five restaurants that promoted sustainability practices. The online reviews were classified into 651 RUs, each of which contained reviewers’ descriptions related to the codes in the conceptual framework. These codes were extracted from the quality factors in the conceptual framework as presented in Figure 3.4.

**Figure 3.4**

*Codes Extracted from Quality Factors*

The establishment of these codes facilitated a critical analysis of data related to each of the codes and uncover new codes in the evaluations posted by reviewers about their dining experience in a restaurant that promoted sustainability practices.

The findings of the study are supported with the frequency of time each code appeared in the data. Numbers have an important role in content analysis, especially in terms of the frequency of the key words (Neuendorf, 2017). The key findings related to each DEVA are supported with quotes from the online reviews. Each online reviewer is identified with a pseudonym, the date of posting the review, and the source of the review.
3.6. Summary

An interpretivist paradigm was applied in this study to understand the key attributes of dining experiences that affect customers’ perceptions in restaurants that promote their sustainability practices. To gain an exploratory understanding of customers’ perceptions, this study used a relativist ontology and constructivist epistemology.

The study used qualitative textual data from 130 online reviews extracted from TripAdvisor. However, the qualitative interpretivist approach tends to compromise the trustworthiness of the study; to overcome this limitation, this study used a deductive approach by combining two critically structured theoretical foundations (see Nemeschansky, 2017) and the GRSERV scale for service of customer valued restaurant attributes to create the conceptual model proposed in Chapter 2 and presented again in section 3.5.2. A content analysis was undertaken using Atlas.ti to organise, segregate, and process data from multiple online reviews. The segregated data were analysed to find the underlying meanings in the online reviews with the purpose of understanding customer perceptions.
CHAPTER 4 FINDINGS AND DISCUSSION

4.1. Chapter overview

This study aimed to investigate the impacts on customers' perceptions of dining experiences due to the promotion of sustainability practices in a restaurant. This chapter presents the key findings from data that were collected and analysed as explained in the previous chapter.

Firstly, this chapter presents the key findings related to each quality factor to identify the most important criteria for the dining experiences of customers. Each quality factor is explained with the interpretation and description of customers' perceptions. The combination of quality factors revealed in this study and extracted from the conceptual framework helped explain the customers’ perception of value attributes specific to dining experiences in restaurants that promote sustainability practices.

The chapter then discusses the significant findings in comparison with the extant literature to answer the following two research questions:

RQ1. What are the key dining experience attributes that customers evaluate when they visit a restaurant that promotes sustainability practices?

RQ2. How does the promotion of sustainability practices by Auckland restaurants affect customers' perception of the dining experience?

Finally, findings from the data and literature are compared to find similarities and differences that helped to support and reveal the contributions of the study.

4.2. Main findings related to DEVAs

This section presents the key findings related to each Dining Experience Value Attribute (DEVA). DEVAs can be defined as the customers’ expectations of quality and their entire dining experience (see Ha & Jang, 2012). These attributes add value to customers’ dining experiences and enhance overall customer satisfaction in restaurants. Reviewers’ evaluations of these DEVAs are presented in detail in the following order: culinary experience, service experience, atmospheric experience, online experience, eco-experience, co-creation-experience, dietary experience, and people experience.
4.2.1. Culinary experience

Culinary experience (40.09%) was found to be the most important criterion for customers evaluating their dining experience (Figure 4.1). According to the conceptual framework, a culinary experience is a combination of the four quality factors of food quality, food appearance, menu variety, and food portion. The data revealed two other quality factors of culinary experience: innovation in cooking, and wine variety. Among these quality factors, most reviewers commented on food quality (67.05%), indicating its primary importance for their culinary experience. Based on the frequencies of mentions, other quality factors such as menu variety (8.43%), food appearance (8.43%), innovation (7.66%), food portion (4.98%), and wine variety (3.45%), were less important to reviewers (as shown in Figure 4.1).

Figure 4.1

*Frequency Distribution of Quality Factors in the Culinary Experience*

Overall, “culinary experience” (77.01%) received mostly positive reactions from reviewers, as presented in Table 4.1. Negative reaction were mostly due to portion sizes and some food quality problems. Table 4.1 presents reviewers' positive, neutral, and negative feedback on all the quality factors of a culinary experience.
Table 4.1

Reviewers' Feedback on Culinary Experience

<table>
<thead>
<tr>
<th>Quality factors of culinary experience</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food quality</td>
<td>73.72%</td>
<td>8.57%</td>
<td>17.71%</td>
</tr>
<tr>
<td>Menu variety</td>
<td>100%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Food appearance</td>
<td>90.90%</td>
<td>0</td>
<td>9.10%</td>
</tr>
<tr>
<td>Innovation in cooking</td>
<td>85.0%</td>
<td>5.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Food portion</td>
<td>15.38%</td>
<td>30.77%</td>
<td>53.85%</td>
</tr>
<tr>
<td>Wine variety</td>
<td>100%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total frequency of culinary experience</td>
<td>77.01%</td>
<td>7.66%</td>
<td>15.32%</td>
</tr>
</tbody>
</table>

The interpretations and descriptions of customers' perceptions of culinary experiences included food quality, menu variety, food appearance, innovation in cooking, food portion, and wine variety, as discussed in the following sections.

4.2.1.1. Food quality

Figure 4.1 shows that food quality (67.05%) was the most important factor of customers’ culinary experiences and accounted for more than half of the quality factors (Figure 4.1). Also, most (73.72%) reviewers indicated that they were satisfied with the quality of food offered by the restaurants that promoted sustainability practices (Table 4.1). However, there were several negative (17.71%) and neutral (8.57%) comments. Mostly, reviewers’ positive evaluation of food quality related to freshness, taste, and quality of ingredients as this example shows:

Scallops perfectly cooked, the fresh pasta came with a great sauce with the just amount of Chili. (Louis, 9 September, 2019, TripAdvisor)

In discussing food quality, reviewers tended to provide the details of cooking style and texture to show the importance of food quality to them, as this extract shows.

For lunch, I ordered the pork main - Pork Cotoletta, Celeriac, Apple & Goddess - described on the menu as” crumbed Far North Hampshire pork $35.00.” What arrived was a 170mm long piece of crumbed pork - fried a bit too fast, so a little bit too chewy - with a few light condiments on the side. (Sonde, 13 September, 2019, TripAdvisor)

Notably, if reviewers commented on food quality with mentions of local and seasonal food, they made only positive (100%) comments (see Table 4.5 which provides
customers' reaction to the quality factors of eco-experience). For example:

*I loved the fresh warm berries and homemade whipped cream. Everything that they have there is farm to table, even their fresh potatoes made with duck fat that gave my taste buds a treat. My husband ordered their breakfast special with some mushrooms then I had to order an extra side for myself because the flavour was incredible.* (BWT, 22 December, 2019, TripAdvisor)

4.2.1.2. Menu variety

Reviewers' evaluations of menu variety described the range and variety of options available on the menus. Menu variety received less attention (8.43%) from reviewers than did food quality. However, the reviewers who mentioned the variety of menus, made positive comments, and appreciated that their specific dietary needs were met, for example, those of vegetarians, vegans, and on gluten-free diets, as this extract reveals:

*The food was exceptional, super tasty, seasonal, fresh and a great selection, catering for meat eaters, fish lovers and vegans.* (Sara, 6 November, 2019, TripAdvisor)

It was important to some reviewers to experience a daily change of menu to reflect the availability of local and seasonal ingredients. For example:

*The menu changes daily but all freshly and locally sourced.* (Mars, 7 October, 2019, TripAdvisor)

4.2.1.3. Food appearance

Reviewers' evaluations of food presentation (8.43%) mostly included positive comments about the aesthetic appeal of the food. However, all the negative reviews (9.09%) on poor presentation of food, considered food quality as a more important quality indicator than the appearance of food in a culinary experience, as exemplified in this review:

*Lamb was looking okay on plate, not very fancy. Average you can get in most restaurants. I was expecting a bit more good plating- anyway it does not really matter all the time. Taste was good.* (Sam, 20 October, 2019, TripAdvisor)

In the restaurants sampled, the promotion of sustainability practices related to food appearance included the use of eco-friendly napkins and packaging material, and using ingredient with minimal wastage (see Table 3.1, that shows the sustainability practices of the sampled restaurants).
4.2.1.4. Innovation in cooking

The data showed that a small number of reviewers (7.66%) mentioned innovation in cooking and presentation of food. However, it was noteworthy that some reviewers with negative comments on innovation preferred their experience of local cuisine to be authentic or with minimal novelty, as this review indicates:

Smelt like the local Indian takeaway. Almost every course had that influence, and frankly it was a let-down, and a long way from the previous reliance on fresh NZ produce presented in a European manner. (NZfood, 26 November, 2019, TripAdvisor)

4.2.1.5. Food portion size

There were limited reviews regarding food portion size (4.98%). However, all the reviewers connected this with good price value, as the following comment illustrates:

The portion sizes are very tiny, and you pay for each individual item, so expect to spend at least $60 per person to have a full meal. (Trendy, 10 October, 2019, TripAdvisor)

Most reviewers dissatisfied with the food portions (53.84%) gave negative feedback. Nevertheless, neutral comments on food portion accepted small portion sizes due to the good quality of food offered. Thus, reviewers with neutral feedback indicated food quality as more important than portion size.

4.2.1.6. Available wine selection

Reviewers' comments on wine variety (3.45%) mostly referred to wine pairing options on the menu. All the reviewers reacted positively (100%) towards wine variety, and two appreciated the variety of local wines, as this review illustrates:

Good wine list with limited wines by the glass. Had two glasses of NZ wine. Excellent Food Menu. (Zane, 24 October, 2019, TripAdvisor)

4.2.2. Service experience

The service experience (26.11%) of a restaurant was found to be the second most important criterion for customers evaluating their dining experience (Figure 4.2). As per the conceptual framework, service experience included four quality factors: service quality, waiting time, communication, and food pricing. This study also revealed two other quality factors of service experience: employees’ ability to handle special occasions,
and additional services provided to the customers beyond the core services and products. In reviewers' evaluations of service experience, service quality (71.17%) was found to be the most important quality factor. Food pricing (11.17%) and waiting time (7.64%) were also important to some reviewers. Communication (5.29%), special events (2.35%) and additional services (2.35%) received less attention, as shown in Figure 4.2.

**Figure 4.2**

*Frequency Distribution of Quality Factors in the Service Experience*

When reviewers evaluated the quality factors of service experience, most wrote positive comments about service quality, waiting time, special events, and additional services. However, the majority of reviewers who mentioned pricing and communication, gave negative feedback, as shown in Table 4.2. This table shows reviewers' positive, neutral, and negative feedback on all the quality factors of their service experience.

**Table 4.2**

*Reviewers' Feedback on Service Experiences*

<table>
<thead>
<tr>
<th>Quality factors of service experience</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service quality</td>
<td>75.20%</td>
<td>2.47%</td>
<td>22.31%</td>
</tr>
<tr>
<td>Pricing</td>
<td>36.84%</td>
<td>10.52%</td>
<td>52.63%</td>
</tr>
<tr>
<td>Waiting time</td>
<td>80.49%</td>
<td>15.38%</td>
<td>4.13%</td>
</tr>
<tr>
<td>Communication</td>
<td>33.33%</td>
<td>0%</td>
<td>66.66%</td>
</tr>
<tr>
<td>Special events</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Additional service</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>70.58%</strong></td>
<td><strong>4.70%</strong></td>
<td><strong>24.70%</strong></td>
</tr>
</tbody>
</table>
The interpretations and descriptions of customers' views on service experience included service quality, pricing, waiting time, communication, special events, and additional service, as discussed in the next sections.

4.2.2.1. *Service quality*

Among all the quality factors of service experience, service quality (71.17%) was found to be the most important quality indicator for the reviewers. When evaluating service experiences, reviewers referred to the willingness and efficiency of staff to provide accurate service, as this review exemplifies.

*From entering, we felt that the place was totally focussed on the customer. Friendly and knowledgeable staff.* (Blue, 24 November, 2019, TripAdvisor)

As Table 4.2 shows that there was a considerable proportion (22.31%) of negative reviews on service quality. The reviewers mostly mentioned unprofessional behaviour by staff and related this to their negative return intentions.

4.2.2.2. *Pricing*

Food pricing (11.17%) was the second most important quality factor in the service experience, and reviewers’ evaluations of food pricing reflected their expectations in terms of value for money. Interestingly, of the reviewers who mentioned food price, most (52.63%) wrote a negative comment and indicated they would not return to the restaurants as the food was expensive, as the following review illustrates:

*At $49.50 for a smoothie, long black, a single main and two bakery items, we feel we will do much better at other restaurants nearby in the future - we won't be back.* (Hami, 5 January, 2020, TripAdvisor)

It was noteworthy that all reviewers who wrote negatively about organic food (16.66%) (see Table 4.6), considered organic food expensive (as discussed in section 4.2.5 that explains the quality factors of eco-experiences). A small number of reviewers also wrote about their willingness to pay extra to support the local community, as this comment exemplifies:

*When you pay, you can also "pay it forward" by buying a coffee for someone in the community in need. Do it: it will make you feel as good as the coffee.* (Rob, 18 February, 2020, TripAdvisor)
4.2.2.3. Waiting time

Reviewers who described waiting times (7.64%) had mostly positive comments (80.49%), and mentioned their experience of waiting time and ease of booking a table. Reviewers who commented positively on food quality wrote neutral comments about long waiting times. The inability of restaurants to provide a table at the promised time, was a cause of negative evaluations, as evident in the following review.

“We tried to book but were told that Amano held 50% of the tables for walk-ins, so we got there about 6:30 p.m. and had to wait over 1 hour for a table. We were happy to wait the 40 minutes quoted but longer than that is hard to accept.” (Mari, 7 January, 2020, TripAdvisor)

This suggests that the majority of reviewers were positive or neutral about waiting to dine in a restaurant that promoted sustainably grown food.

4.2.2.4. Communication with employees

Some reviewers (5.29%) pointed out the importance of communication when experiencing service. However, most (66.66%) wrote negative comments about poor communication and staff’s inability to quickly correct poor service, as described in this review:

“I ordered a medium lamb which I got. After having two bites I noticed a medium-long hair in my food. I asked the waiter. Finally after 15 mins I received another lamb but it was cooked to medium rare and I told the waiter but he didn’t really bother about it and just simply ignored it and never came back to us after.” (Sam, 20 October, 2020, TripAdvisor)

Some reviewers commented on inappropriate communications with staff members, as bad service experiences.

4.2.2.5. Special occasions and additional services

Reviewers’ comments about special occasions (2.35%) and additional services (2.35%) were less common. However, all reviews related to these quality factors were positive. Evaluations of special occasions included comments about staff’s ability to help them celebrate events such as birthdays, anniversaries, corporate events, and non-profit events efficiently and successfully. For example, one reviewer praised the staff's ability to accommodate the special needs of a guest at an event:

“We had a work farewell lunch here, and one of our group had a food allergy. The waiter ensured that he fully understood the restrictions and made
recommendations for that person. He recommended drinks which were well chosen and was knowledgeable about them. (Pete, 5 September, 2019, TripAdvisor)

Reviewers who mentioned additional services also made positive comments about having services such as those of a bakery or florist.

*Cakes from the attached bakery bought on the way out for a snack later. What more could we want?* (Boxi, 6 November, 2019, TripAdvisor)

### 4.2.3. Atmospheric experience

Atmospheric experience (14.90%) was the third most important influence on customers’ evaluations of their experiences, after culinary and service experiences. In the conceptual framework, “atmospheric experience” was comprised of the five quality factors of ambience, décor, seating, noise, and odour. In the findings, location was revealed as a sixth quality indicator.

In evaluations of atmospheric experience, ambience (41.23%), décor (23.71%), and seating arrangements (18.55%) of restaurants were found to be the most important quality indicators for customers. Furthermore, a small number of reviewers commented about the location (10.30%), noise (4.12%), and odour (2.06%), as presented in Figure 4.3.

*Figure 4.3*

*Frequency Distribution of Quality Factors in Atmospheric Experience*

<table>
<thead>
<tr>
<th>Quality Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambience</td>
<td>41.23%</td>
</tr>
<tr>
<td>Décor</td>
<td>23.71%</td>
</tr>
<tr>
<td>Seating</td>
<td>18.55%</td>
</tr>
<tr>
<td>Location</td>
<td>10.30%</td>
</tr>
<tr>
<td>Noise</td>
<td>4.12%</td>
</tr>
<tr>
<td>Odour</td>
<td>2.16%</td>
</tr>
</tbody>
</table>

Evaluations of atmospheric experience were mostly positive about ambience and décor. However, the findings revealed negative and neutral feedback about garden seating space,
and restaurant locations. Noise and odour received the least attention from reviewers and had equal number of positive and negative comments, as shown in Table 4.3, which presents percentages of positive, neutral, and negative feedback on all aspects of atmospheric experience.

**Table 4.3**

*Reviewers’ Feedback on Atmospheric Experience*

<table>
<thead>
<tr>
<th>Quality factors of atmospheric experience</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambience</td>
<td>92.50%</td>
<td>2.50%</td>
<td>5.00%</td>
</tr>
<tr>
<td>Decor</td>
<td>86.95%</td>
<td>4.34%</td>
<td>8.69%</td>
</tr>
<tr>
<td>Seating</td>
<td>66.66%</td>
<td>11.11%</td>
<td>22.22%</td>
</tr>
<tr>
<td>Location</td>
<td>60.00%</td>
<td>20.00%</td>
<td>20.00%</td>
</tr>
<tr>
<td>Noise</td>
<td>0</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Odour</td>
<td>50.00%</td>
<td>0</td>
<td>50.00%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>78.35%</strong></td>
<td><strong>6.18%</strong></td>
<td><strong>15.47%</strong></td>
</tr>
</tbody>
</table>

The findings showed that interpretations and descriptions of atmospheric experience, included comments about ambience, décor, seating, location, noise, and odour, as discussed in the next sections.

**4.2.3.1. Ambience**

Most reviewers appreciated the nature of the physical environment; most of the reviews (92.50%) related to ambience were positive, expressed with words such as "lovely ambience,” "vibrant and lively atmosphere,” and "cool vibe.” The findings suggest ambience (41.23%) was the most important quality factor of the atmospheric experience.

**4.2.3.2. Décor and seating**

When commenting on the décor (23.71%), most reviewers described the physical surroundings and their impression of open spaces, as exemplified in the following review:

*Love the fit-out with the hanging dried flowers and big open space.* (Smith, 28 December, 2019, TripAdvisor)

Some reviewers (18.55%) mentioned the seating arrangements and described their perceptions of space layout and comfort while dining. Interestingly, some reviews mentioning seating also mentioned a preference for open spaces.
4.2.3.3. Location

Comments about the convenience of a location (10.30%) included descriptions of restaurants in the "city centre" or a "harbour-facing location.” The majority (60%) of reviewers who mentioned the location of a restaurant made positive comments about this. However, negative comments (20%) were made about parking problems in the city. However, this may be because all the restaurants in this study were located in the centre of Auckland.

One of our favourite restaurants in Auckland CBD (Britomart area). (Craig, 16 November, 2019, TripAdvisor)

4.2.3.4. Noise and odour

Noise (4.12%) and odour (2.06%) received the least attention from reviewers. The reviews that featured noise had only negative feedback about loud noise from nearby places from other customers.

Unfortunately the noise from an adjoining nightclub/bar was at times overwhelming, resulting in our having to raise our voices to engage in conversation. (Rom, 29 February, 2020, TripAdvisor)

Odour was considered an important quality factor because of reviewers’ tendency to describe it in detail when evaluating atmospheric experience, as the following review illustrates:

I have been to this place several times for both breakfast and lunch, and the smell of fresh bread takes [me] to another world. (Zack, 6 December, 2019, TripAdvisor)

4.2.4. Online experience

Comments about the online experience of a restaurant (7.07%) showed this was a moderately important influence on customers’ dining experience (see Figure 4.4). Reviewers' evaluations of online experiences included three quality factors: loyalty, WOM recommendations to prospective customers, and expectations before visiting the restaurant. These quality factors correspond to the conceptual framework and no new quality factors were revealed in this criterion.

The findings indicated that in terms of online experiences, loyalty (54.35%) and WOM (39.14%) were the most important quality factors. Following these, customers’
expectations of restaurants received significantly less attention by reviewers (6.51%) compared to that for other quality factors in the online experience (see Figure 4.4)

**Figure 4.4**

*Frequency Distribution of Quality Factors in Online Experiences*

The findings related to online experience indicate that most reviewers gave positive WOM feedback when describing their expectations of a restaurant. However, the majority of negative comments about online experiences were related to loyalty (return intention) as presented in Table 4.4. This table outlines the frequencies of customers' positive, negative, and neutral reactions to each quality factor that influenced their interpretations of their online experience.

**Table 4.4**

*Reviewers' Feedback on Online Experiences*

<table>
<thead>
<tr>
<th>Quality factors of online experience</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty</td>
<td>80.0%</td>
<td>4%</td>
<td>16.0%</td>
</tr>
<tr>
<td>WOM</td>
<td>94.44%</td>
<td>0</td>
<td>5.56%</td>
</tr>
<tr>
<td>Expectations</td>
<td>100%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>86.95%</strong></td>
<td><strong>2.17%</strong></td>
<td><strong>10.86%</strong></td>
</tr>
</tbody>
</table>

The interpretations and descriptions of customers' online experiences included loyalty, WOM, and expectations of service, as discussed next.

**4.2.4.1. Loyalty**

In online experiences, loyalty was an important quality indicator as indicated by the high percentage of reviewers' comments about their return intentions. Most had positive
intentions (80%) and linked these to other quality indicators of dining experiences, such as food quality, daily change of menu, innovation in cooking, service quality, the arrangements of special events, ambience, use of local and organic food, personalised interactions, and staff-customer relationships, as this review exemplifies:

*We tasted a lovely local Sangiovese from Matakana. We will definitely be back when we visit Auckland next.* (Deni, 23 September, 2019, TripAdvisor)

**4.2.4.2. WOM and expectations**

The findings suggest that reviewers’ WOM recommendations were slightly less common than comment related to loyalty. Reviewers recommended restaurants with positive feedback because of a particular dish, food quality, innovation, location, personalised interaction, local food and wine, special diet options, or organic food. Negative WOM was mainly due to perceptions of poor value for money and unsatisfactory service, as this extract shows:

*To us, xxx [restaurant name withheld] is the type of place where you pay (a lot) to be seen, but don't expect to be blown away by the food. If that proposition works for you, fair enough. Truthfully, we won’t be revisiting.* (Crett, 12 September, 2019, TripAdvisor)

Descriptions of expectations received the least attention online. Reviewers’ comments indicated that their expectations were developed by reading about restaurants on online reviews, and knowledge gained from taxi drivers, newspaper articles, and other WOM, as this review reveals:

*Upon reading an article in the NZ Herald that Sidart Restaurant won Restaurant of the Year at the Cuisine Good Food Awards, our minds were made up to visit the restaurant.* (Mark, 2 January, 2020, TripAdvisor)

**4.2.5. Eco-experience**

Comments on eco-experiences (7.07%) discussed quality factors related to sustainability practices in restaurants and showed that these were moderately important influences on reviewers’ dining experiences. As shown in the conceptual framework, eco-experiences included four quality factors: local food and wine, organic food, seasonal food, and social conscience; the findings did not reveal any new quality factor of eco-experiences. The findings related to reviewers’ evaluations of eco-experiences suggested that local food sourcing was the most important quality factor for reviewers (63.05%); seasonal food (13.04%) and organic food (13.04%) received less attention. Customers’ social conscience was the least important quality factor, as shown in Figure 4.5.
Reviewers' evaluations of eco-experiences were mostly positive about local food, seasonal food, and social conscience, as shown in Table 4.5. When evaluating eco-experiences, reviewers made mostly positive comments (97.82%). Table 4.5 shows the frequency of reviewers' feedback by topic, showing positive, negative, and neutral reactions towards the quality factors of an eco-experience.

**Table 4.5**

*Reviewers' Feedback on Eco-experiences*

<table>
<thead>
<tr>
<th>Quality factors of eco-experience</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local food</td>
<td>100%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Seasonal food</td>
<td>100%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Organic food</td>
<td>83.34%</td>
<td>0</td>
<td>16.66%</td>
</tr>
<tr>
<td>Social conscience</td>
<td>100%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>97.82%</strong></td>
<td>0</td>
<td><strong>2.17%</strong></td>
</tr>
</tbody>
</table>

Regardless of the fact that eco-experiences received less attention from reviewers, it had a considerable effect on the quality factors of other attributes of the dining experience. The following sections explain the key findings and interpret customers' perceptions of eco-experiences in terms of local food and wine, seasonal and organic food, and their social conscience.
4.2.5.1. Local food and wine

Evaluations of local food and wine included mentions of locally sourced food, and the quality of local ingredients. Reviewers were satisfied (100%) when restaurants featured local food and wine on the menu, and connected this positively to food quality, menu variety, wine variety, WOM, and revisit intentions (Figure 4.6). Figure 4.6 shows the quality factors that affected some reviewers because the restaurant emphasised the use of local foods and wines on their menus and website.

**Figure 4.6**

*Effect of Local Food and Wine on Customers' Positive Perceptions of other Quality Factors*

4.2.5.2. Seasonal and organic food

Reviewers who mentioned seasonal food had only positive (100%) comments and connected these to food quality and menu variety (Figure 4.7). Those who mentioned organic food commented positively on this and related it to food quality (Figure 4.7). However, some left negative feedback (16.66%) related to the high price of the food (see Section 4.3.2).
4.2.5.3. Customers’ social conscience

Social conscience factors received the least attention in reviewers’ narratives on eco-experience. The reviews in which social conscience aspects were commented on, included acknowledgments that the restaurants were helping the local community. All the comments were positive, as exemplified in this review:

*Very organic food, non-profit run with profits going back to the community. Coffee was great, and we paid it forward so that two other people could enjoy.* (Jame, 12 September, 2019, TripAdvisor)

Furthermore, reviewers mentioned their willingness to pay extra to help the local community, as discussed in section 4.3.2 (see Figure 4.8).

**Figure 4.7**

*Effect of Seasonal and Organic Food on Customers' Perceptions of other Quality Factors*

![Diagram of Seasonal and Organic Food Impact on Quality Factors]

**Figure 4.8**

*Effect of Social Conscience on Customers' Service Experiences*

![Diagram of Social Conscience and Pricing]
4.2.6. Co-creation experience

The findings suggest that co-creation experiences (2.30%) were one of the least important criteria for reviewers when evaluating their dining experience (see Figure 4.9). According to the conceptual framework, reviewers’ co-creation experiences in a restaurant includes personalised interactions and customers’ level of involvement in the restaurant. Reviewers mostly emphasised the personalised interactions with the staff (73.33%). The few comments (26.66%) on their level of involvement in building their own dining experience showed this was not an important factor.

Figure 4.9

*Frequency Distribution of Quality Factors in Co-creation*

When reviewers evaluated quality factors of their co-creation experience, most wrote positive comments (90.90%) about the efforts of staff to provide individualised attention and personalised service, as shown in Table 4.6. In terms of reviewers' levels of involvement in the restaurant, there was an equal number of positive (50%) and negative (50%) comments. Table 4.6 outlines the frequency of reviewers' feedback, including positive, negative, and neutral reactions to quality factors of the co-creation experience.
### Table 4.6

**Reviewers' Feedback on Co-creation Experiences**

<table>
<thead>
<tr>
<th>Quality factors of co-creation experience</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personalised interaction</td>
<td>90.90%</td>
<td>9.10%</td>
<td>0</td>
</tr>
<tr>
<td>Involvement</td>
<td>50%</td>
<td>0</td>
<td>50%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>80%</td>
<td>6.66%</td>
<td>13.33%</td>
</tr>
</tbody>
</table>

Reviewers’ evaluations of personalised interaction referred to restaurants’ efforts to provide personalised service and work on satisfying customers' needs, as this example shows:

> *We had the seven-course tasting menu with wine matches, and they very happily adapted the menu for me and my dislike of seafood. The staff and the service were top-notch as well, and we were presented with a beautiful copy of our menu at the end of the meal.* (Sebi, 14 October, 2019, TripAdvisor).

When reviewers mentioned their involvement in co-creating the dining experience, they highlighted their experience of sitting at a table with other customers, as this example illustrates:

> *We were seated at a large "share table." We were joined by a foursome of Kiwis who made our meal and visit most enjoyable.* (Jane, 7 October, 2019, TripAdvisor).

#### 4.2.7. Dietary experience

Dietary experience (1.84%) was not found to be an important criterion for reviewers' evaluations of their dining experience. Evaluations commented on special diet options and healthy foods, both of which were included in the conceptual framework. Healthy food (75%) received much more attention from reviewers than did special diet options (25%), as shown in Figure 4.10.
The findings show that all the reviews related to dietary experience mentioning the availability of special dietary and healthy food options, were positive (Table 4.7). Table 4.7 outlines the frequency of reviewers' feedback in terms of positive, negative, and neutral reactions to the quality factors of dietary experience.

**Table 4.7**

*Reviewers' Feedback on Dietary Experiences*

<table>
<thead>
<tr>
<th>Quality factors of dietary experience</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
<th>Frequency of RU</th>
<th>RU of service experience % (n=170)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special diet options</td>
<td>100%</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>75%</td>
</tr>
<tr>
<td>Healthy food</td>
<td>100%</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>25%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100%</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>100%</td>
</tr>
</tbody>
</table>

Reviewers’ assessment of special dietary options mentioned the availability of gluten-free, vegan, and vegetarian options and linked these to the variety on menus, restaurant, as discussed in section 4.2.2. There were no significant findings related to healthy food.

**4.2.8. People experience**

People experience (1.84%) was the least important criterion influencing reviewers' dining experiences. Reviewers' evaluations of “people experience” included their personal yet professional relationships with staff and other customers in the restaurants. The findings
correspond to the quality factors presented in the conceptual framework and did not reveal any additional quality indicators of people experience.

Within “people experience,” relationships between staff and customers (75%) were a more important quality factor than those with other customers (25%) in the restaurants (see Figure 4.11).

**Figure 4.11**

*Frequency Distribution of Quality Factors in People Experiences*

The findings highlighted that staff who maintained a relationship with customers had a positive effect (75%) on reviewers’ feedback. However, evaluations of experiences with other customers were neutral (100%), as shown in Table 4.9.

**Table 4.8**

*Reviewers' Feedback on People Experiences*

<table>
<thead>
<tr>
<th>Quality factors of people experience</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff-customer relations</td>
<td>75%</td>
<td>0</td>
<td>25%</td>
</tr>
<tr>
<td>Like-minded customers</td>
<td>0</td>
<td>100%</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>50%</strong></td>
<td><strong>25%</strong></td>
<td><strong>25%</strong></td>
</tr>
</tbody>
</table>

The findings of this study revealed that reviewers remembered the names of the staff who served them. In addition, due to their relationships with the staff, they also demonstrated their return intent. They also described the dress styles and attitudes of other customers in the restaurant, as this extract shows:
4.3. Discussion

This section discusses the significant findings related to the key attributes of dining experiences that were most important for customers, then compares the findings to those in the literature, identifying similarities and the potential contributions of this study. This section also highlights the effects on customers’ perception of dining experiences of the promotion of a restaurant’s sustainability practices.

4.3.1. Key attributes of the dining experience

Identifying the most important DEVAs for customers of restaurants that promote sustainability practices, commenced by interpreting the underlying meanings of their online reviews and systematically categorising the reviews in terms of the quality factors of the DEVAs. In the online reviews, the quality factors mentioned most, were identified as the most important DEVAs for customers. The reason for highlighting the comparative importance of the DEVAs was because customers' post-consumption decisions are mainly dependent on a memorable dining experience (Cao, 2016). Furthermore, the most significant memories that customers retain are those they write about most in their online reviews (Berezina et al., 2016). Ensuring that customers think positively and bond emotionally with a brand, helps ensure restaurant loyalty and increases revenue and return intention (DiPietro & Gregory, 2013). Therefore, this study makes a significant contribution by identifying the key attributes of a dining experience, by analysing customers’ online reviews posted after their experiences of service in a restaurant. The attributes identified, were those best remembered by customers post-consumption, and for restaurants that promote sustainability practices, enhancing these attributes may increase the revenue and customer retention.

The findings of this study indicated that culinary experience was the most important dining experience attribute for customers who dined in a restaurant promoting its sustainability practices, followed by “service experience” and “atmospheric experience.” Previous studies indicated that the importance of dining experience and the order of relative importance for each DEVA depends on the style of the restaurant (e.g. fine dining, mid-scale, quick service, fast food) and type of customer occasion (Clark & Wood, 1999;
Various dining experience attributes have been identified as positively affecting customer perceptions and satisfaction. Prior studies in different restaurant settings reported three common attributes of dining experience: culinary experience, service experience, and atmospheric experience (e.g. Campbell-Smith, 1970; DiPietro et al., 2013; Hansen et al., 2005; Park et al., 2020; Ryu & Han, 2011; Trafialek et al., 2019). The findings of this study showed that these three common attributes were not affected by the promotion of sustainability practices. The following sections discuss the significance of these three attributes in their order of importance to customers' dining experiences.

4.3.1.1. Importance of culinary experiences for customers

The culinary experience was mentioned significantly more with positive comments, than with negative and neutral comments combined. The findings showed that customers were usually satisfied with food quality in a restaurant that promoted local, organic, and seasonal food. Some previous studies noted a strong relationship between food quality and customer satisfaction in a restaurant (Han & Hyun, 2017; Line et al., 2016; Ramanathan et al., 2016). Similarly, in this study, many customers shared their experiences of food quality, and according to their satisfaction with this, indicated whether they intended to return to the restaurant. The findings strongly support the findings in the extant literature that indicate food quality is an important influence on customer satisfaction and return intention, whether or not sustainably grown food is served (Hansen, 2005; Kim et al., 2017; Namkung & Jang, 2013; Tan & Yeap, 2012; Trafialek et al., 2019).

Not many customers expressed their views on food appearance, and those who did, were not very concerned with this. This is partially consistent with the results of a study by Konuk (2019), which indicated that food quality and food appearance were the most significant quality indicators influencing customers' internal evaluations. Internal evaluation refers to evaluations based on quality factors that affect customers' purchasing behaviour and brand loyalty (Jacoby, 2002). However, according to the findings, in a restaurant that promotes sustainability, food quality is the only important factor for customers, and may affect their purchasing behaviour and brand loyalty.

The findings also showed that two other quality indicators were important for customers, and had an impact on their culinary experience: 1) innovation in cooking and presentation, and 2) a wide variety of wine (see Figure 4.12). Although, these two quality factors were not shown to be very important, some customers indicated that their only motivation to
visit a particular restaurant was the variety of locally sourced wines it served. In addition, customers showed a lack of intention to visit a restaurant that was excessively innovative with local ingredients and cuisine. Therefore, it is considered that a good range of local wines and balanced innovation in cooking positively affects customers’ return intentions to a restaurant that promotes sustainability practices.

Figure 4.12

Quality Indicators of Culinary Experience

<table>
<thead>
<tr>
<th>Culinary experience</th>
<th>Food quality</th>
<th>Menu variety</th>
<th>Food appearance</th>
<th>Food portion</th>
<th>Innovation in cooking</th>
<th>Variety of wine</th>
</tr>
</thead>
</table>

4.3.1.2. Importance of service experiences for customers

The findings revealed that service experience was the second most important criterion for customers’ to use to evaluate their dining experience. Quality of service and price of food emerged as significant factors that colour customers’ service experiences in a restaurant that promotes sustainability. The findings showed that customers had a pleasant experience if the staff were sufficiently willing and efficient to provide accurate and high-quality service. Previous studies highlighted the service experience as one of the most vital elements of a memorable dining experience, as quality interactions and communications with guests had an impact on their satisfaction and revisit intentions (Han & Hyun, 2017; Markovic et al., 2011; Trafialek et al., 2019). Gremler et al. (2020) suggested that maintaining a balance of professional and personal relationships with customers rather than just a transactional relationship, helps retain customers. The findings of this study agree with extant literature that suggests quality of service is a critical factor that influences customers’ experience in a sustainable restaurant, and subsequently helps in achieving the goal of sustainability management (Chen et al., 2015). The findings revealed that most customers were satisfied with their service experiences, but high-priced organic food and poor communication with staff members resulted in negative experiences. Previous studies have shown that the quality of service and staff’s behaviour, are critical factors affecting customer satisfaction and the intention to return (Anderson et al., 1994; Ban et al., 2019; Jen & Hu, 2003; Parasuraman et al., 1994). Therefore, the findings suggest that high quality service and reasonable pricing might
enhance customers’ perceptions of service experience and increase their intention to return.

The findings also indicated that the main causes of negative reviews of service experiences were staff providing less than expected quality of service, high priced food, and staff's unwillingness or inability to correct service mistakes. Negative reviews of service experiences were also associated with less intention to return. The findings also showed that some reviewers commented positively on food prices, and wanted to revisit restaurants that were helping the local community. Choi and Parsa (2006) found that engaging in sustainability practices can strengthen customer relations for a restaurant, and improve its relationship with the community. By implementing sustainability practices, restaurants can improve their brand image, thereby increasing revenue and profitability. This study supports the findings of Chen et al. (2015) that suggest a constant improvement in service experience improves customers’ perceptions of a brand that promotes sustainability practices.

Further, the findings also revealed two other quality factors that customers included in their service experiences: 1) staff’s ability to successfully manage special occasions for customers, and 2) additional services offered by the restaurant, as presented in Figure 4.13. The findings indicated that a well-organised special event by a restaurant, such as one for a birthday, anniversary, or office celebration, helps retain customers if staff show extra efforts to meet their needs. In addition, some reviewers liked to buy freshly baked cakes, breads, and flowers from a bakery or shop in a restaurant that sold sustainably produced goods. Findings further showed that travellers found the addition of a shop an advantage for small takeaway meals on their journey. All the quality factors that reviewers included in their service experiences in restaurants that promote sustainability, are presented in Figure 4.13.

**Figure 4.13**

*Quality Indicators of Service Experience*
4.3.1.3. Importance of atmospheric experience

Atmospheric experience was the third most important criterion for customers to use when evaluating their dining experience. The atmospheric experience is considered significant in terms of increasing customer satisfaction, and includes odour, colour, and physical surroundings (Filimonau et al., 2020). However, the atmospheric experience was not the primary deciding factor for a positive or a negative review, and culinary experiences or service experiences were always described alongside comments on atmospheric factors. This study supports the work of Harrington et al. (2013), which suggested that training employees to provide accurate customer service is more critical than is a quality atmospheric experience.

Descriptions of atmospheric experiences included comments about the aesthetic appeal, environment, and surroundings of restaurants. Reviewers’ evaluations of a restaurant’s atmosphere contained narrations about how they felt about the physical surroundings of the restaurant. Meng (2010) observed the significance of atmospheric experience, and explained the different feelings and emotions portrayed by consumers in different environments. These feelings and emotions were found to be influential on customers' purchasing behaviour and are referred to as “environmental psychology.”

In this study, many reviewers mentioned décor, ambience, table arrangements, and the location of restaurants (e.g. the restaurant had "rustic unfinished ceiling beams with big bunches of dried flowers hanging down from them to create an interesting and appealing look"). The characteristics of atmospheric experience were notably subjective, varying according to customers' expectations and preferences. According to Canny (2014), the physical environment is a key marketing factor in restaurant differentiation, and can give customers an extraordinary experience in a pleasant and comfortable atmosphere. Reviewers’ negative comments about their atmospheric experience were related to congested seating arrangements, loud noises, odours that did not suit the aesthetics of the restaurant, and inconvenient locations causing problems with parking and reaching the restaurant. However, the findings also showed that customers did not decide their return intent solely on the basis of atmospheric experience.

Lastly, this study revealed that the location of a restaurant was a quality indicator, as reviewers included locations in their descriptions of atmospheric experience. Reviewers commented on restaurants that were centrally located and had a harbour view. Location was an influence on reviewers’ return intention. Figure 4.14 presents the quality indicators that reviewers included in their description of atmospheric experience.
The next section discusses the DEVAs that were observed to have effects on customers’ perception due to the sustainability practices in the restaurants.

4.3.2. Effects of promoting sustainability practices on customers' perceptions of a dining experience

This section explains how the promotion of sustainability practices affected customers' perceptions of their dining experience. Customers' descriptions and interpretations of the eight DEVAs (culinary experience, service experience, atmospheric experience, online experience, eco-experience, co-creation experience, dietary experience, and people experience) presented in section 4.2, helped in identifying the effects of promoting sustainability practices (included in eco-experience) on customers' perceptions of each DEVA. The findings showed that eco-experience had a small influence on the way customers perceived their culinary experience, service experience, dietary experience, and online experience.

As most sustainability practices take place in the unseen back areas of a restaurant (e.g. the kitchen and purchasing department), many sustainability initiatives remain unnoticed by customers (Namkung & Jang, 2013). Subsequently, some researchers have argued that customers favour some sustainability practices more than they do others (Kwok et al., 2016; Park et al., 2020). Data in this study did not include any references to the environmental benefits of using sustainably grown food that reduces pollution, due to the reduced need for transport and the use of chemicals (Edwards-Jones, 2010). Thus, this study suggests restaurateurs to make customers aware of the lower environmental impact of consuming local and organic food.

4.3.2.1. Culinary experience

4.3.2.1.1. Organic principles as an influence on customers

Of all the quality factors of DEVAs that had any effect due to the promotion of
sustainability practices, local and organic food were the two that received the most attention from customers. Providing a sustainable culinary experience is suggested as a way to encourage and deliver sustainability practices to restaurant customers (LaVecchia, 2008). The findings revealed that customers tended to appreciate the quality of local food and noticed the origin of the ingredients mentioned on the menus. Some customers in this study even recognised and remembered the sources of ingredients, such as in "the sangoivese from Matakana." *Local food* is food produced in a particular geographical area (Jones et al., 2004), and its use helps reduce harmful environmental impacts and business costs by minimising travel distances (Weber & Matthews, 2008). However, in this study, the reason customers preferred local rather than imported food, was unclear, due to the nature of secondary data; further studies are required to explain why customers preferred local food. Previous studies have noted that customers may buy sustainably grown food for its health benefits (Kang et al., 2015), or to appease their social or environmental conscience (Huang et al., 2014). This study did not find any comments that directly linked health, or social or environmental consciences, as reasons to appreciate local, organic, and seasonal food.

Organic food is grown with the minimal use of pesticides and fertilisers (Bryła, 2016) and previous studies have noted that customers tend to consider organic food as a healthier option (e.g. Baker et al., 2002; Kwok et al., 2016). However, the findings of this study did not show that customers associated organic food with being healthy. Also, it has been suggested in the literature that organic and local food could assist in building an eco-friendly image for a restaurant, which in turn might gain customers' attention and increase their return intentions (Hu et al., 2010). A significant finding of this study was that some customers identified the use of sustainably grown food, but most related sustainable practices to freshness, authenticity of ingredients, and the taste of the food. Therefore, it was an important finding that even though the effects of sustainability practices were indirectly expressed, this study showed that organic and local food affected customers’ perceptions of the sustainability of culinary experiences.

4.3.2.1.2. Variety of menu with sustainable produce

The findings of this study identified that customers had a positive culinary experience due to menu variety with sustainably grown food options, and the availability of local wines. Trafialek et al. (2019) described *menu variety* as the choice of food matching available to customers, rather than the diversity of dishes. Multiple studies have suggested that it is important for restaurateurs to continue improving their menus and provide new varieties of food to attract more customers (Gustafsson et al., 2006; Raajpoot, 2002). The findings
of this study suggested that providing new or daily changes of menus with sustainably
grown food, helps increase customers’ positive culinary experience. Furthermore,
previous research has highlighted the availability of sustainable menu items as a factor
that positively affects customers' satisfaction (Vieregge et al., 2007) as well as their return

The findings of wine pairing options in restaurants showed that some customers preferred
a selection of local New Zealand wines over non-New Zealand wines. Previous studies
have suggested a strong relationship between customer satisfaction with wine variety and
increased sales in a restaurant (e.g. Choi & Silkes, 2010). The price of wine can be a
sensitive issue for customers with limited wine knowledge, although some may also be
price-sensitive in other areas (Thrane, 2004). However, in this study, customers indicated
that the range of New Zealand wines provided was appropriate and that they were
reasonably priced. Therefore, this study has found that it is a potential financial benefit
and source of gastronomic satisfaction for customers, if restaurants provide a menu with
sustainably grown food that changes daily, and have a range of appropriate local wines.

4.3.2.2. Service experience

4.3.2.2.1. Customers’ perceptions on the price value of organic food

In reviewers' evaluations of service experience, the promotion of sustainability practices
affected perceptions about the food-price value of organic menu items offered. Bristow
and Jenkins (2018) suggested that restaurant managers prefer to buy local food and
practise sustainability. However, restaurant managers have reported that the price of
organic food menus in restaurants is inevitably higher than that for conventional foods
(Kwok & Huang, 2019). Additionally, customers are willing to sacrifice comfort, time,
and money, to achieve the goal of sustainability (Kwok et al., 2016; Sigala, 2013). The
findings related to food price value contradict those in previous studies, as this study
found that customers were not willing to pay extra for local or organic food, and having
to do so, produced a negative experience. In addition, most customers had a negative
revisit intention if they paid a high price for organic food. This may be due to a lack of
information about the quality and price of sustainably grown food provided by the sample
restaurants. In addition, a recent newspaper article described travellers’ inability to afford
healthy food, especially that from a restaurant that serves organic and healthy food
(Thornber, 2019). Therefore, it may be difficult to progress towards a sustainable future
if there is an imbalance caused by customers who are unwilling to pay more, and
restauranteurs moving to expensive sustainable practices.
It was an interesting and contradictory finding that a very small number of customers were willing to pay extra to help the local community. Sustainability practices in restaurants have been reported as beneficial for the welfare of their community (Huang et al., 2014). Therefore, the relationship between the restaurants and customers in this example, is successfully progressing towards a sustainable future (see Bristow & Jenkins, 2018; Bruns-Smith et al., 2015).

4.3.2.3. Online experience

The customers’ online experience was found to be a vital factor for customers and hospitality businesses involved in instant online engagement before and beyond the transaction (see Li et al., 2020b; Zhang et al., 2017).

4.3.2.3.1. Customers' return intention

The findings of this study highlighted that the majority of customers had a positive dining experience in the restaurants that promoted sustainability practices. Customers connected their return intentions to food quality, daily change of menu variety, innovation in cooking, service quality, the arrangements for special events, ambience, local and organic food, personalised interaction, and good staff customer-relations. The findings support the findings of Park et al. (2020) and Vieregge et al. (2007) that identified an increase in customers' return intention when restaurants presented an environmentally friendly attitude. The culinary experience was identified as the main reason behind customers' intentions to return to restaurants that promoted sustainability practices. When reviewers indicated that they already knew a restaurant was serving sustainability grown food, the number of comments with customers’ positive return intention increased. Therefore, increasing the use of sustainably grown food in a restaurant is likely to positively affect patronage.

4.3.2.4. Dietary experience

4.3.2.4.1. Sustainable food consumption for health

The findings indicated that reviewer’s evaluations of dietary experiences appeared to be one of the least important criteria affecting the dining experiences of customers in a restaurant that promotes sustainability practices. However, many studies have found that restaurant customers are becoming more health-conscious and knowledgeable about environmental issues, demonstrating increasing interest in sustainability practices (e.g. Huang et al., 2014; Jang et al., 2015; Mehta & Sharma, 2019) that affect the decisions about where to dine. Also, Kang et al. (2015) and Bryła (2016) reported that health
consciousness is a significant factor attracting customers to eat sustainably-grown food. However, the findings showed that not many reviewers contemplated the healthy nature of sustainably grown food. The findings of this study support those of previous studies, that found superior quality of food is more important than the health aspects of food (Park et al., 2020). This is interesting, as with increased sustainability initiatives, a restaurant's sustainability practices may be perceived as more important than any health concerns. When customers dine on sustainably grown food, they usually prefer or mention more about high quality food as compared to health aspect of food and the reasons behind this may be lack of awareness or education (Filimonau et al., 2020). The number of reviewers who mentioned the health benefits of local, organic, or vegan food, was too low to allow a definite interpretation of customers’ perceptions regarding the health aspects of sustainably grown food.

4.4. Summary

This chapter provided the key findings and interpretations related to each DEVA, from a content analysis of online reviews and helped provide knowledge about the DEVAs that are most important for customers of Auckland restaurants that promote sustainability practices. In order to understand the effects of promoting sustainability practices on customers' perceptions of their dining experiences, eight attributes of dining experience (culinary experience, service experience, atmospheric experience, online experience, eco-experience, dietary experience, people experience, and co-creation experience) were explained with customers’ interpretations of these, and descriptions of their perceptions of their dining experiences.

The significant findings were that three DEVAs emerged as the most important experiences for customers of restaurants that promote sustainability practices. The culinary experience of customers was identified as the most important criterion for them to use when evaluating their dining experience, evidenced by comments about freshness, taste, quality of ingredients, food appearance, and extensive menus with appropriate wine selections. Service experiences of customers emerged as the second most important criterion, and customers’ perception about this related to the staff’s politeness and willingness to provide high quality service, and the price of the food offered by restaurants. Lastly, atmospheric experience was the third most important dining experience attribute, and was usually combined with comments about culinary and service experiences, to express customers’ positive, neutral, and negative feedback. Atmospheric experiences related to how reviewers felt about their surroundings and comfort in a
Due to the promotion of sustainably grown food in Auckland restaurants, this study found some effects on customers’ perceptions of culinary experiences, service experiences, online experiences, and dietary experiences. In customers’ culinary experiences, the quality of food was perceived as tasteful and fresh in nature due to the use of sustainably grown food. In addition, reviewers commented that they would visit a restaurant again that offered a new menu every day, made with local and seasonal ingredients.

In terms of the service experience, the high price of organic food received the most negative reviews, with reviewers indicating a weak return intention because they did not want to pay more for organic food in a restaurant. However, a few customers wanted to return to some restaurants and pay extra to support the restaurant in helping the local community.

Reviewers’ perceptions of online experiences were affected due to the promotion of sustainably grown food on the menu, as they demonstrated stronger return intentions due to the high-quality food, daily change of menu, innovative cooking with local ingredients, the arrangements of special events, personalised interactions, and good staff-customer relations.

Lastly, in terms of customers’ dietary experience, there was a very minor effect on customers’ perception of sustainably grown food being healthy. The findings revealed that most of the reviewers were not aware about the health and environmental benefits of organic and local food. However, a few reviewers appreciated the special dietary options such as vegan and gluten-free food. Figure 4.15 presents the relationship of eco-experiences (sustainability practices) and customers’ perception of the other DEVAs. For example, as explained earlier in this section, high quality food and menu variety were affected due to the sustainability practices that were included in the eco-experience. Hence, the relationship in Figure 4.15 presents the quality factors of dining experience that were affected by the promotion of sustainability practices.
Figure 4.15 shows that eco-experiences that included sustainability practices, had an influence on customers’ perceptions of their culinary experience (food quality and menu variety), service experiences (food pricing), online experiences (word-of-mouth and customers’ loyalty), and dietary experiences (special diet options and healthy food).
CHAPTER 5  CONCLUSION

5.1. Chapter overview

The primary purpose of this study was to identify the attributes of the dining experience that were most important for customers of Auckland restaurants that promoted sustainability. The study investigated the influence of the promoted sustainability practices on customers' perceptions of the dining experience. This chapter summarises the main findings of the study and presents a conceptual model developed from the literature and modified according to the effects on customers’ perceptions of DEVAs (see Nemeschansky, 2017), of promoting sustainability practices. The modified conceptual model has been named as the “Environmentally Focused Dining Experience Value Attributes” (EFDEVA) to differentiate it from that of the DEVAs, to help understand the customers’ experiences of sustainability practices. The chapter also discusses the theoretical and practical implications of the study, the factors that limited this study, and makes recommendations for future research.

This was a qualitative study that collected 130 online reviews from TripAdvisor focusing on five well-known restaurants that promote sustainability practices. The restaurants used in this study were based in Auckland, New Zealand, and were Amano, Crave, Orphans Kitchen, Scarecrow, and SidArt; all these restaurants promoted sustainability practices on their websites. The online reviews were analysed utilising a content analysis to interpret the underlying meanings of the online reviews. Content analysis was considered appropriate for this study, as it helps in analysing the underlying meanings in communications or documents such as texts, pictures, videos, and audio recordings (Neuendorf, 2017). Hospitality scholars have emphasised that online reviews are a potentially valuable source of customers' information that are useful for research (e.g. Zhang et al., 2017).

5.2. Summary of main findings

The online reviews collected for this study were systematically categorised against dining experience attributes to provide insights into customers' perceptions of each attribute. This helped in understanding the importance order of the attributes and identify any effects of sustainability practices on customers’ dining experiences. The study utilised a conceptual framework extracted from the literature to include the important attributes of dining experiences and understand customers’ perception about these attributes. The
conceptual framework provided eight DEVAs: 1) atmospheric experience, 2) culinary experience, 3) service experience, 4) people experience, 5) co-creation experience, 6) dietary experience, 7) online experience, and 8) eco-experience. In order to understand customers’ perceptions of sustainability practices, “eco-experience” was added to the dining experience attributes. “Eco-experience” was extracted from the GRSERV scale (Chen et al., 2015) that was suggested to understand customers’ perceptions of a restaurant.

The findings revealed that the primary dining experience attributes for customers visiting a restaurant in Auckland that promotes sustainability practices, were to have a pleasant culinary experience, service experience, and atmospheric experience. Of these three important attributes, culinary experience and service experience had significant effects due to the sustainability practices, especially in relation to the high quality of food, daily change of menus with sustainably grown food and appropriate wine selections, and the expensive nature of high-quality food. However, a few customers were unhappy with the average food quality, small food portion size, and high priced organic foods, that made them question the value and worth of their expensive dining experience. Further, the findings showed that customers’ online experiences had limited influence in relation to sustainability practices, as few reviewers wrote of their intentions to visit a restaurant again because it served sustainably grown food or to help the restaurant support the local community.

Most customers were satisfied with all three dining experience attributes, commenting on the high standard of service, short waiting times, staff’s ability to handle special events, an in-house bakery, ambience, and, physical surroundings. However, a few customers were unhappy due to bad food quality, small portions, ignorant staff behaviour, long waiting times, high prices, congested seating, and crowded locations.

In reviewers' evaluations of service experiences, the promotion of sustainability practices adversely affected the customers’ experiences. However, the findings showed that very few customers were willing to pay additional costs to contribute to the local community. In terms of online experience, when customers knew that a restaurant served sustainably grown food, there were more comments indicating positive return intentions. Further, in terms of dietary experience, a small number of online reviews showed a preference for vegan diets and healthy options for their dining experience. However, there were limited reviews with narrations about dietary experience. The findings revealed that the quality of sustainable food was more important for customer experiences than was the health aspect.
The conceptual framework presented in Chapter 2 was extracted from the Dining Experience Value Attributes (DEVAs) suggested by Nemeschansky (2017) and the experience of sustainability practices from the GRSERV scale (Chen et al., 2015). The conceptual framework contained seven DEVAs: 1) atmospheric experience, 2) culinary experience, 3) service experience, 4) social experience, 5) co-creation experience, 6) online experience, and 7) dietary experience. Additionally, to highlight the important effects of promoting sustainability practices on other dining experience attributes, “eco-experience” was added. “Eco-experience” relates to customers’ perceptions of sustainability practices in restaurants that customers knew about or had seen evidence of. The conceptual framework was modified according to the findings that informed how sustainability practices affect customers’ perception of dining experience. The eight DEVAs and the relationship of eco-experience with the DEVAs, enabled the development of the new EFDEVA model (see Figure 5.1).

Figure 5.1 shows the seven core DEVAs on the right side, and the new “eco-experience” DEVA on the left. The arrows emerging from “eco-experience” linking to each quality factor of DEVA denotes the factors of dining experience that are affected by sustainability practices in restaurants.
Figure 5.1

**EFDEVA Model**

Note: The size of the text boxes is not significant.
5.3. Implications

5.3.1. Theoretical implications

This study used online reviews to capture customers' perceptions of dining experiences in Auckland restaurants that promote sustainability practices. Previous studies have utilised survey methods to examine the influence of sustainable practices on customers' behaviour (e.g. Han et al., 2009; Hu et al., 2010; Huang et al., 2014; Kwok et al., 2016). However, a limitation of the survey method in some studies, is the assumption that customers remember and identify sustainable practices in a restaurant. Therefore, surveymethods may not always be successful, as most sustainability practices are not evident to the customers and only visible when marketed or promoted (Park et al., 2020). A further disadvantage of the survey method is that social desirability bias is a significant issue in self-administered surveys. Therefore, this study used online reviews provided voluntarily by customers, thereby minimising social desirability bias. Online reviews are written by customers to express their views of their experiences, so generally express attributes developed from their experience (Akbarabadi & Hosseini, 2020). Customers’ perceptions and attitudes towards restaurants practising sustainability are understudied (Jeong et al., 2014; Ottenbacher et al., 2019; Park et al., 2020), as is how these practices affect customers’ perceptions (Peano et al., 2019). Additionally, most sustainability practices are not evident to restaurant customers, and mostly come to their notice through information promoted by the restaurants (Park et al., 2020), such as through the menu, marketing, website and personal communications (Kwok et al., 2016). Therefore, this study filled a gap in the knowledge in the existing literature by using online reviews and showing how customers’ perceptions were affected by the promotion of sustainability practices.

The significant findings of this study also uncovered five other quality factors that were important for customers’ dining experiences in restaurants that promote sustainability practices. These were: 1) appropriate wine pairing options, 2) innovation in cooking and presentation, 3) staff’s ability to celebrate customers’ special occasions, 4) additional services (e.g. bakery and flower shop), and 5) location (see section 5.2). These factors were repeatedly evaluated by the customers of the Auckland restaurants that promoted sustainability practices in this study. These factors were found to be important for some customers and could be further validated using primary data with a larger sample.
This exploratory study refined the existing DEVA and GRSERV scales (see Nemeschansky, 2017). The EFDEVA model now has eight DEVAs based on concepts synthesised from the literature and modified according to the findings of this study. A conceptual model is used to determine the potential course of action or outline an idea (Elangovan & Rajendran, 2015). The EFDEVA model developed and presented in section 5.2 needs to be tested for reliability and validity. Therefore, it is recommended that this conceptual model is validated in future studies, so it can be used to assess customers' perceptions of dining experience in restaurants that practice and promote sustainability.

5.3.2. Practical implications

The key findings of this study provide important implications for hospitality practitioners who wish to introduce a periodic or daily change of menu with seasonal and local New Zealand ingredients. Although this small-scale study analysed 130 online reviews, and comments on menu variety were relatively few, nevertheless, the study provides insights into the positive responses of customers towards a daily change of menu with local and seasonal food products.

The visibility of sustainability practices such as “pay it forward to support the local community” on a menu was found to have a positive influence, as some customers were willing to pay more to support needy people in the local community. Sustainability ideals are important for restaurant patrons. For example, DiPietro et al. (2013) found that respondents dining in a sustainable restaurant were strongly in favour of local and...
environmentally-friendly products. Therefore, the study findings provide a practical recommendation for restaurateurs; firstly, providing variety in a menu with local, organic, and seasonal food is likely to increase positive online reviews. Secondly, the promotion of sustainability practices solely on websites may not be as beneficial as describing these practices on the menu itself, because when consumers dine in a restaurant, they perceive only those sustainability practices that are evident to them. Therefore, describing and spreading awareness about sustainability practices (using terms that consumers recognise as promoting sustainability) on websites, menus, other collateral materials, and through personal communications has considerable potential to improve customer retention. Additionally, to increase awareness and spread knowledge about the importance of and need for sustainability, hospitality and other courses at schools, technical institutes, and universities, should incorporate the significance and implementation of sustainability practices into their programmes.

5.4. Limitations and future research directions

This study collected online reviews posted over six months from September 2019 to February 2020, to meet the time-frame of a one semester dissertation. As the data were collected for just six months, before the impact of Covid-19, the possibility of missing important perspectives of customers' dining experience is a limitation of the study. Additionally, as a qualitative study includes interpretations of customers' perceptions, the possibility that analysis by one researcher only may have influenced the findings, cannot be ignored.

Furthermore, this study’s findings are only applicable to restaurants in Auckland, New Zealand, that promote sustainability practices. The number of reviewers who mentioned the health benefits of local, organic, or vegan food were too few to allow for a definite interpretation of customers’ views. Future studies may therefore utilise a larger sample in order to generate more detailed interpretations.

This study used secondary data to understand customers’ perception of dining experience through online reviews, and there was no information on reviewers’ demographic characteristics. Previous studies have showed that respondents' gender, age, and education level have a significant impact on customers' perceptions and return intentions in restaurants with sustainability practices. Thus, further study designs can use large scale quantitative and mixed methods, to achieve more comprehensive results on how demographic characteristics affect perceptions of restaurants with sustainability practices.
5.4. Sustainability is not supposed to be luxury, it is a necessity

It has been suggested by many researchers that luxury restaurants should provide unique experiences that can be differentiated from other restaurants. In addition to providing a memorable customer experience, there is a huge need to invest better in environmental and social practices in order to sustain the business and world.
REFERENCES


implications in destination venue placement. *UNLV Theses, Dissertations, Professional Papers, and Capstones.*
https://digitalscholarship.unlv.edu/thesesdissertations/1142

https://doi.org/10.1177/001088047001100116


https://doi.org/10.1086/209158


https://doi.org/10.1080/14783363.2013.832478


https://doi.org/10.1108/00070709910272196


System Formulation and Baseline Simulation Characteristics*. Journal of Climate, 26, 2247–2267. https://doi.org/10.1175/JCLI-D-12-00150.1


image and customer attitudes: An investigation in a café setting.


Martinez-Martinez, A., Cegarra-Navarro, J.-G., Garcia-Perez, A., & Wensley, A.


Namkung, Y., & Jang, S. S. (2013). Effects of restaurant green practices on brand


https://online.wsj.com/article/SB10001424052702304171804579119342816300078.html


https://doi.org/10.1007/BF02894350


https://doi.org/10.1080/22041451.2020.1759925


https://doi.org/10.1097/ACM.0000000000003101

Zanella, M. A. (2020). On the challenges of making a sustainable kitchen:
https://doi.org/10.1080/22243534.2020.1790207

https://doi.org/10.1177/002224298805200302

https://doi.org/10.1108/IJCHM-10-2015-0611