WAITING FOR SERVICE: HOW DO GOAL ATTRACTIVENESS, LEVEL OF DINING USAGE AND GENDER MODERATE THE EFFECT OF SERVICE INTERVENTIONS ON SERVICE OUTCOMES?

Submitted in fulfillment of the requirements of the degree of Doctor of Business Administration

ASAD KAYANI
Master of Business Administration

SCHOOL OF MARKETING AND MANAGEMENT
CHARLES STURT UNIVERSITY

Oct, 2008
ABSTRACT

Service businesses often experience unwelcome delays in service delivery that tend to generate negative impacts from customers. In response, managers develop and implement service intervention strategies, such as providing the length and reason for a delay, both of which have been reported to have positive impacts on customers. However, the results from studies investigating such interventions were mixed.

To further investigate the efficacy of service intervention strategies on service outcomes, a new wait-management model is presented in this research. The research problem sought to determine the role of situational variables, such as goal attractiveness, level of dining usage and gender in moderating the effectiveness of two types of delay-related information. Accordingly, it was hypothesised that situations might be an important moderating factor and one reason for the mixed findings from previous research.

Three studies were conducted. The first study was a qualitative study; the second and third were quantitative and used an experimental design. In the first study, twelve semi-structured interviews were conducted. The participants provided insight into the nature of the waiting problem in the restaurant context. Three situational variables were identified. These insights, together with an extensive literature review, led to the development of a wait model in which three situational variables were modelled to influence the effectiveness of providing duration and cause information to customers in the wait situation.
The second study was a 2 x 2 x 2 factorial design based on a restaurant scenario for the stimulus material and an online web site to collect data from 130 respondents. The findings indicated a significant moderating effect of situations on the effectiveness of providing duration and cause information. More importantly, under certain conditions, a service intervention may be counterproductive to the intended strategy.

The third study used the same methodology developed for study two but employed a larger and more diversified sample size. The findings indicated that the effectiveness of providing duration and cause information was not consistent between low and high goal attractive subjects. Similarly, it was found that the level of dining usage also played a role in the effectiveness of delay-related information. However, gender had a limited effect on the service interventions tested.

The results indicated that the different outcomes resulting from the provision of duration and cause information might be counterproductive if the service intervention were applied routinely to different groups of customers. For instance, the results indicated that providing both types of information had a positive effect on subjects with high levels of goal attractiveness or high levels of dining experience. However, more importantly, it was identified that, for other groups of subjects, the intervention could have a negative effect on service outcomes. Accordingly, this research extended previous studies, such as those conducted by Begri (2004), Hui and Tse (1996), Hui and Zhou (1996) and Meyer (1994), into the efficacy of service interventions.
In conclusion, a new wait-management model was developed and tested for the restaurant industry. Findings suggested that managers needed to be wary of developing and executing expensive service recovery strategies without due regard to the customer segment being targeted. Managers are advised not to apply service interventions, such as duration and cause information, routinely without first understanding the effects that this type of information might have on different types of customers. Consequently, restaurant owners/managers need to improve their understanding of the range and nature of situations facing their customers and to develop specific strategies to suit such situations.
ACKNOWLEDGMENTS

Special thanks to the following individuals

First of all, thank you to my supervisor, Dr. Ken Butcher, who provided me valuable guidance throughout all stages of my thesis. I feel very lucky and privileged to have a special person like him. I could not have achieved this milestone without his precise help and support. I am also thankful to Charles Sturt University. In particular, Dr. Grant O’Neill, Dr. Mark Morrison and Professor Denise Jarratt who provided valuable feedback to me in the doctoral workshops. Thank you to other CSU staff members for helping me from time to time.

I am profoundly grateful to my mother, Nasreen Kayani, for her support. She has been an inspiration for my family. I am also thankful to my brothers (Khurram, Taimoor, Murad and Salman) and sister (Hina) for lifting me and supporting me during all those years. Thanks to my wife Sonia and my kids, Shan and Hajira, who had to sacrifice their weekend plans to allow me to study.

And last to my late father, Hanif Kayani, for his sacrifices and contributions to my life. I miss him a lot.

Thank you all, I appreciate your help and support.
# TABLE OF CONTENTS

Abstract ii

Acknowledgments v

Table of Content vi

Certification of Authorship

List of Tables xiii

List of Figures xv

List of Appendices xvi

## CHAPTER 1: INTRODUCTION

1.1 Background to the Research 3

1.2 Research Problem 6

1.3 Justification for the Research 8

1.4 Methodology 12

1.5 Outline of the Thesis 14

1.6 Definitions 15

1.7 Delimitations of Scope 16

1.8 Conclusion 17

## CHAPTER 2: LITERATURE REVIEW

2.1 Introduction 21

2.2 Managing the Service Encounter – Five Themes 23
2.2.1 Service Process Design 25
2.2.2 Physical Environment 26
2.2.3 Social Influence 28
2.2.4 Service Recovery 30
2.2.5 Service Evaluation 34

2.3 Managing Service Delays: A Critical Business Issue
2.3.1 Overview of Strategic and Operation Issues 38
2.3.2 Specific Service Outcomes 41

2.4 Service Interventions
2.4.1 Twin Approaches 54
2.4.2 Nature of Service Interventions 59

2.5 Two Key Service Interventions
2.5.1 Waiting Duration Information 60
2.5.2 Explanation of Cause of Wait (Cause Information) 68

2.6 Issues with Delay Related Information 71

2.7 Situational Approach: An Alternative Model 83
2.7.1 Goal Attractiveness 87
2.7.2 Level of Dining Usage 90
2.7.3 Gender 94

2.8 Summary 96

CHAPTER 3: METHOD

3.1 Introduction 101
3.2 Overview of Research Design 102
  3.2.1 General Design Considerations 102
  3.2.2 In-depth Interviews 108
  3.2.3 Experimental Design 110
3.3 Measurement Instruments 113
3.4 Measurement Scales 113
  3.4.1 In-Process Thoughts and Feelings 120
  3.4.2 In-Process Actions 122
  3.4.3 Post-Process Evaluations 123
3.5 Independent Variables 126
  3.5.1 Stimulus Material 126
3.6 Sampling 130
  3.6.1 Selection of Context 130
  3.6.2 Sample Representation 131
  3.6.3 Random Assignment of Sample 132
3.7 Data Collection Procedures 133
  3.7.1 Semi-structured Interviews 133
  3.7.2 Online Questionnaire 134
  3.7.3 Ethical Issues 137
3.8 Data Analysis 141
  3.8.1 Preliminary Analysis 141
  3.8.2 Main Analysis 143
3.9 Summary 144
CHAPTER 4: ANALYSIS AND RESULTS

4.1 Introduction 147

4.2 Study 1

4.2.1 Participant Profile 148
4.2.2 Nature of Service Delays in Restaurants 150
4.2.3 Current Practices of Managing Waits in the Restaurant Industry 154
4.2.4 Effects of Situational Factors 155
4.2.5 Summary 162

4.3 Study 2

4.3.1 Sample Characteristics 163
4.3.2 Preliminary Analysis 166
4.3.3 Reliability of Measurement Scales 169
4.3.4 Main Effects of Duration and Cause Information 177
4.3.5 Effects of Situational Factors on Duration and Cause Information 181
4.6 Summary of Results (Study 2) 197

4.4 Study 3 198

4.4.1 Sample Characteristics 198
4.4.2 Preliminary Analysis 199
4.4.3 Reliability of Measurement Scales 202
4.4.4 Main Effects of Duration and Cause Information 203
4.4.5 Effects of Situational Factors on Duration and Cause Information 205
4.4.6 Summary of Results (Study 3) 224
CHAPTER 5: DISCUSSION AND CONCLUSIONS

5.1 Introduction 231

5.2 Conclusion of Research Issues 233

5.2.1 How do situational factors moderate the effectiveness of duration information on service outcomes? 233

5.2.2 How do situational factors moderate the effectiveness of cause information on service outcomes? 242

5.2.3 How do situational factors moderate the combined effect of providing duration and cause information on service outcomes? 246

5.3 Contribution of Thesis 248

5.3.1 Service Interventions Framework 248

5.3.2 Effectiveness of Service Interventions 250

5.4 Implications for Theory 255

5.4.1 Approach towards Waiting 255

5.4.2 Approach towards Effectiveness of Service Interventions 258

5.5 Implications for Management Practice 259

5.4.4 Implications for the Hospitality Industry 260

5.4.5 Implications for the Restaurant Owner 261

5.4.6 Implications for the Restaurant Manager 264

5.4.7 Implications for Serving Staff 267

5.5 Limitations 268

5.6 Future Research 270
LIST OF TABLES

Table 1.1 Definitions of Terms
Table 3.1 Major Studies
Table 3.2 Type of Instruments used
Table 3.3 Sampling Design
Table 3.4 Data Analysis Stages and Tests
Table 4.1 Participant Information
Table 4.2 Measurement: Cronbach Alpha
Table 4.3 Interaction Effect: Goal Attractiveness * Duration Information
* In-Process Thoughts and Feelings
Table 4.4 Interaction Effect: Goal Attractiveness * Duration Information
* In-Process Actions
Table 4.5 Interaction Effect: Level of Dining Usage * Duration Information
In-Process Thoughts and Feelings
Table 4.6 Interaction Effect: Level of Dining Usage * Duration Information
In-Process Actions
Table 4.7 Interaction Effect: Level of Dining Usage * Duration Information
Post-Process Evaluations
Table 4.8 Interaction Effect: Level of Dining Usage * Cause Information
In-Process Actions
Table 4.9 Measurements: Cronbach Alpha
Table 4.10 Interaction Effect: Goal Attractiveness * Duration Information
In-Process Thoughts and Feelings
Table 4.11  Interaction Effect: Goal Attractiveness * Duration Information
In-Process Actions

Table 4.12  Interaction Effect: Level of Dining Usage * Duration Information
In-Process Thoughts and Feelings

Table 4.13  Interaction Effect: Level of Dining Usage * Cause Information
In-Process Thoughts and Feelings

Table 4.14  Interaction Effect: Level of Dining Usage * Cause Information
In-Process Actions

Table 4.15  Interaction Effect: Goal Attractiveness * Duration Information * Cause Information on Service Outcomes

Table 4.16  Interaction Effect: Level of Service * Duration Information * Cause Information on Service Outcomes

Table 4.17  Results of Hypothesis Testing
LIST OF FIGURES

Figure 1.1  Thesis Structure
Figure 2.1  Framework of Literature Review
Figure 2.2  Five Perspectives of the Service Encounter
Figure 2.3  In-Process and Post-Process Stages of the Service Encounter and Service Delays
Figure 2.4  Situational Approaches to Wait Management
Figure 3.1  Mixed Methodology
Figure 4.1  Six Types of Analysis for Studies 2 and 3
LIST OF APPENDICES

Appendix 1  Cover Letter for Study 2
Appendix 2  Scenarios Used in Study 2
Appendix 3  Questionnaire Used in Study 2
Appendix 4  Cover Letter for Study 3
Appendix 5  Scenarios Used in Study 3
Appendix 6  Questionnaire Used in Study 3
Appendix 7  Changes in Scenarios and Questionnaire in Study 3
CHAPTER 1

INTRODUCTION
CHAPTER 1

INTRODUCTION

1.1 BACKGROUND TO THE RESEARCH

The main focus of this thesis is service interventions and their effectiveness in different wait situations. The context of the current research was the restaurant industry. While there are many forms that a service intervention can take, most previous research has been directed at the effectiveness of two types of delay-related information, namely: providing duration information of the length of the expected delay and an explanation for the wait. In addition, scholars (e.g., Hui & Tse, 1996; Hui & Zhou, 1996; Hui & Zhou, 2006) tended to focus primarily on finding a generic answer to whether providing duration and cause information was useful in improving customers’ wait experiences. In contrast, Meyer (1994) explored how waiting experiences could be different for various types of customers, in particular among those who assigned different values to standing in a queue. In support of this contingent approach, researchers, such as Maister (1985), Meyer (1994), Hui, Thakor and Gill (1998) and Miller (2004), emphasised the need to further investigate such situational factors and their influence on a customer’s waiting experience. This thesis follows the work of Meyer (1994) and examines the influence of situational factors on the customers’ overall wait experiences. In particular, the research investigated how individual factors that were unique to a customer could influence the effectiveness of providing delay-related service interventions.
One of the biggest problems facing restaurant managers is balancing demand and supply (Dickson, Ford & Laval, 2005) as services are produced and consumed simultaneously and, hence, could not be inventoried as easily as goods. Therefore, managers are being constantly challenged with fluctuating demands (Zeithaml, Parasuraman & Berry, 1985), especially in hospitality industry services. Consequently, some waiting time for customers is deliberately planned to inventory demand but often waits are neither planned nor desirable. Such unplanned waits might generate strong negative impacts on customers (Taylor, 1994). Mostly, customers dislike waiting in line and even a single person intrusion into a queue may generate strong negative emotions (Dubé, Schmitt & Leclerc, 1991). Consequently, waiting is an issue of tension between customers and service providers (Houston, Bettencourt & Wenger, 1998) and could influence service assessment and satisfaction (Pruyn & Smidts, 1998), service quality evaluations (Houston, Bettencourt & Wenger, 1998) and the long term relationship between the customer and service provider. Therefore, it is essential for managers to ensure that a customer’s negative experiences are properly managed.

Finding the right balance between efficient operations and excellent customer service thus requires well honed management skills. If delays occur due to increased demand, one option is to improve infrastructure and resources to avoid customer waits. Similarly, an improvement in the overall design of delivery processes (Dawes & Rowley, 1996), service design improvements (Murdick, Render & Russel, 1990) and development of efficient queue systems (Nie, 2000) could help reduce waiting time. However, due to increased competition in the restaurant industry and higher labour costs, this option might
be expensive (Davis, 1991) and not always possible. Alternatively, a less costly option is to improve wait management strategies that reduce the negative perceptions of waiting.

In general, wait management strategies were examined either through objective approaches (e.g., Davis & Vollman, 1990) or subjective approaches (e.g., Maister, 1985). The latter group of studies addressed the issue of customer perception of waiting time. For instance, service interventions, such as providing information regarding the length of a delay (Hui & Zhou, 1996) and providing explanations for a delay (Zakay, 1989), provided positive impacts on customer perceptions. However, the empirical evidence was mixed and several studies found that neither intervention worked as intended (e.g., Naumann & Miles, 2001).

A common approach taken by previous researchers in evaluating the effectiveness of delay-related service interventions was to apply an intervention to all types of customers. That is, to provide duration or cause information to all customers regardless of their individual differences. Hence, in most studies, customers were treated as one homogeneous group of people. However, considering all customers as alike was criticised by both Meyer (1994) and Maister (1985). For instance, Maister (1985) made a general point that customers were not machines that always acted and behaved in a similar manner. More specifically, Meyer argued that joining a queue did not necessarily mean that the queue had the same value for all participants. Hui, Thakor and Gill (1998) suggested that a better approach to enhance the effectiveness of delay-related service
interventions was to apply the intervention selectively on different types of customers, based upon different situational factors.

This thesis investigated how three situational factors, namely customer’s individual goals external to a service encounter, level of their dining usage or dining frequency and gender, could influence their evaluation of service encounters. More specifically, could these three situational factors moderate the effectiveness of delay-related service interventions, such as duration information and explanation for the delay. The term “goal attractiveness” is used in this thesis to represent level of attraction and desire of a customer to achieve external personal goals such as attending a meeting or meeting someone important etc. Similarly, the term “level of dining usage” represents the overall dining experience of a customer outside home.

1.2 RESEARCH PROBLEM

In chapter two, the gaps in the literature relating to the effectiveness of service interventions are presented. The research problem is stated as:

How do the situational factors of goal attractiveness, level of dining usage and gender moderate the effectiveness of service interventions on service outcomes?

The main argument of this thesis is that the effectiveness of a delay-related service intervention might be moderated by situational factors, such as the customers’ individual goals, level of dining usage and their gender. Therefore, the common practice of researchers in considering customers as a homogenous group and trying to find a blanket solution as to whether duration and cause information were useful interventions might not
be the best approach to improve the effectiveness of such service interventions. In particular, the findings of this thesis concluded that customers with different levels of attraction to their goals and different levels of dining usage reported different outcomes, after being provided with wait duration or cause information. Most importantly, there were situations in which both types of service intervention could produce counterproductive effects. That is, the service intervention designed to enhance the customer experience had the opposite effect and detracted from the customer’s experience. Thus, the interventions proved to be a waste of effort and resources. This is an important issue given the challenging conditions facing restaurant managers in an increasingly competitive business environment. Further, limited differences were also found between genders in the reported benefits of providing duration information.

Several research objectives and hypotheses were developed to assist in this investigation. Hypotheses are listed in sections 2.7.1 to 2.7.3 of chapter 2. Three objectives are stated as follows:

1. How do situational factors of goal attractiveness, level of dining usage and gender influence the effectiveness of duration information on service outcomes?

2. How do situational factors of goal attractiveness, level of dining usage and gender influence the effectiveness of cause information on service outcomes?

3. How do situational factors of goal attractiveness, level of dining usage and gender influence the effectiveness of a combination of both types of wait information on service outcomes?
1.3 JUSTIFICATION FOR THE RESEARCH

This study investigated the effectiveness of delay-related service interventions in the restaurant industry. The outcome of this research project provides some insight into how managers can improve customers’ service experiences. This thesis can make a contribution in three major areas. The first contribution is to the hospitality and restaurant industry. The second area is to the knowledge and practice of waiting for service from service operators and the third area relates, more specifically, to the effectiveness of service interventions in wait situations. The importance of each of these three areas is discussed below.

The first justification concerns the importance of the hospitality industry in building a stronger Australian economy and providing a growing segment for research. The hospitality industry is an important contributor to the Australian economy and is growing rapidly, particularly since 2000. Restaurants provided a rich environment for research and a classic mix of services and production elements (Israeli & Rachel, 2004). Figures provided by Restaurants and Catering Australia (2004) showed that there were more than 37,700 restaurants in Australia. More than 2000 new restaurants were opened every year and the industry employed more than 250,000 staff. However, rapid growth also resulted in a more competitive market. Restaurants typically operated on very low profit margins, reflected by the fact that an average restaurant owner in Australia earned $47,515 per annum or just $13.64 per hour. As a result, restaurants need to ensure that they do not lose customers due to poor service or food quality. In addition, strong
competition also demands exploring innovative and cost effective ways to retain customers and improve their dining experiences.

The second justification for this research relates to the importance of managing waits in restaurants. The restaurant industry presents management with a highly competitive market where growth in consumer demand is outstripped by growth in the numbers of restaurants. Managers were constantly striving to reduce waiting time (Jones & Peppiatt, 1996). Research showed that 27% of customers who had to wait would likely take their business elsewhere (Fitzsimmons & Fitzsimmons, 2000). The value of keeping satisfied, loyal customers in the table service restaurant industry was illustrated by the results of a National Restaurant Association (US) study (2004) that found 60% to 80% of table service restaurant sales come from repeat customers. Similarly, experts in the service industry suggested that no aspect of customer service was more important than customers waiting in line to be served and the service wait was regarded as one of the most important aspects of service quality. However, Lewis and McCann (2004) indicated that little research has been conducted to investigate what problems were experienced by diners, how such problems were dealt with and, consequently, the level of customer satisfaction with the handling of problems. Similarly, Dickson, Ford and Laval (2005) suggested looking for innovative ways to reduce customers’ dissatisfaction in the restaurant industry. They posited that, while the hospitality industry had long used a variety of quantitative models to reduce actual wait times, managers needed to find other ways to keep customers satisfied. This aspect is particularly important because restaurant managers have limited resources to manage waits.
A third factor to justify this research is that current research on waiting and service intervention did not provide a conclusive picture relating to the effectiveness of providing duration and cause information in restaurants. Sections 2.5 and 2.6 of the literature review chapter provide a more detailed discussion on these mixed results. Given the mixed results of studies into the wait situation, it is appropriate to look at alternative models of wait management. In particular, researchers called for further investigation into the role of situational factors and their influence on the effectiveness of a wait management strategy. For instance, suggestions by researchers included: role of the customers’ individual characteristics and their preferences (Hornik, 1984), individual characteristics of customers (Dubé, Chebat & Morin, 1995), personality traits of employees (Ehrhart, 2006), customer’s situations (Miller, 2004), impact of goals (Meyer, 1994), type of emotional response to goal blockage or attainment (Austin & Vancouver, 1998), behaviour of those who were very time-short and different aspects of goals on customers’ behaviour in service delays (Hui, Thakor & Gill, 1996), differences in behaviour between novice and experienced customers (Alba & Hutchinson, 1987) and differences due to gender (Cotte, Ratneshwar & Mick, 2004).

Various contexts have been used to study service delay experiences, such as banks (Katz, Larson & Larson, 1991), airlines (Taylor, 1996), supermarkets (Tom & Lucey, 1995) and hospitals (Transik & Routhieaux, 1996). In addition, restaurants have been widely used as a context to investigate various dimensions of service delay experiences (Jones & Dent, 1994; Dawes & Rowley, 1996; McDougall, 1996; Mattila & Cranage, 2005).
Selection of a suitable service context is important, as Jiang and Wang (2006) argued that context can moderate the effect of service evaluations. They further suggested that hedonic related service contexts are different in nature from utilitarian service contexts. Consequently the influence of affect on service quality and service evaluation may be stronger in hedonic contexts than in utilitarian contexts. Therefore findings from one type of context may not be generalised to other different contexts.

Restaurants were chosen as the experimental context for several reasons. Restaurants are an important context for service marketing research and in particular for studying service delays. Customers are increasingly concerned with the quality of service at restaurants and increasing competitiveness and high operational costs are resulting in more service related problems. Therefore, more research is warranted in this context to find innovative methods to improve quality at restaurants. Restaurants in general are also a useful context for research as they provide a rich environment of hedonic service experience to study behaviour, actions and service evaluations under various dimensions of service delivery processes. Restaurants are commonly visited places and service delays are common in restaurants and therefore, for interview purposes, people can easily relate to their own personal experiences of services in restaurants. Further, from the point of view of this research project, a context where service interventions, such as providing duration and cause information are usually practised, was required. As a result, the use of restaurants, as a context for this research, was considered appropriate to study the effectiveness of service interventions.
In summary, the hospitality industry has become very competitive. Hence, hospitality businesses, such as restaurants, are required to find innovative and cost effective ways to manage waits. Previous research conducted in this area provided an inconclusive picture of whether to provide delay-related information in various situations. Thus, this project investigated the role that situational factors play in the effectiveness of service interventions.

### 1.4 METHODOLOGY

In this research project, three studies were conducted. The first study was qualitative and studies 2 and 3 used quantitative methods. A mixed approach combining techniques from both quantitative and qualitative methods was considered appropriate. Denzin and Lincoln (1994) note that no single method adequately captures all aspects of a problem. Therefore, mixing the strengths of different methods improves research validity. Further, a mixed approach is endorsed by many researchers who hold the view that both quantitative and qualitative methods could be combined in one project (Cook, 1995). More importantly, the choice of method should reflect the overall research strategy (Silverman, 1997).

Accordingly, in study 1 of this research project, the qualitative research technique of semi-structured interviews explored wait concepts and improved understanding of the research problem. The main purpose of the study was to understand and explore the
research problem, key constructs and relationships and to formulate key hypotheses. Two instruments were used to collect data: (1) semi-structured interviews and (2) on-line surveys. The interview method provided flexibility in understanding a concept that required exploration. Interviews were also useful in building groundwork for theory construction. Further, interviews provided a guard against questionnaires when conducted first (Babbie, 1995).

For the second study, online surveys were used. Online surveys are widely used in service marketing and have significant advantages over postal surveys (Cobanoglu, Warde & Moreo, 2001). Online surveys also offer easy administration, cover large populations and are relatively low cost (Evans & Mathur, 2005). The main purpose of Study 2 was to establish and test relationships between the constructs. A 2x2x2 experimental design was employed. The main technique used to analyse data collected from the online surveys was multiple analysis of variance (MANOVA). Other techniques, such as the independent sample t-test, were used to test the efficacy of experimental manipulations and credibility checks.

MANOVA was found to be statistically significant, further analysis was conducted using individual mean scores.

The third study was conducted to further investigate and test the proposed relationships found in study 2 with a larger and more diversified sample. A similar 2x2x2 experimental design was used. A probability sampling technique was used and data were collected
using online surveys. Multiple analysis of variance (MANOVA) was used to analyse data. Finally, the research conducted for this thesis complied with the National Protocols on Research Ethics. In particular, all participation was voluntary with respondents providing informed consent.

1.5 OUTLINE OF THE THESIS

This thesis is presented in five chapters, as shown in figure 1.1. This structure is based on Perry (1998) who suggests that the five chapter format provides a unified and focussed approach to solving one research problem. Further, this structure is widely used by academic researchers.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
</tr>
<tr>
<td>2</td>
<td>Literature Review</td>
</tr>
<tr>
<td>3</td>
<td>Methodology</td>
</tr>
<tr>
<td>4</td>
<td>Results</td>
</tr>
<tr>
<td>5</td>
<td>Discussion</td>
</tr>
</tbody>
</table>

*Figure 1.1. Thesis Structure*

The first chapter of the thesis provides an introduction and lays the foundation by providing an overview of the research problem and objectives of the study. Chapter 2 presents the literature review in the area of wait-management and identifies gaps in the existing literature. Further, this chapter highlights issues relating to wait management and presents an alternative wait-management model. This chapter also provides the rationale for each hypothesis. Chapter 3 describes the methodology used in this research, including sampling, individual information on data collection and analytical techniques used. Chapter 4 presents the results of the interviews and hypothesis testing. The concluding chapter provides further discussion on results and identifies the theoretical and
managerial contributions made by the thesis. The chapter ends with an identification of the limitations of the research and guidelines for future research.

1.6 DEFINITIONS

More detailed descriptions of the terms used in this thesis, appear in various chapters of the thesis. Definitions of the constructs are presented in chapter 3. Some of the most commonly used terms are presented in Table 1.1.

Table 1.1
Definition of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service provider</td>
<td>Refers to owners, waiters and managers of restaurants.</td>
</tr>
<tr>
<td>Service outcomes</td>
<td>A blanket term used to reflect in-process and post-process outcomes of a service encounter</td>
</tr>
<tr>
<td>Situation</td>
<td>Refers to situational factors used in this research. These variables are: goal attractiveness, level of dining usage and gender.</td>
</tr>
<tr>
<td>Delay related information</td>
<td>Duration and cause information</td>
</tr>
<tr>
<td>In-process actions</td>
<td>Intentions of a customer to take an action in response to events during a service encounter such as leaving a restaurant or complaining to a waiter.</td>
</tr>
<tr>
<td>Goal attractiveness</td>
<td>Level of attraction and desire to achieve external personal goals of a customer.</td>
</tr>
</tbody>
</table>
1.7 DELIMITATIONS OF SCOPE

The results presented in chapter 4 should be interpreted within the associated limitations and arbitrary boundaries of this thesis, which could influence the overall generalisability of the results. First, the investigation used a role-playing methodology in studies 2 and 3. The subjects were asked to imagine a given scenario and then answer a series of questions. As the service encounter was described rather than experienced by the subject, the emotional response to stimulants might be less intensive than would be experienced in a real life scenario. A simulated scenario was substituted for real life experience to enhance the feasibility of the experimental design.

Second, online surveys and interviews conducted in the research were limited to one state of NSW in Australia and results might differ due to differences in culture and behaviour of customers from other states. Further, the scenarios presented in the research cover only table restaurants, therefore, results may not be generalised to other types of restaurants, such as fast food or takeaway restaurants.

Third, it was assumed in Studies 2 and 3 that, for the high and low goal attractive scenarios presented in this research, subjects had a similar attraction to the internal goals and events related to a service encounter, such as attraction to food. While the research design tried to reduce the impact of subjects’ food quality assessments by including a
statement in the scenario to negate the effect of food quality, other internal events and factors of a service encounter, which a subject may have experienced in their real life situations, could influence their behaviour and intentions. As a result, subjects might have viewed the imaginary situations differently based on their own personal past experiences.

1.7 CONCLUSION

In this introductory chapter, an overview of the thesis, the background of the research area and the research questions and objectives, justification for the research project, research methodology and delimitations were presented. A detailed description of the literature, methodology and results follows in chapters 2 to 4. The final chapter summarizes the results and literature and highlights contributions made by this thesis. In the next chapter, the literature review is presented and key issues relating to wait management are highlighted.
CHAPTER 2

LITERATURE REVIEW
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Chapter 1 presented an overview of the thesis. The research problem broadly questioned the way in which various situational factors moderated the effect of service interventions on service outcomes. Chapter 2 presents the background literature and an introductory framework specific to service delays and service interventions. In addition, research objectives and hypotheses will be developed to guide the resolution of the research problem.

This literature review presents the literature on service encounters from five perspectives relevant to this research project as shown in figure 2.1. In addition, the literature on service delays and management of waits is examined. In the following section, different approaches to managing waits are presented and the effectiveness of providing service interventions is discussed. Issues relating to the effectiveness of providing waiting duration information and cause of waiting information are highlighted. Next, an alternative model is presented to study the effectiveness of service interventions. This alternative model includes three important moderating variables: goal attractiveness, level of dining usage and gender. Figure 2.1 shows the overall structure of the literature review chapter.
Figure 2.1. Framework of Literature Review.

- Section 2.2 Managing the Service Encounter - Five Themes
- Section 2.3 Managing Service Delays – A Critical Business Issue
- Section 2.4 Managing Service Interventions
- Section 2.5 Two Key Service Interventions
- Section 2.6 Issues with Delay Related Information
- Section 2.7 Situational Approach: An Alternative Model
2.2 MANAGING THE SERVICE ENCOUNTER – FIVE THEMES

This section covers five major themes relevant to this research project. Service encounters have been investigated from multiple perspectives, including the customer’s viewpoint (Hoffman, Kelley & Rotalsky, 1995; Keaveney, 1995) and the employee’s viewpoint (Bitner, Booms & Mohr, 1994; Sandoff, 2005; Baum, 2006). In this research, however, the service encounter was treated as an experience that could be viewed through five themes as shown in figure 2.2.

Five major research areas of the service encounter field are: (1) process design of service, (2) physical servicescape, (3) social and people factors, (4) service recovery and (5) service quality evaluations. While these themes do not present an exhaustive picture of the service encounter literature, they cover substantial research interests of service encounter scholars. Furthermore, they present a picture of the service encounter as a multifaceted and complex phenomenon. For each of these themes, a brief overview is provided, including some insight into the difficulties facing service providers, especially when managing wait situations. The next section discusses these five major themes.
Figure 2.2. Five perspectives of the service encounter.
2.2.1 Service Process Design

Service process design is one of the objective approaches that managers commonly use to control service delays and will be further discussed in section 2.4.1. Using this technique, managers can develop a planned design of the flow of activities and processes of a service encounter. Process design has been regarded as important for the smooth delivery of a service. In spite of the importance of service process design, little attention has been given to design in the service management literature. Generally, the main approach toward service process design is to examine the service encounter from a transactional aspect. This approach has been criticised by several authors (e.g., Fitzsimmons & Fitzsimmons, 2006; Gupta & Vajic, 2000). These authors suggest that managers needed to create designs that focused more on developing compelling service experiences.

Other authors support the view that managers should focus on the customer experience in design. For instance, Grove, Fisk and John (2000) regard service design as a theatrical performance, in which there are actors (people), stage (physical environment) and script (process). This is similar to staging a performance in delivery services (Fitzsimmons & Fitzsimmons, 2006). However, while the audience in a stage performance does not usually participate in the performance, the effectiveness of service design can be enhanced by encouraging greater participation from customers. Customer participation was viewed as critical because this placed more emphasis on developing personalised or customized services to promote greater service experiences (Berry & Bendapudi, 2003; Sandoff, 2005). Therefore, the service delivery process can be made more effective by
including customers in the design. However, one main hurdle to incorporating service experiences into service design is the lack of a design framework.

In summary, service process design is an important objective approach to manage a service encounter. However, as the major focus of service process design is more on the transactional aspects of a service encounter, complex elements of a personal service experience, such as staff and customer interactions in a service delay, may not be fully represented in process plans. This may lead to a situation where staff has an understanding of the transactional processes involved in service delivery but do not know how to respond to different problem situations that may originate from service delays.

2.2.2 Physical Environment

Service delays tend to be experienced in a physical environment during which interaction between a customer and a service provider takes place simultaneously. Shostack (1985) included elements, such as physical facilities, working staff and other visible and tangible elements of service, in her definition of a service encounter. Similarly, Booms and Bitner (1981) regard the servicescape as an integral part of the marketing mix and proposed to extend the four “P’s” to include physical evidence among the extended list of marketing mix elements.

The importance of the physical atmosphere in a service has been widely acknowledged by various researchers (e.g., Baker & Cameron, 1996; Milliman, 2000; Hoffman & Turley, 2002). This importance was further highlighted because services are mostly
intangible, so a customer could feel uncertain about some service characteristics. Similarly, Shostack (1977) suggested that, due to the intangibility of services, customers were frequently looking for “cues” to determine the capability of a firm and these were often provided by the physical facilities. As a result, managers needed to increase the amount of information in a servicescape (Hoffman & Turley, 2002). In particular, restaurants provide a high level of intangible service: therefore, customers can form impressions of a restaurant based on various factors, such as atmosphere, seating arrangements, interior design and temperature.

Managers can improve customer experiences by focusing on different dimensions of the physical environment, such as (1) ambient conditions (2) spatial layout and (3) signs and symbols. These three dimensions have received much attention in retail businesses such as restaurants and supermarkets, and include music, temperature, odours, colours and lighting. For instance, several researchers studied the effect of music on customer mood and time perceptions and found music had a strong influence on customer time orientations (e.g., Chebat, Chebat-Gelinas & Filliatrault, 1994; Hui, Dubé & Chebat, 1997; Oakes, 2000). Similarly, different colours in the physical environment can stimulate customer moods and emotions. For instance, Bellizzi and Hite (1992) found that warm-coloured backgrounds drew more customer attention and were useful in attracting customers to a business. Further, in layout design, it is important to consider the effect of lighting and space. Bright lighting is useful in a service setting where more customer to employee interaction is required; whereas, low lighting suits a more romantic setting (Areni & Kim, 1993). Therefore, decisions related to colour, sitting arrangements,
music, lighting and temperature are often determined by the type and mood of a targeted customer.

While researchers had different opinions on the focus of investigation of servicescape and its effect on service evaluation, the physical environment was still regarded as a indicator of quality (Baker, Parasuraman, Grewal & Voss, 2002; Baker, 1998; Bitner, 1992), which could lead to better and more favourable responses from customers (Baker, 1998). Similarly, from a service delay perspective, the customers’ tolerance for a delay may be influenced by the physical environment in which he/she will be waiting and can influence how a customer might respond. Further, an individual response to physical environment may also be influenced by situational factors, such as the customer’s purpose for being in the service environment.

2.2.3 Social Influence

The third theme of research in the service encounter field, attesting to the complexities of the service encounter, is the umbrella term social influence. In this thesis, the term describes any personal interaction between customer and service provider. Accordingly, social influence variables come into play quite strongly in many delayed service situations. Such interactions can be viewed from two aspects: (1) internal and external dispositions of customers and employees and (2) the relational aspects of interactions. During a service encounter, an interaction between customer and service provider may involve such characteristics as personality or mood (internal), gender, friendliness and attractiveness (external). Such influences have been linked to service outcomes (Watson,
Clark & Tellegen, 1988; Simons, 2005) and the customer’s behaviour, but have not been fully explored in the service marketing literature. Only a few researchers associated personality traits and personal orientation with a customer’s affective state of mind. For instance, Watson, Clark and Tellegen (1988) argued that individual personality traits could influence the customer’s affective responses. Similarly, Gountas (2004) and Larsen and Ketelaar (1991) suggested that customers might have different orientations in the way they think, feel and imagine; therefore, customers could demonstrate behaviour and emotions differently, based on their personality traits.

The notion of social influence also includes those elements relevant to a relationship between customer and service provider. Five elements identified by Sheth and Kellstadt (2002) in the formation of a relationship are: (1) trust, (2) bonding, (3) empathy, (4) reciprocity and (5) loyalty. Trust and commitment are important relational factors in building bonding between the customer and the employee and highly interrelated notions (Kumar, Scheer & Steenkamp, 1995). Trust could lead to commitment and be cognitive, which arises from confidence in the service provider’s competence and willingness, or affective (Rempel, Holmes & Zanna, 1984), which generates a feeling of trust originating from previous experiences.

The importance of studying customer relationships has been widely recognized and has resulted in a shift of focus from the transactional aspect of buying and selling to the relational aspects of a service encounter. This shift was logical as more and more companies wanted to build long term relationships with their target customers (Zeithaml
Bitner, 2003). The direction of this relationship could be from the customer towards an employee involving trust (Heffernan, 2004), feeling comfortable (Caldow, 1998) and liking (Hawke & Heffernan, 2006). It could exist mutually between a customer and an employee involving commitment (Morgan & Hunt, 1994), personal bonding (Witkowski & Thibodeau, 1999) and social regard (Butcher, Sparks & O’Callaghan, 2001; Butcher & Heffernan, 2006). While a service encounter may be described as a period of time, relational factors, such as social regard, comfort, trust and personal bonding, help build long term relationships.

Such relationships take time to build and are under threat when a service provider fails to provide a service as expected by a customer. Therefore, situations such as delays may put strains on relationships between customers and service providers. As a result, interactions between customers and employees become more important. In particular, how employees interact with customers, in such situations, may have long term effects on service outcomes.

### 2.2.4 Service Recovery

The fourth major research theme used for examining the service encounter is service recovery, which plays an important role in the formation of service quality and satisfaction assessments and influenced loyalty (Smith & Bolton, 1998; Tax & Brown, 1998). Service failure occurs when a service provider does not provide a service the customer expected (Grönroos, 1992), such as restaurant bookings not being recorded accurately resulting in unplanned waits. Service recovery is the term applied to the
service provider’s response to the failure. While service recovery is the term applied to all types of failure responses, *service intervention* in this thesis denotes the response to a delay.

At times, a customer might complain to initiate a recovery to a service failure (Tax & Brown, 1998). In such situations, a manager could respond by taking action regarding the service failure (Zeithaml & Bitner, 2003) or decide to do nothing. However, an unrectified failure could result in a customer leaving the service, switching or ending the relationship with the service provider (Smith, Bolton & Wagner, 1999). Research has shown that an upset customer might tell more than 20 people about his/her experience (Zemke, 1999). However, what a service provider does after a service failure could make things better or worse (Parasuraman, Zeithaml & Berry, 1994). An inappropriate recovery attempt by a service provider could result in a customer feeling even more upset than he or she was with the initial failure (Bitner, 1990). On the other hand, a successful recovery builds loyalty more quickly than if no failure occurred (McCollough & Bharadwaj, 1992) and increases relationship quality (Ross, Fleming, Fabes & Frankl, 1999). A good recovery could impact customer satisfaction, word-of-mouth communications and future intentions (Keaveney, 1995; Bitner, 1990). The recovery paradox suggests that a dissatisfied customer who experienced a high level of service recovery might be more satisfied and more likely to repurchase than those who were satisfied in the first place (McCollough & Bharadwaj, 1992). However, the level of satisfaction achieved by a service provider is determined by the customer’s assessment of the recovery effort (Bitner, 1990; Bitner & Hubbert, 1994). Therefore, there is no
guarantee that any service recovery strategy would completely offset the negative effects of service failure (Cranage, 2004). Accordingly, avoiding failures, such as a service delay, is often seen as the best strategy. However, where service failure is inevitable, an effective recovery effort may partly reduce the negative impacts of a failure.

While it is important to respond quickly to failure, an equally important factor is that the recovery effort is seen by the customer as fair and equal. Service failure and recovery have been investigated through theoretical frameworks, such as output, process and interactional justice. Distributive justice was concerned primarily with recovery outcomes, such as providing free food, coupons, refunds, gifts or replacements. Thus, a customer could be provided with at least the level of service they would have received before the failure. Second, procedural justice has focused on the perceived fairness of the policies and procedures (Blodgett, Hill & Tax, 1997). Tax, Brown and Chandrashekaran (1998) identified five elements of procedural justice: (1) process, (2) decision, (3) accessibility, (4) speed and (5) flexibility. Similarly, Goodwin and Ross (1992) regarded allowing the customer a say in recovery as an important procedural step. Third, interactional justice focused on the appropriateness of the interpersonal treatment customers received during a transaction (Tax, Brown & Chandrashekaran, 1998). For instance, these treatments could include explanations (Mattila, 2006), effort from a staff member (Mohr & Bitner, 1995), friendliness and politeness (Goodwin & Ross, 1992), social regard (Butcher et al., 2001) and empathy (Parasuraman et al., 1988). All three types of justice have a profound effect on service outcomes and future intentions (McCollough, Berry & Yadav, 2000; Smith, Bolton & Wagner, 1999; Blodgett, Hill &
Therefore, in order for a service recovery to be effective, a recovery effort needs to be seen as fair and just by the customers.

The importance of service recovery in hospitality has been widely accepted but limited empirical research has been completed to examine failures and recoveries in restaurants (Hoffman, Kelly & Rotalsky, 1995). The main emphasis from previous research identified and categorised service problems and service recovery techniques. For instance, Bitner (1990) used the critical incident technique to identify failures in restaurants and hotels. She identified favourable and unfavourable recoveries (i.e., actions that satisfied or dissatisfied customers) and their causes. Her results suggested that acknowledgment of the service failure, apologizing, explaining the failure, and then giving tangible offerings constituted an acceptable solution that accomplished a successful service recovery. Similarly, Hoffman et al. (1995) confirmed that offerings, such as free food, gift certificates, and discounts, were critical to service recovery in restaurant service failures. These authors suggested a failure and recovery typology specific to restaurants. They used Bitner’s three major classes but somewhat different subgroups in their restaurant-specific inquiry and identified major failures in restaurants, such as product defects, slow or unavailable service, facility problems, unclear policies, out-of-stock conditions, food not cooked to order, requests not honoured, inappropriate employee behaviours, incorrect food orders, lost orders and wrongly charged orders. To resolve such problems, Hoffman et al. (1995) classified service recovery strategies in restaurants as: free food, food discounts, coupons, management intervention, food replacement, corrections of failure and apologies. They identified a service provider’s
failure to respond as unacceptable to the customer, leading to dissatisfaction and possibly defection. Although recovery was most difficult in the cases of facility failures and inappropriate employee behaviour, Hoffman et al. confirmed that recovery could be achieved from most failures in restaurants, regardless of failure type or magnitude.

While it is recognized that a service recovery effort is important to reduce the impact of a service delay, such efforts may only be effective if service failures are handled promptly and customers see such efforts as fair and just in terms of process, interaction and distribution.

2.2.5 Service Quality Evaluation

The last theme involves customer assessments of quality and satisfaction with the service. Factors, such as service speed, product quality and other intangibles and tangible factors, can influence service evaluations. Physical products can be evaluated based upon their appearance and visual attributes. However, services are intangible, thus, cannot be seen but only experienced. Special difficulties arise from this intangibility, which lead to quality control problems for a service provider and evaluation problems for the customer (Bebko, 2000). This complexity has led to substantial differences among researchers in understanding satisfaction and service quality assessments, resulting in conflicting ideas in the conceptualisation and measurement of satisfaction and service quality. Service quality and satisfaction are arguably the two core evaluative concepts of marketing theory and practice, closely related but different constructs (Parasuraman, Zeithaml and Berry, 1994; Zeithaml, 2006). Swan, Trawick and Carroll (1982) empirically tested and found
that satisfaction increased with a positive disconfirmation. Oliver’s disconfirmation paradigm formed the basis of a popular service quality measurement model SERVQUAL developed by Parasuraman, Zeithaml and Berry (1985). In spite of the popularity of the SERVQUAL instrument, researchers raised a number of issues with the model and provided alternative models (Teas, 1993; Cronin, Joseph & Taylor, 1992; Grönroos, 1990). Given the central role of SERVQUAL in services, particularly in the hospitality context, important issues relating to the measurement of satisfaction and service quality require highlighting.

One important service quality issue concerns the nature and direction of the relationship between service quality, satisfaction and future intentions. Some researchers have treated service quality and satisfaction as related but distinct constructs (Taylor, 1996; Baker, 1994). Others researchers, such as Oliver (1980), suggested that satisfaction mediated the prior-perceived service quality and led to a revision in the initial level of perceived service quality. The link between satisfaction and service quality was empirically addressed by Cronin and Taylor (1992) and addressed conceptually by Teas (1993). Cronin and Taylor (1992) reported that service quality was an antecedent of service satisfaction and, further, that satisfaction was a much stronger predictor of future behaviour than service quality. Other researchers reported a strong relationship between satisfaction and loyalty behaviour, such as switching, word of mouth, complaining and repurchase intentions. Another unresolved issue is the direction of the relationship between service quality and satisfaction. Parasuraman et al. (1985; 1988) proposed that higher perceived service quality would lead to higher satisfaction. Similarly, Bolton and
Draw (1991) and Bitner (1990) suggested that satisfaction was an antecedent of service quality. However, other researchers found that, instead, perceived quality led to a higher level of satisfaction (Lee, Lee & Yoo, 2000; Spreng & Mackoy, 1995; Cronin et al. 1992; Oliver, 1993). While there was no clear distinction made between service quality and satisfaction, there was greater accord in the literature that service quality was a cognitive construct, while satisfaction had a wider range of determinants including service quality.

In addition to the above issues with service evaluation, one notable issue relates to the service delay literature. Researchers casually use the terms service quality, satisfaction and service evaluations to indicate overall customer assessments of delayed service encounters without making a distinction about what aspects of a service encounter was represented (e.g., Taylor, 1994; Hui & Tse, 1996). This approach could pose a problem where a more specific area of the service encounter is under study, such as the impact of a particular strategy in a restaurant. One strong attribute of a service, such as quality of food, could overshadow the impact of another attribute on the customers’ overall assessment, making it difficult to study the individual impacts of certain attributes.

In this section, five themes of the service encounter are presented that are related to the main focus of this thesis of investigating service delays and the effectiveness of service interventions. While from a manager’s perspective, the desired outcome of a service encounter is the smooth delivery of a service, at times, customers may have to confront delays in the delivery of a service. Such delays have negative impacts on the customer service experience and can influence the long term relationship between a customer and a
service provider. The next section discusses some of the issues managers have to face in dealing with service delays.

2.3 MANAGING SERVICE DELAYS: A CRITICAL BUSINESS ISSUE

Service delays are a frustrating experience for customers and are considered an important factor in the customer’s evaluation of the service that could lead to negative impressions about the service provider (Taylor, 1994). Thus, service delays are a matter of concern for managers. As service delays can occur at different stages of a service encounter, managers are confronted with the difficult task of ensuring smooth delivery during the entire service encounter. If a service encounter is viewed as a sequence of events, some waiting is reasonable for service delivery and intentionally factored in at three different stages of a service encounter: (1) pre-process, (2) in-process and (3) post-process. For instance, in restaurants delays can occur before a customer is seated, during the delivery of food and even after delivery in the processing of payment. A pre-process wait happens before the start of a transaction and was defined by Diaz and Ruiz (2002) as the time from which a customer was ready to receive a service until the time the service commenced. An in-process wait happens during the delivery of a service. Similarly, a wait could occur, even after the delivery of a service, and is known as a post-process wait (Dubé et al. 1991). However, at times, when such waiting time exceeds a reasonable and expected time for a component of the service, the customer may be forced to wait longer than desired. Most importantly, as delays are linked to customer evaluation of service and long term intentions to reuse a service, delays can pose a number of strategic and
operational issues for managers. In section 2.3.2, an overview of such in-process and post-process wait factors is provided.

2.3.1 Overview of strategic and operational issues

Service delays can raise strategic challenges for managers. Two strategic issues are highlighted in this section: speed of delivery as a notion of competitive advantage for a business and building and keeping a long term relationship with the customer through smooth delivery, successful service recovery and favourable service outcomes. These issues are discussed in more detail.

Speed of delivery is an important aspect of service delivery for businesses, such as hotels, restaurants and theme parks. Jones (1988) provided a framework for customer-processing operations, such as restaurants, in which he regarded service response time as one of the most important attributes of service in restaurants. The success of fast food restaurants, such as McDonalds and KFC, lies in their ability to provide a very fast service to customers. Similarly, in Australia, some firms position themselves solely for customers who do not have time, such as Muzz Buzz coffee in Western Australia, which delivers premium coffee to customers in the shortest possible time (http://www.hospitalitymagazine.com). Providing timely service in restaurants and hotels is becoming even more important in busy cities, such as Sydney and Melbourne, where customers are under more time pressure. Waiting related incidents are also common in restaurants and hotels due to their reliance on casual staff. Many businesses cannot justify hiring additional full-time staff to meet the occasional peaks in demand (Sarel &
Marmorstein, 1998). According to the hospitality magazine *Restaurants USA*, service-related issues, such as service delays and slow service, were more common than food quality related problems. Similarly, Jones and Dent (1994) in an audit of restaurants found that customers reported more than 80 incidents a day involving response time problems and they further reported that timely service in restaurants was rated as the second most important attribute of service after food quality.

There are also strategic advantages in a smooth delivery, such as customer retention and long term relationship building. Smooth service delivery ensures repeat visits from customers, which is important for the long term survival of a business. Therefore, providing smooth service can give a competitive edge to a business. Every year businesses lose 27% of their existing customer base due to customers switching over to another service provider (Fitzsimmons & Fitzsimmons, 2006). Even a single bad experience can influence a customer’s decision to reuse the service. A customer waiting in line for a service is potentially a lost customer as waiting influences customer satisfaction (Maister, 1985; Hui & Zhou, 1996; Davis & Heineke, 1994; Pruyn & Smidts, 1998), service quality evaluations (Houston, Bettencourt & Wenger, 1998; Chebat & Filiatrault, 1993) and the customer’s decision to come back to a firm (Houston, Bettencourt & Wenger, 1998; Taylor, 1994). Therefore, waiting is an issue of tension for both customers and service providers (Houston, Bettencourt & Wenger, 1998).

The first operational issue related to service delays is balancing demand with supply. Services are produced and consumed simultaneously and, therefore, cannot be
inventoried. On the other hand, demand usually fluctuates, making it difficult for operational managers to anticipate demand and adjust supply. One proposed solution is to develop a reservation system. However, reservation systems have two main problems: (1) the customer made a booking but does not turn up and (2) the reservation system works well only when there is fixed and predictable capacity (Dickson, Ford & Laval, 2005). Reservation systems are, thus, not as effective for service businesses with variable demands, such as restaurants or theme parks. As a result, managers are confronted with the difficult task of adjusting variable demand to capacity for such businesses. Consequently, managers tend to have an element of delay built into the delivery of the desired service and deliberately plan to inventory demand. However, often waits are neither planned nor desirable (Bebko, 2000) and, therefore, cannot be totally avoided. Consequently, there are times when customers are forced to wait for a service. Therefore, it is important that, if delays cannot be totally avoided, new and innovative strategies are developed to minimize their negative impacts.

One strategy is to initiate successful recovery from a potential service failure such as a delay. This issue was highlighted in section 2.2.4. Managers can take a proactive approach to recovery by initiating action before a consumer complains or can act reactively to a customer’s complaint. However, in both cases, the main objective should be making right what went wrong (Smith, 1998). Maister suggested that recovering from a bad waiting experience is difficult. The service recovery paradox (McCollough & Bharadwaj, 1992) indicates that a successful recovery is possible and could cancel the effect of initial failure. However, Bitner et al. (1990) linked successful recoveries to the
way the recovery was executed. They suggested that an inappropriate response to a service failure could increase the dissatisfaction of a customer more than that derived from the initial failure. Therefore, while managers try to ensure the delivery of smooth service in the first place, in the case of an inevitable service delay, managers need to execute recovery effectively.

In summary, service delays generate a number of strategic and operational issues for managers. Substantial evidence has suggested the negative impacts of delays on various service outcomes. The next section looks exclusively at the impacts of service delays at two stages of service encounters: (1) during a service encounter (in-process customer feelings, thoughts, actions and behaviour) and (2) after a service encounter (post-process customer overall assessments, evaluation of a service encounter).

2.3.2 Specific Service Outcomes

As identified in the previous section, one of the important issues relating to service delays for managers is that delays have a strong influence on different service outcomes. The term *service outcome* in this thesis is used as a blanket term to include different types of outcomes. These outcome classifications are based upon the two stages of a service encounter, namely in-process outcomes, which refer to customer’s feelings, thoughts and actions during a service encounter, and post-process outcomes, which influence transaction based evaluations and long term assessments of a service experience as shown in figure 2.3.
In-Process Outcomes

Waiting can influence a customer in many ways. During a service encounter, a customer could feel, think and understand a situation (Lazarus & Folkman, 1984) through affective or cognitive responses. This section briefly outlines a series of possible actions a customer might take in the wait situation, shown in figure 2.3. Customer feelings are usually represented by the construct of affect. Russell (1978) defined affect as an internal state comprised of pleasure and arousal.

Similarly, Hui and Tse (1996) used the term affective response to represent customer feelings of anger, dissatisfaction and annoyance during a wait. Thinking processes included understanding and interpretation of a wait situation and cognitive dimensions, such as acceptability of wait, sense of control, locus of control and cost of waiting (Hui & Tse, 1996; Maister, 1985; Houston et al., 1998). There is no clear distinction in the waiting literature between the affective and cognitive dimensions of a customer waiting experience. A few researchers (e.g., Taylor, 1994; Houston et al., 1998) have either combined both dimensions as affect or focused on affective dimensions alone (Diaz & Ruiz, 2002), without clearly distinguishing between the cognitive and affective responses of a customer. However, Hui and Tse (1996) argued that the responses are different and both should be investigated to improve understanding of a customer waiting experience. Similarly, others supported the idea of a distinction between evaluation based on affective and cognitive responses (e.g., Verplanken, Hofstee & Janssen, 1998).
Figure 2.3. In-process and post-process stages of service encounter and service delays.

The affective dimensions of a customer experience can be divided into two types of customer reactions: uncertainty reactions with associated feelings of uneasiness, unsettledness, and anxiety and anger reactions with associated feelings of annoyance,
irritation and frustration. Affect can be positive or negative (Taylor, 1994). Oliver (1993) suggested three types of negative affect. The first negative affect is triggered by the service provider, the second apparently directed inward at the user him/her self and the third is situational.

There has been strong evidence that waiting provokes anger and could cause a broad range of unpleasant responses, such as boredom, irritation, anxiety, tension, helplessness and even humiliation (Carmon et al., 1995; Taylor, 1994; Houston et al., 1998; Díaz & Ruiz, 2002). Similarly, negative emotions, like anger, uncertainty (Hui & Tse, 1996; Taylor, 1994) and helplessness (Hui & Zhou, 1996), were reported as the result of a negative waiting experience. Taylor (1994) noted that those customers who felt that the delay was under the control of the service provider felt more unhappy and angry with the service provider. Similarly, other studies showed that customers who attributed the reason for the delay to the service provider experienced increased anger due to the delay (Díaz & Ruiz, 2002). Bougie, Pieters and Zeelenberg (2003) depicted customer feelings of anger as: they would explode; they were overtaken by their emotions and were thinking of violence; were letting themselves go; or might behave aggressively. Similarly, waiting created uncertainty, a situation disliked by customers because uncertainty made planning difficult (Leclerc et al., 1995). Maister (1985) suggested that, when customers did not know how long they had to wait, they experienced uncertainty and associated feelings of uneasiness and anxiety. Uncertainty was a key variable that explained negative responses to waiting (Osuna, 1985). Similarly, Taylor (1995) found that customers were more uncertain when they felt the wait was too long.
Various explanations have been given for feelings of uncertainty and anger, the two most reported emotions of a negative wait experience. Larson (1987) considered that delays were obstacles to service and when an obstacle blocked the satisfaction of a need, frustration and anger resulted. Likewise, waiting in a queue also implied opportunity costs for a customer. However, if there were no valuable alternative, tension was slight (Leclerc, Schmitt & Dubé, 1995). Thus, when attractive alternatives or overlapping goals were present, tension was increased (Houston et al., 1998). Maister (1985) regarded uncertainty as a key reason for customer anger. Therefore, if the economic cost of waiting was too high and the customer anticipated a heavy loss, he/she experienced a negative affective response due to the perceived threat (Larson, 1987; Leclerc, Schmitt & Dubé, 1995). However, Berkowitz (1993) argued that any unpleasant state of affairs, such as physical pain and unpleasant temperatures, could also give rise to customer anger. Hence, an unpleasant physical state might confound the cause of customer anger (Pruyn & Smidts, 1999; Baker & Cameron, 1993).

However, the most widely accepted explanations for customer anger in waiting situations were attribution and inequality. People were inclined to make a causal link between events and causes (Nie, 2000). For instance, Nguyen and McColl-Kennedy (2003) suggested that customer anger at the service provider was triggered if a customer felt the service provider was responsible for a service failure. According to attribution theory (Heider, 1958; Weiner, 1996), people generally made causal attributions about their own as well as other people’s behaviour. Therefore, a customer might attribute the cause of the delay to the service provider. Houston et al. (1998) found that customers who thought
that the service provider could have controlled the queue reported higher negative affect. Similarly, Taylor (1995) found that airline passengers who attributed the delay to the service provider felt more anger towards the provider for not keeping up to the promise of timely service and responsibility.

In addition, other important factors that could trigger customer anger were the perceptions of justice through service provider interactions with people (interactional justice), process (procedural justice) and outputs (distributed justice). Maister (1985) also supported the idea that fair waits seemed shorter. Customers get angry about the unjust way a service provider manages the queue (Larson, 1987). Even one person’s intrusion into a queue could generate negative feelings among customers (Dubé, Schmitt & Leclerc, 1992). Therefore, social justice in a queue plays an important role in the customer waiting experience (Larson, 1987). Similarly, Butcher et al. (2006) explored other dimensions of justice and found that employee friendliness towards a customer played an important role in a service experience.

Cognitive responses within the in-process outcomes are shown in figure 2.3. Waiting can generate different types of cognitive responses. Four types of cognitive responses have received most attention in the waiting literature: (1) acceptability of a wait, (2) customer sense of control over situation, (3) attribution assessment of a delay and (4) customer assessment of the costs of waiting.
The cognitive response of acceptability of wait refers to what aspects of a wait are acceptable to a customer. This reflects a customer’s tolerance to a delay (Pruyn et al., 1998). However, tolerance to wait could change over the duration of a delay, as Maister (1985) illustrated by giving the example of a patient in a waiting room that was told that the doctor would be delayed 30 minutes. The customer experienced initial annoyance but then relaxed and accepted the delay. Customer tolerance is also linked to the length of delay (Pruyn et al., 1998). Therefore, a longer wait has lower acceptability. However, tolerance could also depend on when and where the delay occurred, as reported by Katz, Larson and Larson (1991). They found that customers who visited a bank at different times of the day and on different days of the week showed different tolerance levels. Other researchers, such as Houston et al. (1998), linked acceptability of wait to internal goals. They stated that acceptability was equalled or exceeded by the positive utility provided by reaching the goal to the degree that outcomes were essential, where leaving the queue was not an attractive option and the customer felt trapped, thus, causing an increase in tension. They further suggested that consumers could not change the queue length but they might cope by reinterpreting the situation in a manner that reduced tension (e.g., given its importance, the wait is acceptable) (Hui & Tse, 1996). Therefore, customers may evaluate whether a delay time is acceptable or not based upon whether the time allows them to reach the desired goal.

Central to the concept of acceptability of wait is cognitive appraisal. Once a customer knows about the length of a delay, either by movement of a queue or by being provided with such information by a service provider (Hui & Tse, 1996), the customer reinterprets
the situation. Cognitive appraisal is also an effective coping strategy when there is no appropriate manner to change or escape from the situation (Lazarus, 1991). Thus, when a customer cannot shorten the length of the delay (behavioural control) or cannot avoid waiting (decision control), the customer reinterprets the situation to handle the problem (Hui & Tse, 1996) and compares it with an internal standard of expectations (Hui & Zhou, 1996). The outcome of such appraisal determines whether or not a customer accepts a delay (Houston et al., 1998).

The second cognitive response refers to whether customers think they have control of the situation. Hui and Tse (1996) and Hui and Zhou (1996) suggested that a lack of control and helplessness generates negative affect. Lack of control of the situation creates stress, which intensifies if continued. Perceived control affects the way waiting time is experienced (Haynes, 1990). Lefcourt (1976) referred to sense of control as a generalised expectancy about the extent to which reinforcements are under internal (one’s own belief) or external (people, fate, luck or social structures) control. Hui and Bateson (1991) provided empirical evidence of the role that a sense of control plays in influencing consumers’ emotional feelings in a service encounter.

The third cognitive response is the customer’s assessment of the cost of waiting in terms of physiological, emotional and financial costs (Houston et al. 1998). Maister (1985) suggested that a customer is willing to wait longer for an important transaction. Similarly, Meyer (1994) argued that different levels of potential motivation govern the maximum amount of energy that an individual is willing to expend in awaiting an outcome. This can
differ between those who are less or more attracted to their goals. Those who are highly attracted take any action which can indicate progress to a goal (Hui, Thakor and Gill, 1998) and their acceptability is linked to the importance the customer assigns to a transaction (Houston et al., 1998).

Both affective and cognitive responses influence customer actions during a service encounter and evaluation of a wait experience (Mattila & Wirtz, 2000). According to Hui and Tse (1996), a customer’s acceptability of a wait affects service evaluation indirectly through affective responses. Similarly, Taylor (1994) reported that negative reactions influence customer service evaluations and confirmed a relationship between affective responses and cognitive responses in her study of airline passengers. Several other studies provided support for a strong link between customer’s affective and cognitive responses and consumer’s satisfaction judgement (Wirtz & Bateson, 1999). However, most researchers, who investigated service delays, mainly focused on how such cognitive and affective responses influenced post-process evaluation. Such emotions and responses were generated by events taking place during a service encounter, hence, could influence customer’s decision making processes during a service encounter. Nguyen and McColl-Kennedy (2003) identified that events could be internal or external to a service encounter and responsible in the formation of anger and stress. Similarly, Katz et al. (1991) suggested that events during a service encounter could lead to customer’s action, such as leaving the service. In particular, the literature on service delays in restaurants has given little attention to customer actions during a service encounter, such as their ordering, tipping, leaving and complaining behaviours.
Post-Process Outcomes

A post-process outcome is a customer’s evaluation of a service encounter. Such evaluations are based upon the customer’s service experience. A service delay is generally viewed by a customer as a negative experience (Carmon et al., 1995; Hui & Tse 1996; Dellaert & Kahn, 1999; Nie, 2000) and, as such, has a negative effect on customer evaluations of a service (Maister, 1985; Katz, Larson & Larson, 1991; Taylor, 1994; Hui & Zhou, 1996). One factor that could influence a customer’s evaluation of a service encounter is the cost of waiting. For instance, customers may have perceived emotional and physiological costs (Osuna, 1985), therefore, might view such waits as either an investment to achieve a particular consumption goal or as a complete waste of time (Meyer, 1994). Negative experiences can influence the customer’s evaluation of a service encounter and can lead to a negative evaluation of a service provider.

Post-process outcomes can be further classified as transaction-specific, involving satisfaction or long term assessments, such as repurchase or word of mouth intentions. Satisfaction, as a post-process outcome, has received more importance as a benchmark of customer assessment. Mostly, the term satisfaction has been used to refer to overall satisfaction with a service encounter without making a distinction between service encounter satisfaction, satisfaction with an employee or satisfaction with the organisation. Researchers have usually linked negative experiences with customer evaluation of satisfaction. Substantial evidence has suggested that waiting has a profound effect on customer satisfaction (e.g., Maister 1985; Katz et al., 1991; Baker & Cameron, 1996; Hui...
In general, the actual length of waiting time has a direct influence on customer’s service evaluation and satisfaction. The longer a customer has to wait for a service, the lower a customer will rate his or her satisfaction with the service encounter. Maister (1985) suggested that a customer would be less satisfied if he/she were made to wait longer. More specifically, Tom and Lucey (1997) found that customers who were made to wait in a supermarket were less satisfied with the server. Similarly, Durrande-Moreau (1999) concluded that there was a clear link between time duration and satisfaction. Numerous other studies confirmed a strong relationship between time duration and satisfaction (Katz et al., 1991; Dellaert & Kahn, 2000; Naumann & Miles, 2001; Diaz & Ruiz, 2002).

Similarly, the physical environment influences service outcomes such as satisfaction with the service provided. Baker and Cameron (1996) noted that a great deal of focus was given to the time dimension and customer perception of time. However, an uncomfortable physical waiting environment can also influence a customer’s perception of time and eventually his/her satisfaction rating. As the customer has to spend time in a physical environment, an unattractive environment will make waiting difficult.

Along different lines, Meyer (1994) linked customer satisfaction to customer goal directed behaviour and suggested that external factors of a waiting event, such as goal attractiveness, influenced a customer’s recollection of events congruent to his personal
and individual goals and, therefore, would influence customer satisfaction. Hui and Tse (1996) found that customers who were informed about the expected length of a delay were more satisfied with the service encounter.

As discussed in section 2.2.5, one other important post-purchase evaluation is longer term customer assessment of quality of service. Service quality assessment is an important determinant of a long term relationship with a customer. Usually, speedy delivery of a service is regarded as a sign of good quality of service and waiting as a sign of poor service quality (Taylor, 1994). Dubé, Schmitt and Leclerc (1991) reported a negative impact of service delays on customer service quality assessment. Similarly, Chebat and Filiatrault (1993) found a strong link between waiting time and perceived service quality. The responsiveness items of the SERVQUAL scale have been used by researchers to determine customer assessment of delay in service (Clemmer & Schneider, 1993).

While researchers have mainly focussed on satisfaction as a benchmark of the customer assessment of a wait experience, a customer’s future intentions have received little attention. This area has not been well researched because more emphasis has been given to customers’ post-purchase evaluations (satisfaction and service quality). Although satisfaction is a necessary step towards loyalty formation (Zeithaml, Berry & Parasuraman, 1996) and service quality is an important determinant in long term relationships, one bad or good experience with a service provider could influence a customer’s intention to buy from a service provider (Czepiel, Solomon, Surprenant & Gutman, 1985) or not to repurchase (Nie, 2000). A wait experience could affect a
customer’s decision to return to an establishment (Chebat & Filiatrault, 1993; Houston et al., 1998). Hui and Zhou (2003) pointed out that, although many researchers have provided a theoretical basis for studying waiting time, satisfaction and return frequency, they failed to investigate this relationship. They found no clear relationship between a customer’s satisfaction and return frequency in a restaurant study and suggested further research. Similarly, little research has been done to identify customer intentions to spread positive or negative word of mouth advertising for a business after confronting a delayed service encounter. Such research is required to further establish the long term effect of service delays.

In summary, service delays have a strong influence on both in-processes and post-process outcomes. Such impacts can lead to a positive or negative assessment of a service encounter. As managing negative affective responses is important for managers to reduce the impact of waiting, the next section highlights two common approaches available to managers for wait-management derived from the operations and service marketing literature.

### 2.4 MANAGING SERVICE INTERVENTIONS

As described in the previous section, the literature on services marketing and services operations management has mostly considered waiting as a negative experience (Kumar, Kalwani & Dada, 1997). Customers who are forced to wait for service tend to experience a broad range of unpleasant responses, such as boredom, irritation, anxiety, tension and
helplessness (Dubé-Rioux, Schmitt & LeClerc, 1988; Katz, Larson & Larson, 1991; Osuna, 1985; Carmon et al., 1995). Customers remain uncertain and feel uneasy because they are unaware of what would happen next (Taylor, 1994; Maister, 1985) and often respond with anger and associated feelings of annoyance, irritation and frustration (Taylor, 1994). Therefore, a waiting experience could generate negative emotions that influence the assessment of a service encounter, such as satisfaction (Pruyn & Smidts, 1998; Hui & Zhou, 1996; Davis & Heineke, 1994; Katz, Larson & Larson, 1991) and the evaluation of service quality (Houston et al., 1998; Chebat et al., 1993). Hence, the proper management of the customer’s negative experiences is a critical issue for managers.

To minimise such negative effects, managers intervene in the service delivery and attempt to enhance outcomes. The idea of a service intervention is defined in this thesis as any action a manager or serving staff can take to minimize the effect of a delay. Before key service intervention strategies are discussed, a brief review of the literature from service operations management and marketing is presented that identifies the two main approaches to service interventions. These two approaches are discussed next.

2.4.1 Twin approaches

The two main approaches to service intervention are termed objective and subjective, respectively. The latter approach is also known as perception management. Real or objective time was the initial focus of researchers and emphasis was on ways in which queue structures could be improved to reduce the time of delivery (Durrande-Moreau,
1999). This emphasis was logical as there was strong evidence to support the fact that the actual length of a delay had a significant influence on customer evaluation of a service encounter (Hornik, 1984; Maister, 1985; Taylor, 1994; Hui & Tse, 1996; Houston et al., 1998). However, other researchers (e.g., Pruyn & Smidts, 1996; Maister, 1985) suggested an alternative approach to waiting and stressed the need to look at the subjective nature of time. These twin approaches are discussed, largely from the perspectives of the operations and services marketing literature.

*Operations management approach*

The operations management literature has advocated reducing the objective time of a wait and has focussed on ways to reduce the actual customer waiting time. This wait improvement could be achieved by improving the overall design of the delivery processes (Dawes & Rowley, 1996), such as the number of lines formed, how customers join waiting lines and how each line was serviced. Modifying old processes with new and efficient processes could also reduce waiting time. Thus, service process design is likely to assist business in improving service operations and reducing customer waiting (Murdick, Render & Russel, 1990). For instance, developing an efficient queue system could help avoid the *slips and skips* problem (Davis & Heineke, 1993). Improvements in queue structures could minimize the time required to deliver a service (Nie, 2000). However, Davis (1991) argued that such approaches were usually expensive to implement and typically required adding more resources, such as increasing the number of servers. Further, physical space constraints, availability of trained employees, computer problems, fiscal concerns and other higher service priorities, places bounds on
this approach (Tom & Lucey, 1995). Likewise, the intangible nature of services and the inherent difficulty in predicting demand patterns makes it even more difficult to implement operation led solutions. This is more evident in high contact services where customers must be present. One commonly used management practice is to employ variable staff levels based upon predicted demand. For example, this is common in the hospitality industry where variable levels of servers are assigned at different times of a day. The same technique is commonly used in restaurants where more staff is employed over a weekend. However, at times when restaurants experience unexpected demand levels, a service delay is usually inevitable.

*Perception management approach*

The alternative approach to managing service delays is through perception management. This approach focuses on the reduction in perceived waiting time when the actual waiting time cannot be reduced. Maister (1985) contended that both customer perception and expectation about service operations play a role in determining satisfaction and suggested looking at the subjective nature of time. His eight principles were widely expounded and became the basis for many managers to follow. Along similar lines, Hornik (1984), who is known for his work on *time*, suggested giving more importance to subjective time rather than simply trying to reduce objective time. A focus on subjective time becomes more useful when customers can make time estimation errors (Pruyn & Smidts, 1996). Katz et al. (1991) also pointed out that customers made time estimation errors and further reported that people tended to overestimate the amount of time they spent waiting in line. Such overestimation could result in longer perceived time, thereby resulting in a more
negative appraisal of a wait (Pruyn & Smidts, 1996; Clemmer & Schneider, 1993). Meyer (1994) reported similar findings that customers tended to overestimate time, particularly when under time pressure. Affective states (such as irritation because of waiting) might also influence time perception and mood states. For instance, Hornik (1992) reported that mood states could moderate the way people estimated the duration of recent events, as well as their stated temporal orientation. He suggested that positive and negative emotions resulted in underestimation and overestimation of duration. In this thesis, the perception management approach is the main focus of the research project and is discussed below.

To reduce customer perceived time, researchers have identified numerous techniques. For example, Baker and Cameron (1996) suggested that the physical environment influences customer’s perception of time. Similar findings were reported by Pruyn and Smidts (1996) who found that physical comfort provided by an environment influenced customer reactions and their perception of time. Maister (1985) recommended keeping a customer busy because unoccupied time felt longer than occupied time. That is, time appeared to pass more quickly or fly when people occupied their time, especially if they were having fun (Larson, 1987; Davis & Heinke, 1994; Nie, 2000). Similarly, Taylor (1994) reported that the degree to which an individual’s time was filled influenced reactions to a delay. Consequently, the challenge to service organizations is obvious: to fill this time in a helpful way and make people feel relaxed and more comfortable. Taylor (1995) found support for the idea of keeping a customer busy and found that magazines provided for waiting consumers were effective time fillers. Katz, Larson and Larson (1991) found that
when a bank provided a news board, customers were more relaxed and tended to underestimate waiting time compared to those without access to a news board.

Music was also found to distract a customer and reduce customer time perceptions (Kellaris & Altsech, 1992; Routhieaux & Tansik, 1997). In one study, females were reported to be more positively influenced by music when played at low volume. Respondent females underestimated time when listening to music (Cotte, Ratneshwar & Mick 2004). Conversely, some researchers found a negative effect when using such techniques to fill a customer’s time. For instance, Durrande-Moreau (1999) reported that time fillers had only a small effect on perceived waiting time and this distraction technique depended on the context studied. Similarly, Pruyn and Smidts (1998) reported that entertainment during a wait actually extended the perceived waiting time. Furthermore, Hui, Dubé and Chebat (1997) noted that customers who were listening to the music in a bank reported longer duration estimates than those who were not listening. Similarly, Kellaris and Kent (1992) suggested that the more consumers enjoyed background music, played during a time period, the longer they perceived the time period to be.

The previous discussion highlights the nature of perceived time and how it can be modified. Thus, to improve the customer’s perception of a wait, an employee or manager may intervene by taking action to reduce the negative impact of a wait. Such actions are referred to as service interventions in the service marketing literature. However, not all service interventions enhance the service experience. The next section provides a more
in-depth discussion about the nature of service interventions and the different types of commonly used service interventions.

2.4.2 Nature of Service Interventions

From a service marketing perspective, speed of delivery is viewed as a measure of service quality, especially in businesses, such as restaurants. Slow service could be classified as a service failure, which requires a successful service recovery and special efforts to accommodate a customer during such encounters (Berry & Parasuraman, 1991). Accordingly, service providers and employees are expected to do something to relieve a customer from the associated negative impacts of waiting. Service interventions are what a manager or a staff member can do to manage a wait situation in a service. Both what is done and how it is done influence the customer’s perception of service (Levesque & McDougall, 2000). Examples of such interventions can be offering an apology or compensation, showing a visible effort to resolve a problem and providing additional information to a customer about the failure.

Two commonly used information intervention techniques are the main focus of this thesis. The first and the most researched information intervention is known as waiting duration information. This intervention addresses the expected length of delay. The second information intervention, closely associated with waiting duration information but which can be provided alone, is an explanation for the delay and is referred to, in this thesis, as cause information. These two service interventions are discussed in the next section.
2.5 TWO KEY SERVICE INTERVENTIONS

In the previous section, twin approaches to manage waits and the nature of service interventions were discussed. Two of the most important service interventions commonly employed as part of a wait-management strategy are duration information and cause information. These two interventions are discussed in more detail below.

2.5.1 Waiting duration information

Simply stated, this intervention means providing information, in one form or another, to indicate the expected time for a service to be delivered. Waiting duration information can be provided at different stages of a service encounter. Examples of such interventions included: prior notification of busy times (Clemmer & Schneider, 1993), information on the expected duration of the wait at the start of the delay, which can be both implicit (customer anticipates from the length of the queue) and explicit (when service provider informs the duration of wait) (Hui & Tse, 1996; Hui & Zhou, 1996), and counter information (Taylor & Claxton, 1994; Katz et al., 1991). Prior notification of a delay is provided before the start of a service encounter. For example, if a person books a restaurant table for two and is informed at the time of booking that the restaurant is heavily booked with a wait of 15-30 minutes extra before being seated and served the meals, that customer will likely be more comfortable with the wait. Notifying customers that a delay is likely before the service encounter was reported to have a positive impact on customer evaluation (Clemmer & Schneider, 1993). However, this is not a common practice in restaurants and may only be useful for a restaurant that is constantly under demand pressure. Information can be presented at regular intervals, using such devices as
digital timers/counter and electronics board to inform customers about expected service times. This type of information, referred to as *counter information*, is provided through a constant update to customers. For example, in some fast food restaurants in Australia, such as Dominos, a digital counter displays the customer name and expected length for the delivery of the pizza. This practice is primarily found in fast food restaurants and is not as common in traditional restaurants. In this thesis, the term *duration information* refers to the waiting duration information provided during a service delay.

Providing duration information has positive effects on customers as they are inclined to make a link among various events (Nie, 2000). When a product or service fails, people engage in causal attribution (Weiner, 2000). However, if no information is provided, people tend to guess and make wrong estimations of the time of a delay. Hui and Tse (1996) and Hui and Zhou (1996) undertook the most comprehensive work in this area. In two related studies, they set out to determine the effectiveness of waiting duration information for different length of waits. Both studies were conducted in a university environment. The results were mixed. Duration information was found useful for short and intermediate waits but not as useful for longer waits. In both studies, the researchers (Hui & Tse, 1996; Hui & Zhou, 1996) found that duration information affected customer evaluations through customer affective responses and acceptability of wait. They reported a positive impact of providing duration information on customer time perceptions overall.

One major benefit reported in the literature was that providing duration information reduced the uncertainty associated with waiting (Maister, 1985; Osuna, 1985). As a
result, a customer had a greater sense of control over the situation (Hui & Tse, 1996). Houston et al. (1998) found that information triggered a customer’s cognitive function, which could result in a greater acceptance of a wait. However, there are also alternative views that challenge the positive aspect of providing duration information. The following discussion provides more insight into the suggested benefits of providing duration information along with an alternative view.

Uncertainty reduction

As previously discussed, waiting for service can generate uncertainty in a customer’s mind. When customers do not know how long they have to wait, they remain uncertain and alert to queue movement (Nie, 2000). Remaining uncertain generates negative affective responses (Hui & Tse, 1996); accordingly, Maister (1985) pointed out that known waits were better than unknown waits. Customers sometimes need to plan ahead and uncertainty makes future planning difficult (Dubé, Schmitt & Leclerc, 1995). More specifically, Nie (2000) considered waiting for a service as equivalent to blocking the achievement of a customer goal. Whereas, providing information could indicate progress towards a goal and decrease customer stress levels (Hui et al., 1998; Nie, 2000). Similarly, uncertainty has a negative influence on a customer’s mood (Hornik, 1984), perception of time (Ahmadi, 1984) and, more importantly, satisfaction with a service (Taylor, 1994). Therefore, any information that allows a customer to plan ahead could reduce uncertainty with the wait experience (Osuna, 1985) and, as a result, reduce the stress levels of a customer (Larson et al., 1997).
However, some researchers cast doubts on whether providing duration information has positive impacts on customers. For instance, Dellaert and Kahn (1999) did not find a direct relationship between providing duration information and stress or anxiety reduction in their study. More generally, Osuna (1985) suggested that providing information about the waiting duration might not be the most effective tool to minimize consumer dissatisfaction. Moreover, some researchers identified situations in which providing duration information might even have a negative impact. For instance, Hui and Tse (1996) and Hui and Zhou (1996) reported that providing such information was only useful in short waits (5 minutes) but not very useful for longer waits. Similarly Lazarus and Folkman (1984) argued that stress increased for a customer who did not want certainty and was provided with information on the length of the expected wait. Miller (2004) also found in her study that participants who disliked a task reported negative impacts of duration information. Consequently, in some situations, a customer can take unfavourable actions, such as leaving a queue. Likewise, Katz et al. (1991) voiced their concern that a customer might leave once knowing the expected length of wait. Similarly, a customer might leave temporarily to come back later when it was less crowded (Hui & Tse, 1996).

**Sense of control over the situation**

Scholars reported that providing duration information improved a customer’s sense of control of a situation. Control was defined as a person’s need to demonstrate his or her competence, superiority and mastery over the environment (Hui & Tse, 1996). Averill (1976) suggested three ways in which one can feel in control of a situation. First, was
behavioural control, which referred to a customer’s sense of control over choices of ways to deal with a service delay. Customers could do something themselves to shorten the wait (Hui & Tse, 1996). For instance, the customer could read a magazine (Taylor, 1994) or interact with other fellow sufferers during the wait (Pruyn & Smidth, 1998). The customer could also decide to fill his time with a distraction, like TV or music (Oakes, 2003). The second type of control was decision control, which referred to a customer’s ability to make a decision to leave, stay or do nothing. Katz et al. (1991) thought that customers would leave if provided with information about the wait. Whereas, Whitt (1999) suggested that providing information reduced reneging (leaving the queue after joining) because information allowed a customer to leave even before joining a queue. The third type of control was cognitive control, a customer’s ability to be fully appraised of a situation. Hui and Tse (1996) found that providing duration information offered an anchor for customers and helped in a more accurate estimation of time. However, they did not find that providing information led to customers feeling a better sense of control over the situation.

Meyer (1994) provided a different explanation of what improved a customer’s sense of control of the situation. He argued that a feeling of personal control resulted from a sense of one’s own effectiveness in pursuing important goals. Therefore, a customer felt a greater sense of control if the information confirmed progress towards a goal (Hui, Thakor & Gill, 1998). Similarly, the theory of self-determination (Ryan & Deci, 2000) stated that control orientation could differ between customers based upon their goals. Those customers who were more goal-oriented saw their own activity as being more self-
determined rather than controlled by the environment. Hence, such customers would do more to achieve a sense of control of the situation.

*Distraction from passing time*

The third area relating to duration information was the role that distraction played. Zakay and Hornik (1991) stated that a person naturally was occupied with the passage of time and actively engaged in time estimation during the whole waiting period. Therefore, any distraction that could take away the cognitive timer and reduce the perceived waiting duration improved her/his satisfaction with the service (Chebat et al., 1993). Some researchers supported this model referred to as the *attentional model* by Zakay (1989). For instance, Larson (1987) and Maister (1985) noted that the presence of *empty* or *unfilled* time could lead to boredom. Similarly, Tom and Lucey (1999) found that those customers who were socializing with the checkers reported a shorter perceived waiting duration at the counter than those who did not. In a different context, Weinberg (2000) also found positive results from providing a waiting time anchor while students downloaded a page. He noted that students were more focused on the time anchor and, thus, less focused on the actual download time. Similarly, Kellaris and Kent (1992) posited that filling waiting time during a delay might counteract the delay’s negative impact by increasing cognitive activity during the wait because this distracted from the wait itself. Therefore, providing duration information could shorten the perceived duration and time overestimation due to customer distraction (Katz et al., 1991) via taking away the customers’ cognitive timer (Zakay, 1989) and improving service evaluation overall (Ahmadi, 1984; Chebat, Gelinas-Chebat & Filiatrault, 1993).
However, other researchers, such as Naumann et al. (2001), argued that a customer might not be distracted if the length of duration of wait was long because providing information to customers would not always result in shortening the perceived duration and only fill their time. As a result, those customers who had to wait for very long periods of time would be more likely to find ways to fill their time while waiting. Similarly, Mowen et al. (1993) argued that distraction was not always possible. There were certain situations when it might be difficult to influence the customer’s perception of time, such as in the highly stressful environment of an emergency room setting. In such situations patients might have poor recall of the information given.

Further, two important models of time perceptions, the contextual change or segmentation model by Block (1990) and the attentional model by Zakay (1981), provide a conflicting account of whether distraction is helpful. For instance, the contextual change (or segmentation) model of time perception predicts that the more changes there are in the environment during an interval, the longer its perceived duration. This would imply that an intervention that segments the time interval into easily remembered chunks of information increases the perceived duration of waiting. Applying this to the effect of duration information, it might mean that duration information would actually increase the perceived waiting time.

However, Zakay’s (1989) attentional model predicted that when more attention was given to the passage of time, the longer the duration appeared. Therefore, any distraction
would have a positive effect on perceived duration. Zakay (1989) also suggested that the attentional model explained prospective time estimates (when the customer knew in advance that he would have to give a time estimate after the waiting), whereas, retrospective time estimates (when a customer did not know in advance that he would be asked to give a time estimate) were explained more accurately by the contextual change model. He explained that this was more appropriate because for people in a waiting situation, time can be considered salient.

*Cognitive appraisal effect*

One other benefit of providing duration information is that the information facilitates customer reinterpretation of a wait (Hui & Tse, 1996) and is particularly useful when no other physical means are available to deal with a situation (Folkman, 1984). The interpretation results in acceptability of the wait. Cognitive reappraisal centred on the consumers’ evaluation of whether the wait was acceptable (Hui & Tse, 1996). Maister (1985) described this process of how a patient accepts a wait as: “If a patient in a waiting room is told that the doctor will be delayed thirty minutes, he experiences an initial annoyance but then relaxes into an acceptance of the inevitability of a wait” (p. 118).

Acceptability to wait was linked to coping mechanisms. Lazarus (1991) identified two approaches, which could lead to coping with a situation such as waiting. The first approach was via problem solving wherein a customer looked for options to resolve the threat induced by a situation. The second approach was emotionally based where a customer regulates his/her emotions into accepting the wait. If a customer successfully
cope with the situation, either by managing emotions or problem solving, anger was reduced. Furthermore, the situation would be less stressful for he/she would have a greater sense of control of the situation (Hui & Zhou, 1996).

While researchers suggested mostly positive benefits from the provision of duration information, empirical researchers to date have found mixed and conflicting results. As discussed before, a few studies found that providing duration information improved customer satisfaction with a service encounter (Carmon, 1991; Hui & Tse, 1996; Hui & Zhou, 1996; Durrande-Moreau, 1999). However, Hui and Tse (1996) reported that providing duration information was useful for short delays and not for longer delays. They provided an explanation that, when a delay is long, a customer might start focusing on the cost of waiting. Similarly, Miller (2004) and Begri (2004) found that providing duration information might not always be beneficial for customers. Hui and Zhou (2006) reported that the effect from providing duration information was influenced by which other type of information was provided at the same time as duration information. Therefore, extant research does not offer a clear answer for business on whether to provide or not to provide duration information during the wait situation.

2.5.2 Explanation of cause of wait (cause information)

Providing duration information is one of the interventions that can influence a customer’s evaluation of the service encounter. However, once a customer knows the expected length of delay, the customer might also be interested to know what caused the delay. Some customers may even respond to cause information alone. *Cause information* is
defined as the explanation an employee provides to inform the customer of the reasons for the wait. Maister (1985) noted that unexplained waits were longer than explained waits. He suggested that providing information on the cause of a delay was better than hiding details of a delay. Similarly, Coye (2003) linked customer negative emotions, such as frustration and anger, to the service provider’s inability to provide the reason for a delay. Likewise, Groth and Gilland (2006) also reported the positive effect of providing cause information on customer satisfaction.

Once cause information is provided, a customer evaluates the consequences of that information through cognitive appraisal (Lazarus, 1984). There may be different outcomes of this cognitive process. The outcome of a cognitive process can lead to a customer blaming the service provider for the delay. Such attributions could then further lead to negative emotions, such as anger, uncertainty and feelings of helplessness (Taylor, 1996). A customer may also feel that the situation is out of the control of the service provider and not blame anyone for the delay. The customer can also blame himself/herself for reasons, such as using the service or other decisions that have led to his current situation.

There is support for the view that such attributions can lead to negative emotions and negative service evaluations. For instance, Taylor (1994) examined different attributes and their effect on affect and service outcomes. She found that airline customers, who attributed the delay to the service provider and felt that the service provider had some control over the delay, negatively rated the service encounter. However, in some
situations, a customer might consider himself/herself as the reason for the delay (Clemmer & Schneider, 1993). Such behaviour is explained in dissonance theory. According to dissonance theory (Festinger, 1957), a person experiencing two dissonant cognitions would feel arousal and discomfort and be motivated to reduce these thoughts by changing one of the two cognitions. For instance, a customer may face a situation where he/she is experiencing a delay for which he/she feels somewhat responsible for the decision that led to the current situation. According to dissonance theory, he/she may justify his/her decision rather than blame the service provider.

Consequently, the benefits of providing cause information are dependent upon the outcome of a cognitive process that determines whether the cause information is useful or not. If a customer blames the service provider, providing cause information could lead to conclusions that may have a negative effect, as Taylor (1994) found in her study. However, if a customer feels that circumstances are beyond the service provider’s control or regards himself/herself as the reason for the delay, providing cause information could be useful in that situation. Therefore, the result of such cognitive processes may differ from one situation to another as conditions vary.

Contrary to Maister’s (1985) and Osuna’s (1985) recommendation to provide the reasons for the wait to a customer, Clemmer and Schneider (1996) suggested that explanations should not be provided when close to the end of a service encounter. Similarly, Houston et al. (1998) found that providing cause information did not affect customer satisfaction with the service encounter. Finally, Taylor (1995) only found a positive effect of
providing cause information when the customer did not attribute the delay to the service provider.

In summary, waiting is considered to be a mostly negative experience. Providing duration and cause information are two interventions designed to improve such experiences. However, the results of these interventions seem to conflict. Accordingly, the literature on waiting does not provide a conclusive picture of whether cause information should be provided or not.

2.6 ISSUES WITH DELAY-RELATED INFORMATION

In the previous sections of this Chapter, the waiting problem and various wait management interventions were discussed. This section will highlight further issues with duration and cause information. In particular, the literature on the role of situational factors in the waiting literature is highlighted. Research issues relating to the effectiveness of providing duration and cause information are also discussed. Further discussion leads to the formation of hypotheses to guide the research in section 2.7.

One major issue for managers, relating to delay-related information, is whether to provide information to the customers or not. There is not enough clarity on how customers may react to such information. The research in this area provides no conclusive answer to this question. Existing research undertaken to determine the effectiveness of delay-related information reports some positive benefits of providing such information. For instance,
duration information: (1) reduces uncertainty, (2) distracts customers from the passage of time, (3) reduces stress, (4) provides sense of control on situation, (5) initiates cognitive appraisal and (6) enables a customer to cope with a situation. These benefits are based mainly on Zakay’s (1989) model. However, one underlying assumption is that these benefits always achieve results. That is, providing information always reduces uncertainty, distracts a customer, initiates cognitive appraisal and enables a customer to cope with the threat of waiting. However, some researchers have indicated that, in some situations, providing duration and cause information would have different meanings for different customers depending upon their individual situation. The benefits of providing delay-related information as well as alternative views follow.

Providing information reduces uncertainty

One stated benefit of providing information is that such information could help to reduce the uncertainty about a delay. In section 2.6.1, it was shown that providing duration information tended to reduce the uncertainty associated with a service delay. Zakay’s (1989) resource allocation model provided an explanation for this effect. According to Zakay (1989), time estimation is a function of the number of time units recorded by a cognitive timer, which is activated only when an individual’s attention is on the passage of time. Three underlying mechanisms of Zakay’s (1989) model provide explanations of how uncertainty reduction is achieved. First, the mechanism worked by distracting a customer from the passing of time. A second mechanism worked by reducing stress and a third mechanism worked by increasing a sense of control over the situation. Partial support of the above three benefits of providing duration information exist in the waiting
literature (Hui & Tse, 1996). However, researchers have not been totally satisfied that such benefits are always achievable in all situations (Miller, 2004).

*Providing delay-related information distracts a customer*

The second benefit of providing information is that such information could distract a customer from the passage of time. Providing duration information works as a stimulus and distracts a person’s conscious attention from the passage of time (Zakay, 1989); consequently, the customer is less focused on the actual passing of time and would perceive time to be shorter. However, some researchers indicated that distraction was not possible in certain situations. For instance, Naumann et al. (2001) argued that, when the length of a delay is too long, customers might not be distracted by information only but might find other ways to fill their time, such as reading a book or watching TV. Similarly, Hui and Tse (1996) reported that they found positive impacts in providing duration information for short and intermediate length of waits but did not find providing information useful for longer waits. They suggested that when duration was too long, customers started worrying about the consequences of the delay and were more focused on the cost of waiting. Similarly, Mowen et al. (1993) conducted their study in an emergency ward and found difficulty in distracting and influencing patients’ time perceptions as the highly stressful environment of an emergency room setting caused poor recollection of the given information. Furthermore, in situations where customers have important tasks to attend to once the wait is over, customers may be more focused on the goal and task itself rather than on other events. Meyer (1994) reported that high goal attractive customers were more focused on the progress of their goals, whereas low
goal attractive customers focused more on time already spent in the queue. This result was consistent with the classic finding that time is a function of allocation (Block, 1990). Therefore, based upon Meyer (1994), for low goal attractive customers, the distraction effect is possible. However, for high goal attractive customers, information would likely further increase their focus on the achievement of their goals, particularly when information confirmed a threat to achievement of those goals. Furthermore, as Meyer (1994) reported, those who were more focused on their goals and had high goal attraction perceived the wait as longer.

*Providing delay related information reduces stress*

The third benefit of providing delay-related information is that information may reduce stress levels of customers. Stress might occur when customers do not know how long they would have to wait for a service and, consequently, find future planning difficult (Leclerc et al., 1995). However, when duration information was provided, it reduced the stress associated with the waiting (Osuna, 1985) and reduced the negative affective response associated with stress (Taylor, 1994; Hui & Tse, 1996). Generally, researchers considered waiting stressful but have not identified the sources of stress in waiting. Beehr and Bhagat (1985) asserted that stress is situational. That is, a situation is only stressful if causation factors are present. In support, Lepisto, Stuenkel and Anglin (1991) identified five situational characteristics that could trigger stress in a person. These characteristics are (1) physical environment, (2) social surroundings, (3) possessing information needed to make a decision, (4) time pressure and (5) mood.
Further, if a customer is not under time pressure, does not require any further information to make a decision, is in a comfortable physical environment and dealt with properly by the service provider, that customer may be under no stress. In such situations the stress reduction benefit of information may not apply. Similarly, there can be situations in which customers are not stressed at all. For instance, Dawes and Rowley (1994) illustrated that waiting was not always stressful and could be fun at leisure places such as Disneyland. Similarly, Katz’s (1991) study found that some customers visiting the bank did not find waiting stressful. On the other hand, researchers (Nie, 2000; Quigley, Combs & O'Leary, 1984) found customer’s individual goals could increase their stress level. Nie (2000) stated that one reason why a customer was stressed was that waiting impeded goal completion.

Therefore, for those customers with goals, any information that confirmed progress toward a goal would likely reduce stress (Hui et al., 1998). However, if the information indicates that a goal is being blocked, stress will further increase, due to the cost of waiting. Similarly, Quigley et al. (1984) suggested that waiting was perceived to be an obstacle that created tension for an individual who was delayed in attaining his or her goals. Furthermore, Lazarus and Folkman (1984) suggested that, when a stressful situation has no apparent implication for an individual’s well-being, the encounter is not stressful for a person. On the other hand, if an individual perceived harm/loss, threat and challenge, only then did a situation become stressful. Therefore, the stress reducing benefit of providing information is expected to work for some customers and may not work for others due to differences in their sources and intensity of stress.
**Providing information gives sense of control**

The fourth benefit of providing delay-related information is that such information gives a sense of control of the situation to a customer. The third mechanism of Zakay’s resource allocation model suggests that information on the length of wait provides customers with a feeling of control of the situation (Hui & Zhou, 1996; Hui & Tse, 1996) because customers can make a decision or act upon the information. However, Katz et al. (1991) felt that, in some situations, providing duration information could lead to customers leaving the queue. Similarly, for some customers, a feeling of personal control results from a sense of their own effectiveness in pursuing important goals (Meyer, 1994). For such customers, getting more information allowed them to reappraise the situation, which, in turn, provided a sense of control of the situation. Therefore, for some customers reappraisal of the situation could affect their physical and psychological reactions to stress (Hui & Tse, 1996; Hui & Bateson, 1991).

**Providing delay related information initiates a cognitive appraisal process**

The fifth benefit of providing delay-related information is that such information may initiate a cognitive process. Cognitive appraisal is a process of understanding a situation. Lazarus (1991) suggested two stages of appraisal: (1) primary appraisal and (2) secondary appraisal. Once information was provided, such as duration or cause information, according to Lazarus (1985), a person would try to understand the implication of such information, analyse whether the information posed any threat to him/her and then adopt a coping mechanism to reduce the threat. Such appraisals are
influenced by an individual’s goals, which, in turn, influence the cognitive effort to recollect and organise information and engage in deliberation to compare and choose between alternatives (Dholakia & Bogozzi, 2002). A person’s desire to be involved in a process of decision making depends upon his goal commitments or desire to achieve those goals (Dholakia & Bogozzi, 2002). If the decision making process involves a comparison that indicates that the behaviour (the actual outcome) is moving the person toward the desired outcome (the goal), then one would expect a continuance or increase in the behaviour.

The five benefits of providing delay-related information above provide a mixed picture. Furthermore, researchers have focused mostly on the usefulness of providing duration and cause information and the effect of such information on the customer’s overall assessment of quality and satisfaction. However, the influence on customer actions from providing information during a service encounter has not received any attention apart from suggesting the customer would wait longer for an important transaction (Maister, 1985). Hui and Tse (1996) reported that, in longer wait situations, customers did not find providing duration information useful and customers were instead more focused on the psychological and financial costs of waiting. Such situations will force a customer to take action to reduce the threat posed by a delay and he/she would either persist in a queue or would leave. Similarly, feedback-control theory posits that in the process of attaining their goals, people periodically assess (i.e., collect feedback on) whether their behaviour is moving them toward their goals by comparing the actual outcome against the desired outcome and adjusting (i.e., exercising control over) their behaviour to best achieve the
service of their goals. Katz et al. (1991) suggested that providing duration information could lead a customer to leave especially when they anticipated higher physiological and economic costs. In contrast, Soman and Zhou (2002) found that providing duration information helped a customer stay longer in a queue and reduced baulking (decision not to join a queue) and reneging (join a queue but leave). Customers who received information in Soman and Zhou’s (2002) study decided not to join the queue once information confirmed a long wait. Other researchers also found a relationship between the value of a service and the customers’ decision to persist in a queue (e.g., Berry et al., 2002). Similarly, the theory of planned action (Ajzen & Fishbein, 1975) suggested that a person with strong intentions would likely persist in goal-directed behaviour for a longer period of time than a person with a weaker intention. Furthermore, Dholakia and Bagozzi (2002) stated that an individual would likely continue to pursue a chosen course of action to justify the initial resource investment and would remain consistent in engagement with the goal.

Another issue with the findings from research into the effect of delay-related information is that nearly all studies related to transaction specific goals within the waiting environment. In such situations, as the theory of planned action (Ajzen & Fishbein, 1977) suggests, a customer would persist longer if the transaction were important to a customer. Similarly, Maister’s (1985) suggestion that a customer was willing to wait longer for an important transaction also referred to the importance of the service and transactions of the service encounter. Therefore, in both explanations, a customer’s goals were assumed to be related to the current transaction and service consumption. However, if a customer
were attracted to goals different from the immediate service consumption goals, then the reverse might be true, based upon the theory of planned action. Therefore, for external goals, a high goal attractive customer would persist longer for those goals and remove any threat to them caused by the wait event (Lazarus, 1989). Consequently, such situations could possibly lead a customer to leave the current service to ensure that those external goals could be accomplished. Lazarus (1985) stated that those customers who were more attracted to their goals would employ a problem-solving coping mechanism to reduce the threat of failure. A problem-solving coping mechanism means that they will evaluate the situation or try to get as much input as possible from the situation either by asking other people, listening carefully to the provided information or observing more carefully what is happening around them. Therefore, the behaviour and evaluation of such customers will be different from those who are least affected or who deliberately want a delay.

As noted above, there is some support for the view that a situation can influence different aspects of information processing and, therefore, can influence the effectiveness of information provision. However, the literature has not examined the impact of situational factors, such as customer goals, level of dining usage and gender. Meyer (1994) suggested looking further into a goal oriented approach to waiting. Similarly, Davis and Heineke (1998) pointed out that exploring goal orientation in waiting situations was an opportunity for fruitful research. Such research was important because goals had a strong influence on customer perception of time (Meyer, 1994), affect (Hui, Thakor & Gills, 1996), cognitive appraisal (Lazarus, 1984), service evaluations (Garbarino & Johnson,
2001) and were, therefore, likely to influence the effectiveness of service interventions. Therefore, investigating the nature of the effect of goal attractiveness on service interventions is necessary. This investigation explores differences that the provision of duration and cause information has on different behavioural and evaluative intentions.

Most studies have largely assumed that a customer’s individual characteristics, such as age, gender and personality type do not affect perceptions of wait times (Jones & Peppiatt, 1996). Similarly, customers were mostly regarded as belonging to the same type and having similar reasons to visit a restaurant, bank or hospital. However, customers differ from each other due to their personal characteristics and situations and such differences can produce different outcomes from the service intervention. More interestingly, researchers have reported either a positive or no effect from the provision of duration information and cause information but have not investigated whether any negative effects followed the provision of such information. However, Miller (2004) pointed out that, in some situations, providing duration information could be a cause of stress for certain types of customers. Similarly, Maister (1985) noted that customers were not like machines that always reacted in the same way. Instead, customers could think and feel and, thus, regulate their behaviour. Similarly, Jones and Peppiatt (1996) argued that customers should not be treated like a homogenous group of people; instead, they suggested looking at the individual differences between customers. Thus, the application of a general script to all types of customers without having an understanding of underlying differences might result in an ineffective recovery strategy (Miller, 2004). Similarly, Begri (2004) argued that such differences should be accounted for before
coming to a conclusion about whether providing information would be useful for all customers or only for some specific customers. More importantly, service interventions can have a negative impact on some customers, which could lead to a negative service evaluation.

Therefore, the effect of individual differences in customers, such as gender, age, location and personality type, should be addressed (Jones & Peppiatt, 1996). The gender effect has not been reported in any study that investigated the effectiveness of duration or cause information. Females and males are believed to respond and evaluate service encounters differently (McColl-Kennedy, Daus & Sparks, 2003; Mattila, Grandey & Fisk, 2003). Similarly, business and leisure customers are not alike and responded differently due to situational differences. For instance, Chu and Chio (2000), who studied differences between business and leisure customers in hotels, found a clear difference in preferences and behaviour of such customers. Similarly, in another study, Lewis and McCann (2004), who conducted a study to evaluate the effectiveness of service interventions in hotels, found differences between business and leisure customers. They found that business customers were more sensitive to delays and reported lower satisfaction levels with the service than did leisure customers. Further, business customers assigned a higher preference to cause information than leisure customers.

The moderating effects of situational variables on the effectiveness of service interventions were rarely investigated (exceptions: Begri, 2004; Lewis & McCann, 2004; Meyer, 1994). Waiting is generally treated as a negative experience and, therefore,
providing duration or cause information is also viewed as either helpful or having no effect and the negative impacts of providing such information are mostly not reported (exception: Clemmer & Schneider, 1998). However, researchers have argued that a wait experience could be negative or positive based upon the customer’s situation. For instance, Dubé et al. (1989) and Carmon et al. (1995) suggested that waiting experiences could be positive if a customer wanted to wait or liked a delay. Customers in some situations might not have any desire to reach their goal on time. For example, if being on time does not fit with that person’s individual goals the customer may be willing to accept a delay.

Consequently, such customers might be less interested in any information provided by the service provider and any such information might actually increase stress levels (Miller, 2004). On the other hand, customers who are more affected by a delay and more committed to their subsequent goals might have a higher desire to receive any cue that could indicate progress (Lazarus, 1985). Providing information to such customers can have a more positive effect, especially if the information indicates progress toward achieving their goals. On the other hand, if information indicates a threat or challenge to the achievement of a goal, such customers are likely to take action to reduce the threat or ensure goal achievement. Clemmer and Schneider (1998) reported that providing cause information close to the end of a service encounter had a negative impact on customers and should be avoided.
As noted above, wide support exists for the proposition that a situation moderates the effectiveness of providing information. However, because limited research has been undertaken in this direction, no clear picture emerges. Conflicting results point towards the need to look further to find alternative models and to investigate the effect of possible moderators on the utility of providing information to customers. Ignoring the effect of situations on the suitability of information can result in the wrong prescription for a recovery technique. Therefore, there is a need to examine alternative models and investigate the effect of moderators to identify situations in which providing duration and cause information can be more or less useful. Understanding that the effectiveness of interventions can vary between groups, it is proposed that, by applying customer segmentation and profiling techniques to determine the most appropriate customer group for a particular type of intervention, the overall effectiveness of a recovery effort can be enhanced.

### 2.7 SITUATIONAL APPROACH: AN ALTERNATIVE MODEL

While waiting has traditionally been treated as an economic cost, the psychological cost of waiting has also received attention. Maister (1985) identified a number of situational factors, which could incur psychological costs to a customer. Based on Maister’s eight principles, a number of researchers further investigated the role of situation in waiting, such as length of a delay (Hui & Tse, 1996), physical environment (Baker & Cameron, 1996), goal influences (Meyer, 1994), fairness (Larson, 1984), distance from goal (Hui, Thakor & Gill, 1998) and social regard (Butcher & Heffernan, 2006).
While researchers gave due consideration to the influence situational variables had on wait experience, very little attention was given to whether situational variables played any role in determining the effectiveness of service interventions. Most existing research has focused primarily on helping businesses to find a generic solution to service interventions. Limited research has focused on using a more customer segmented approach to identify situations in which providing information might be useful for one group of customers and but have different effects on other groups. However, Hornik (1984) suggested looking into the role of individual customer characteristics and their preferences. Similarly, Miller (2004) also suggested that the effectiveness of information might be different based upon a customer’s situation.

Given the mixed results of studies into the wait situation, this research has reconfigured the conventional relationship between service interventions and outcomes. What factors might be influencing the mixed results reported in the literature? In this study, three situational variables were introduced to ascertain what moderating effect, if any, they might have in influencing service outcomes. These three factors were found to be relevant in study 1 to a customer’s experience of a service encounter. Hence, goal attractiveness, level of dining usage and gender were modelled, together with duration information and cause of delay given. An alternative model (Figure 2.4) was introduced to test the effectiveness of service interventions within the context of a restaurant.
The approach to wait management in this thesis is situational. That is, it is argued that the effectiveness of service interventions is not homogenous for all customers but rather that the situation determines the outcome and effectiveness of providing duration or cause information. There is some empirical and theoretical support for this approach. First of all, numerous researchers pointed out that differences in service outcomes are based on customer’s individual situations. For instance, Katz et al. (1991) identified that a customer’s definition of acceptable wait time was based upon the time of day and day of week. They further reported that those customers who are under more time pressure at lunch time had a lower acceptability of the wait. Similarly, Miller (2004) reported in her
study that providing duration information for a group of participants who had a greater aversion to a task showed a higher level of negative emotions, such as stress due to their situation. Houston et al. (1998) noted that the acceptability of a wait was linked to waiting costs and those customers who experienced higher waiting costs found waiting less acceptable. Therefore, there was some empirical evidence to suggest that service outcomes, such as customer’s individual feelings, thoughts, actions and service evaluations, could be influenced by situational variables. Accordingly, the following hypotheses guide this research.

**H1:** Situation will moderate the effect of duration information on service outcomes

**H2:** Situation will moderate the effect of cause information on service outcomes

**H3:** Situation will moderate the combined effect of duration and cause information on service outcomes

Three important situational variables were identified that might moderate the effectiveness of service interventions. The first variable is goal attractiveness. Goal attractiveness refers to the level of importance a customer associates with an external event or task. An example of goal attractiveness is when a customer has to attend an
important meeting after dining at a restaurant. Similarly, a low goal attractive customer could be one who has nothing special to do after dining. The second variable is a customer’s previous experience of similar service. An example could be the dining frequency of a customer. The third variable is gender. These three variables are now discussed.

2.7.1 Goal Attractiveness

Goal attractiveness was the first variable used in the model. Goals were defined as internal representations of desired states, where states were broadly constructed as outcomes, events and processes (Austin & Vancouver, 1998) and reported to have a strong influence at all stages of an individual’s decision making process. Similarly, goals were linked to intentions and involved in the formation of specific emotions, which could lead to specific behaviour. Bosmans and Baumgartner (2005) suggested that goals are closely associated with specific emotions and that specific emotions had the potential to serve as inputs for subsequent behaviour. They found that specific extraneous emotions (caused by external sources) would be considered informative for subsequent evaluations to the extent they matched a consumer’s goals.

Researchers have focused mostly on a customer’s internal consumption goals within a waiting environment (Meyer, 1994; Hui, Tse & Gill, 1998; Begri, 2004). However, a customer can have both internal and external goals. For instance, a customer visiting a restaurant may have simple consumption goals, such as having a good time, eating a delicious meal, or having a chat with an old friend. Similarly, a customer may have to
attend to other important events and tasks external to the waited event, such as attending a business meeting or attending a musical concert. Nguyen and McColl-Kennedy (2003) argued that both internal and external goals could influence customer affect and cognitive evaluations. They argued that an external cause could produce anger and further initiate a cognitive appraisal process with reference to the customer’s goal relevance.

Similarly, customers might differ on attraction to their goals. Meyer (1994) used the term \textit{goal attractiveness} to represent customer attraction to his/her goals. Different terms were used to describe goal attractiveness concepts, such as goal commitment, valence of a goal, desire and motivation to achievement. Meyer (1994) identified two components of goal attractiveness: (1) the level of desire to achieve the goal and (2) the level of importance attributed to the achievement of goals, due to the emotional or financial costs involved in not achieving the goal. Lazarus (1985) used the term \textit{goal commitment} to reflect what was important to the person or what had meaning for him/her. Authors have referred to goal attractiveness from two independent motivational orientations: having a desire for success and having a desire to avoid failure. An example of this approach was Atkinson’s (1957) framework, which regarded the desire to attain success and the desire to avoid failure as important determinants of achievement behaviour.

The notion of goal attractiveness has existed in the waiting literature but has not been explored to any extent. A few researchers have explored aspects of goals’ influence on customer’s perception of time, behaviour and intentions (e.g., Begiri, 2004; Meyer, 1994; Hui, Thakor & Gills, 1998; Davis & Vollmann, 1990). However, in most studies, goals
were either assumed to be non-existent or neutralised to look at the effect of other factors. Meyer (1994), in a study in Paris, France, found that, when goals were less attractive to the participants, they tended to underestimate the time it would take to reach the goal and overestimate it when they came closer to the goal. Conversely, participants with a high goal orientation (waiting for a waited-for-event that was very important to them or they liked) relied heavily on distance from the goal and relied less on time spent in the queue. Therefore, perceived duration affected them less than the actual waiting time. Similarly, Davis and Vollmann (1990) found that those customers who were time constrained because of some event after taking a lunch or dinner had a different perception of time. They found that customers who had to attend to some important task after lunch were more impatient at lunch time than they were at dinner time. Similarly, Begiri (2004) found that the degree of importance of a service directly influenced customer’s perception of time.

While the waiting literature investigated some aspects of goal influence on the waiting experience, researchers have mostly investigated the influence of goals on the effectiveness of service interventions, such as providing duration and cause information. As goals influence customer decision making, it is likely that goals also influence the effectiveness of service interventions. Meyer (1994) argued that waiting in line was rarely approached in goal-oriented settings in which the goals could have different values for different participants and have different dimensions, i.e., goal attractiveness, intensity, valence and relevance (Austin, 1996). In most previous studies, customer’s personal goals were either assumed neutral or were neutralised to explore the influence of other
factors on waiting. Miller (2004) argued that, if a customer’s individual goals were not taken into account, an inappropriate solution to a business problem might be put in place by a service provider. Accordingly, the following specific hypotheses test the moderating effect of goal attractiveness.

**H1a:** Goal attractiveness will moderate the effect of duration information on service outcomes

**H2a:** Goal attractiveness will moderate the effect of cause information on service outcomes

**H3a:** Goal attractiveness will moderate the combined effect of duration and cause information on service outcomes.

### 2.7.2 Level of Dining Usage

A second situational variable is the level of dining frequency by customers. Customers who dine out frequently are referred to here as “experienced customers”. However, these customers’ experiences can be linked to a particular restaurant or may be varied based upon overall dining experiences in different restaurants. In this thesis, level of dining usage represents the overall dining experience of a customer. A long standing segmentation variable utilised by service businesses is the examination of the differences between heavy and light users of a service. Customers who are more experienced in dining out respond differently to service interventions than would infrequent users.
Researchers highlighted a few major differences between experienced and novice users (e.g., Zeithaml, Parasuraman & Berry, 1993) in the formation of: (1) customer expectations of what to expect from the service provider and expected performance benchmarks, (2) tolerance of a service failure and (3) assessment of service outcomes and future intentions.

**Customer Expectations**

Customers have expectations about a service and a service provider. Such expectations are based upon previous visits or through word of mouth. Mostly, experienced customers base their expectations on past experience, especially their last visit to a service provider (Zeithaml et al., 1993). In support, Baron and Harris (2004) gave an example of how a customer’s previous experience could influence his or her current experience of a service, stating:

> If you are a regular user of a particular restaurant and have always been given a rose at the end of the meal you would come to expect this treatment. However, if you have never been there, the rose would not form part of your service expectations. (p. 288)

Similarly, Boulding, Kalra, Staelin and Zeithaml (1993) suggested that customer expectations of what should be done or what to expect during a service encounter were formed by previous experience. In an empirical study, Jones and Peppard (1996) found differences between repeat customers and infrequent or first time customers in restaurants. They reported that frequent users were less anxious, less uncertain and had
established explanations for wait times due to previous experience of a queue. They warned that restaurants should give special care and spend more time on newcomers to restaurants to align their expectations with the norms of a service. Smith and Bolton (1998) found that experienced customers might differ from those customers who were newcomers in the way they formed expectations of different attributes of a service. Nordfält and Söderlund (2000) suggested that, as a customer became more experienced with a service, some attributes of the service became less important than others. However, Nordfält and Söderlund (2000) did not find any differences in expectations between new and experienced customers and argued that experience should not be seen only as familiarity with a service but also as the customer’s subjective and objective knowledge of a service. Such knowledge could affect customer information processing.

Tolerance to Service Failure

Researchers indicated that the level of dining usage shaped a customer’s tolerance for service (Zeithaml et al., 1993; Boulding et al., 1993; Bolton, 1998) and acceptance of waiting (Hui & Tse, 1996). Bolton & Draw (1995) used the term tolerance zone to reflect customers’ acceptability of waiting time and found that experienced customers were less sensitive to a service delay, if they had a previous positive experience. Likewise, Jones and Peppaitt (1996) reported that a new user of a service had greater sensitivity to wait times than an experienced user. However, Sarel and Marmorstein (1999) argued that, in a waiting context, experienced customers might have less tolerance to a delay if they experienced delays in previous encounters. They further stated that if the previous bad
experiences with a service were the most dominant expectation of that service, then a customer was likely to be more angered by the delay.

Service Evaluations and Future Intentions

A customer’s previous experience and familiarity with a service usually framed the future consequences of perceived service quality and satisfaction, particularly if a customer had high expectations about a service and was not provided with the same quality of service (McDougall & Levesque, 1999). Such customers evaluated a service encounter based upon their expectations of different dimensions of the service from the service provider against what they actually received. Such confirmation and violation of expectancies exerted significant impact on customer judgement (Botz, 1994). Similarly, experience was an important determinant of customer satisfaction and an important component of the service encounter as experience influenced the future relationship between the customer and the service provider (Tax, Brown & Chandrashekaran, 1998). The long term effect of experience on the customer’s future intentions was reported by several authors (e.g., Bagozzi et al., 1989). However, researchers in service management tended to use cognitive variables to predict future behaviour rather than the customer’s past behaviour (Nordfält et al., 2000) as a predictor of future intentions.

The level of dining usage influences customer expectations, information processing, zone of tolerance to a failure and service evaluations. However, little research exists to determine if previous experience of a service could also influence the effectiveness of delay-related information, particularly when evidence exists that experienced customers
process information differently from novices and have different expectations of what information to expect from a service provider. Looking further into such an important situational variable could improve understanding of whether the effectiveness of providing duration and cause information was the same for experienced and novice customers. Accordingly, the following hypotheses investigate the moderating effect of level of dining usage.

**H1b:** Customer level of dining usage will moderate the effect of duration information on service outcomes

**H2b:** Customer level of dining usage will moderate the effect of cause information on service outcomes

**H3b:** Customer level of dining usage will moderate the combined effect of duration and cause information on service outcomes

### 2.7.3 Gender

The third situational variable investigated was gender. Gender differences have been acknowledged but have not been explored further in the wait situation. Gender was included as a situational variable, as previous research showed that there are differences in how males and females generally respond in the service encounter environment (e.g., McColl-Kennedy, Daus & Sparks, 2003; Mattila, Grandey & Fisk, 2003). More
specifically, research by Iacobucci and Ostrom (1993) demonstrated in an experimental vignette that female customers were more influenced by relational information, such as employees being polite and helpful. Furthermore, they reported that female customers were less influenced by efficiency aspects. In support of this notion, Mattila et al. (2003) argued that males were more likely to focus on service delivery outcomes rather than on process aspects. However, McColl-Kennedy et al. (2003) found that both males and females reported more favourable attitudes when service providers displayed concern or provided compensation in a service breakdown situation. However, they reported that females tended to prefer more explanation in a service breakdown situation. Similarly, Meyers-Levy (1989) suggested differences in the way females and males processed information and stated that females were inclined to prefer a detailed information processing strategy; whereas, males were predisposed to heuristic message processing. Similarly, researchers found differences in the way females and males evaluated the outcome of a service. For instance, females had higher expectations about a service than males (Ross, Fleming, Fabes & Frankl, 1999). Therefore, outcomes that were expectation based, such as satisfaction and service quality, could have a strong gender influence. For instance, Albrecht and Zemke (1985) reported that females’ assessment of quality and satisfaction was different than that of males. Females were more satisfied with a service encounter if a service met their need (Ross, Fleming, Fabes & Frankl, 1999). Similarly, Gopalkrishna and Mummalaneni (1993) found that women expressed greater levels of satisfaction with a service than men. Finally, Ndubisi (2005) showed that, once females trusted a service provider, they became more loyal than their male counterparts.
Gender differences were acknowledged in some of the studies relating to waiting. However, these differences were not explored further. It is important to further investigate gender differences, particularly when females are reported to underestimate time when compared to males (Cotte, Ratneshwar & Mick, 2004). Costa (1994) argued that merely suggesting that men and women did things differently was not enough and it was time to look further into questions of why, how and in what ways females were different from males. Accordingly, the following hypotheses are formally stated to investigate the moderating role of gender.

**H1c:** Gender will moderate the effect of duration information on service outcomes

**H2c:** Gender will moderate the effect of cause information on service outcomes

**H3c:** Gender will moderate the combined effect of duration and cause information on service outcomes

### 2.8 SUMMARY

In this chapter, a theoretical foundation for the research program outlined in chapter 3 has been presented. The initial discussion focused on the five themes of service encounter. It was highlighted that waiting is an important business issue, which can influence the long term survival of a business. In section 2.3, two management interventions were discussed that are widely thought to minimize the effect of service delays. It was noted, however, that empirical evidence relating to the effectiveness of duration and cause information did
not provide a conclusive picture for managers to implement delay-related interventions effectively. Therefore, in section 2.7, an alternative model was presented and situational factors of goal attractiveness, prior service experience were hypothesised to moderate the effect of service interventions on service outcomes.

In the next chapter, the research design and methodology used in this research project is presented. The research design consisted of both qualitative and quantitative approaches to resolve the research problem. Chapter 3 consists of sections on overall design of the research project, procedures used to collect the data and analytical techniques employed.
CHAPTER 3

METHOD
CHAPTER 3

METHOD

3.1 INTRODUCTION

In chapter 2, a literature review of the research project was presented. In chapter 3, methods used in the three studies are highlighted. The structure of this chapter follows suggestions by Perry (1998) on developing the “method section” of a thesis. Perry (1998) suggested that there should be separate sections for methodology justification, sample selection, research procedures, limitations of methodology, evidence of analytical techniques to be used and listing of computer programs used. I have adapted Perry’s (1998) suggestion into a format more suitable for this thesis. The method chapter is divided into three major sections based upon progression of the research project and flow of information considerations. These sections are (1) overall research design (2) procedure and data collection and (3) analytical techniques used.

After the introduction section, the next section provides an overview of how the research project was designed. This section includes information on the instruments used for data collection, and issues relating to the validity and reliability of measurement instruments. Later in the section, ethical considerations are provided. Section two covers details of the actual procedures used to collect data. The details of processes and instruments used in collecting data in study 1 are presented followed by the processes for studies 2 and 3. The third section covers justification of the choice of analytical techniques.
3.2 OVERVIEW OF RESEARCH DESIGN

3.2.1 General Design Considerations

In chapter 2, the research problem and research objectives were presented. The research program consists of three studies. The first study was conducted to further explore the research problem and to generate theory. The second study is a quantitative study to test the model presented in section 2.7 of the literature review chapter while the third study is an extension to study 2 and uses a larger and more diversified sample.

Initially, depth interviews were conducted to understand and explore the role of important moderators on the effectiveness of delay related information on service outcomes and to assist in model development. Furthermore, in-depth interviews were carried out to assist in the development of a questionnaire and stimulus material, used in the subsequent quantitative studies to empirically test the model. Rose (1991) has referred to this approach as theory-building and theory testing.

The research paradigm that employs this theory-building and theory testing approach is known as realism. This is a philosophical paradigm that uses elements from both qualitative and quantitative methods. This is done in a way that both methods complement each other to explore reality. While there are underlying differences in both quantitative and qualitative methods and between their associated research paradigms, both are widely used together to explore and test marketing and management research problems.
The research paradigm or basic belief system (Guba & Lincoln, 1994) that employs quantitative methods is generally known as positivism. According to this paradigm, there is only one reality and science is regarded as a way to reach that reality; a researcher sees the truth as a one way mirror by separating him/herself from the world she/he studies. As a result, the analyses are value-free, objective and don’t change because they are being observed (Healy & Perry, 2000).

An alternative view is the constructivist or naturalist view. This is generally the foundation of most of the qualitative methods. Reality in this paradigm is regarded as multi-dimensional and the relationship between the researchers and what they study differs from positivism. Constructivists believe that the best way to reach reality is to understand the context, as the meaning or interpretation of reality can change with a different context. Therefore the resulting knowledge is idiosyncratic and is purposefully constructed (Lythcott & Duschl, 1990) and as a result subjective in nature (Zeera, 2001)

However, mixing qualitative and quantitative methods and their associated research paradigms can pose some issues, as research strategies and data collection procedures are different for quantitative and qualitative research (Stacey, 1969). In addition, these approaches represent fundamentally different epistemological frameworks for conceptualizing the nature of knowing, social reality and procedures for comprehending these phenomena. Some researchers feel that these two approaches are incompatible due to underlying assumptions (e.g., Filstead, 1979). Denzin (1989) suggests that theory is always incomplete and provisional, hence no single method adequately captures all aspects of a problem. Therefore, different methods should be used in every investigation,
since no method is totally free of rival causal factors. Further, Breuer (2003) suggests that all methods impose perspectives on reality by the type of data that they collect and each tends to reveal something slightly different about the same symbolic reality. However, other authors, such as Sale, Lohfeld and Brazil (2002), support mixing the two methods for complementary purposes and not for cross-validation or triangulation purposes.

In this research project, possible moderating factors were identified in the literature review and further investigation was required to determine which of these factors could influence a customer’s waiting experience and effectiveness of wait-management strategies. Therefore, study one was conducted to explore the waiting experience of a customer from two perspectives. First, from the customer perspective to understand how customers react to different situations and then from a wait-management perspective to understand how wait-management strategies are applied to counter negative effects of waiting. The findings of study one helped to develop a new wait-management model and also laid the foundation for the subsequent quantitative studies.

To effectively use a mixture of qualitative and quantitative methods, Hammersley (1996) identified three possible forms: (1) method triangulation – in which different methods from both approaches are used (2) facilitation – where one method is used to provide groundwork for the other and (3) complementary – when both methods are used to explore different aspects of a research problem. This research project used the facilitation form of mixing qualitative and quantitative methods. This decision is
endorsed by many who hold the view that quantitative and qualitative methods contribute to all aspects of enquiries and can be successfully used together (Cook, 1995). Similarly, Silverman (2000) suggested the choice of method should reflect the overall research strategy. Therefore in this case, qualitative methods are used initially to explore the phenomena and identify relationships and subsequently quantitative methods are used to test the relationships. Hakim (1987) also recommended this approach of using qualitative research for exploratory studies leading to more structured quantitative studies. Similarly, Stacey (1969) suggested exploring abstract concepts and when relationships have been established, precise hypotheses can be enunciated for testing. Therefore, this project consists of one qualitative study to strengthen the theoretical groundwork and two quantitative studies to test the theory. The overall research approach which has been used in this research project is shown in figure 3.1.

**Figure 3.1 Mixed Methodology**
For the three studies conducted in this research project, an overview of each is now provided. The first study was conducted for exploratory and concept building and was designed to further understand the possible moderating factors in the wait situation and to look at current practices to manage service delays in restaurants. This qualitative work facilitated the development of the model and subsequently the measurement instruments used. Two subsequent quantitative studies were conducted to test the theory. Table 3.1 provides more information about the primary focus of the three studies:

<table>
<thead>
<tr>
<th>Study</th>
<th>Type</th>
<th>Purpose</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Qualitative</td>
<td>Exploratory, theory generation</td>
<td>The waiting experience and wait-management strategies were studied to further explore the waiting experience of a customer and to understand which moderating factors can influence a customer’s waiting experience. Three factors of goal attractiveness, level of dining usage and gender were identified as possible moderating factors. A wait-management model was developed.</td>
</tr>
<tr>
<td>2</td>
<td>Quantitative (narrow sample frame)</td>
<td>Theory testing. To test the effect of three independent variables of goal attractiveness, dining usage and gender on effectiveness of service interventions.</td>
<td>The wait-management model developed based upon findings of Study one was required to be tested.</td>
</tr>
</tbody>
</table>
In-depth interviews were considered appropriate for the first study. There are numerous examples in the literature where an initial interview is conducted to improve understanding of the concepts. Specifically, if the relationships under study have new dimensions and require additional exploration Neuman (1997) suggests that conducting unstructured or semi-structured interviews during the planning phase and learning about the nature of the problem, is appropriate. Further, Lazarsfeld and Thielens (1958) recommended that researchers conduct exploratory interviews in the formulation and final development of questionnaire instruments. Stacey (1969) also favoured conducting unstructured interviews consisting of a series of statements on topics the researcher wants to record, such as the experiences, feelings, reasons and motives of a customer.

For studies 2 and 3, an experimental 2x2x2 design was employed to test the theory. It was considered appropriate to use an experimental design so that “interaction” effects between service interventions and various situational factors could be tested in a controlled environment. A three way experimental design was also considered

|   | 3 | Quantitative | Theory testing. Additional tests to measure the impact of independent variables on the customer’s in-process actions and behaviours. | Results obtained in Study 2 indicated possible counterproductive effects. However, sample frame used in Study 2 was small and based upon one specific IT company and therefore, Study 3 was conducted to verify the results with a bigger and varied sample frame. |
appropriate as four way interactions may become too complex. Two conditions were also assigned to each treatment in order to optimise manipulations. A restaurant vignette was developed to provide the storyline for the three independent variables and an online questionnaire was developed to capture data. The next section provides more details of the research design.

**In-depth Interviews**

In-depth interviews were conducted as part of study 1 to gain insights into the nature of service delays in restaurants. Frey and Oishi (1995) define an interview as a purposeful conversation to gain information about a particular topic but which relies on the respondent being willing to give accurate and complete answers (Breakwell, Sean & Chris, 1995). Furthermore, interviews provide an opportunity for combining practical, analytical and interpretive approaches (Jensen, Nicholas & Jankowski, 1991). Other alternative qualitative approaches include observation and focus groups. However, observation is more useful in studying human interactions observable in day to day life settings whereas in-depth interviews are more appropriate to capture customer experiences (Edvardsson & Mattsson, 1993). Therefore, one to one interviews were the preferred option for the qualitative study in this project as that approach allows flexibility to explore different aspects of a problem and provide a platform on which further testing could be done.

However, Wimmer et al. (1997) acknowledge that qualitative research methods, such as interviews, are most useful when their limitations are recognised. For instance, a common
limitation associated with interviews is that the interviewer can force the direction of an
answer and exercise undue control over respondents. Similarly, interviews are time
consuming and participants are sometimes reluctant to commit to interviewing. However,
neither of the above associated limitations presents a major problem in this research
project as the interviews were primarily used for exploratory purposes.

Overall, the rationale for using in-depth interviews in this study was two-fold: (1) in-
depth interviews provided flexibility to understand the wait-management problem in
restaurants and helped in the identification of current business practices in restaurants to
manage waits and (2) as quantitative methods were used in subsequent studies, in-depth
interviews provide a guard against quantitative methods, such as survey questionnaires if
conducted first (Babbie, 2000). Furthermore, results from the interviews facilitated the
development of the online questionnaire which was used in the second and third studies.

More specifically, in-depth interviews were planned to serve three key objectives of the
research project: (1) to understand service delays from businesses and customer
perspectives (2) to understand what businesses are doing to manage such service delays
and (3) to investigate whether goal attractiveness, level of dining usage and gender has
any influence on customers’ behaviour and actions. Therefore, interview participants
were selected to represent customers, business managers and employees. All interviews
followed a standard script. Open ended statements were asked in order to observe and
collect data at the same time.
Experimental Design

An experimental 2x2x2 design was the main quantitative technique used in studies 2 and 3. Two experiments were conducted in this research project to test hypotheses of the proposed model highlighted in chapter 2 (figure 2.4). The rationale for using this approach derived from four main determinants: (1) the need to find enough appropriate delay situations (2) the need for a controlled environment to avoid influence by other factors in order to allow greater inferences of causation. For instance, one important factor in restaurants is food quality. Good or bad quality of food can influence a customer’s overall evaluation of a service encounter. Hence, this factor was controlled in the experiment (3) to obtain more comprehensive data about the psychological processes taking place during a customer’s waiting experience such as how a customer makes choice decisions of what to order or not to order in a given situation or whether to tip or not to tip waiter and (4) experimental design is a widely used practice to study the wait experience (e.g., Miller, 2004; Hui & Tse, 1996; Hui & Zhou, 1996).

One alternative to experimental design is the cross-sectional survey method. While the survey design method is widely used in service marketing, using this methodology for the current project had a few disadvantages. The major issue is one of respondent knowledge and recall. In practice, the researcher has to find sufficient numbers of customers who could recall their waiting experiences in restaurants where: (1) they had either high or low goal attractiveness (2) they were provided / not provided with duration information and (3) they were provided / not provided with cause information. Further, recalling an
experience based on memory or retrospection has limitations as customers might not recall events correctly. Again, every service situation is unique with different factors affecting a customer. Furthermore, conceiving a situation where all the causal factors have been taken into account is difficult and isolating the effect of factors under study from customer experiences can also be difficult. Second, a survey depicts attitudes (and memory) at a certain point in time and this may have changed over time from the service experience. In such situations, an experimental design is more appropriate as experiments provide more control over stimulus materials. Consequently, the use of an experimental design was a more logical choice for the research project rather than using the widely used survey method.

The use of experiments is widely accepted in the marketing and operations management literature. In particular, experimental design is often used as the major technique in the area of waiting and service interventions. For instance, two of the most widely cited studies on effectiveness of service interventions by Hui and Tse (1996) and Hui and Zhou (1996) have used experimental design as their main approach to study the effect of duration information on service satisfaction. Recently, Miller (2004) conducted a series of experiments to study the effectiveness of duration information. Similarly, Hui and Zhou’s (2006) recent study on the interaction of two types of service delay reactions also used an experimental design. Similarly, several instances of the use of experiments can be found in the waiting in-line literature (Miller, 2004; Hui & Tse, 1996; Chebat et al., 1995; Pruyn & Smidts, 1991; Dubé et al., 1989; Ahmadi, 1984). Accordingly, the use of
experimental design for studies 2 and 3 provides an opportunity to extend and compare results with earlier studies.

However, to effectively use experiments in studying consumer behaviour requires careful consideration of important specific factors namely: (1) randomization to ensure that cells have equal representation (2) careful use of vignettes to create various conditions and (3) checks to ensure that manipulations have worked. Randomization is an important part of any experiment. By allocating subjects to treatments using a random mechanism, one may remove conscious or unconscious bias and ensure that at least on average each treatment group or replicate has a similar composition in terms of other potentially influencing factors (Keppel, 1991). This is an important factor, as the lack of balance in the data impairs the ability of the experiment to distinguish the effects of the factors (Shaw & Mitchell-Olds, 1993). Therefore, to ensure randomization and balanced data within each cell, customised computer software was used.

Furthermore, at the core of experimental design is the use of vignettes. Finch (1987) described vignettes as short stories about hypothetical characters in specified circumstances, to whose situation the subject is invited to respond. Eight vignettes were developed for this project and special care was given to keep vignettes simple, readily understood and not too complex, as suggested by Barter and Renold (1999). Similarly, sufficient context information was provided to subjects to generate an understanding about the situations being depicted. Subjects were instructed to place themselves in the role of the customer who was experiencing the service delay described in the scenario.
The service context used for this study was a restaurant to which subjects could easily relate. Subjects were then asked about their reactions to the delay situation described in the scenario. However, it is important to ensure that subjects have successfully absorbed the conditions. Therefore, reality check statements were asked of the subjects to ensure that the overall scenario is realistic and second that they have successfully absorbed the treatment conditions. Thus, manipulation checks to ensure the efficacy of the treatment conditions were also conducted.

One main weakness of experimental design is external validity. An experiment has external validity if the experimental results hold across different experimental contexts and with different samples (Shadish, Cook & Campbell, 2002). The level of external validity is usually assumed to be higher in field studies than experiments. However, Anderson and Bushman (1997) argue that while the experimental setting has artificial features that are lacking in the real world, it does not have some of the extraneous features present in the real world. Therefore, according to these authors, if the independent variables are manipulated successfully, participants are randomly assigned, and independent variables are systematically related to dependent variables, then one can be more confident that an experiment has sound external validity.

3.3 MEASUREMENT INSTRUMENTS

For this project, two main instruments were used to collect the required data. First, semi-structured interviews provided the structure required to understand and explore concepts
in study 1. The researcher acted as an instrument. Then in studies 2 and 3, an online questionnaire was used as the instrument for measurement. Several specific measures were utilised based on standardised scales to measure three different phases of a service encounter (pre-process, in-process and post-process) as described in chapter 2 (figure 2.3). Next, the types of instruments used in this thesis are discussed. Table 3.2 shows the instruments used in each study.

### Table 3.2
**Type of instruments used**

<table>
<thead>
<tr>
<th>Study</th>
<th>Study Phase</th>
<th>Type of instrument Used</th>
<th>Measurement Modalities</th>
<th>Level of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Exploratory Phase</td>
<td>Semi-structured interviews. Researcher acts as a primary instrument</td>
<td>Open ended questions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Theory generating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Theory Testing Phase</td>
<td>Inanimate instruments online questionnaire, scales</td>
<td>Seven point Likert Standardized Questions</td>
<td>Interval</td>
</tr>
<tr>
<td>3</td>
<td>Theory Testing Phase</td>
<td>Inanimate instruments online questionnaire, scales</td>
<td>Seven point Likert Standardized Questions</td>
<td>Interval</td>
</tr>
</tbody>
</table>

 Twelve semi-structured interviews were conducted to seek a greater understanding of the research problem. The decision of what to cover in the interviews was based upon information learnt from two sources of material: (1) material relating to the research problem domain provided insights into key issues in related research areas and (2) material from other research areas which were considered applicable to the research
problem and were considered useful in exploring the nature of service delays experiences. The knowledge gathered from the literature study provided initial guidance to identify, explore and understand concepts which were further used to develop an interview script and guide. Qualitative research relies on the subjectivity aspect of the human instrument to observe and interpret findings. Therefore, this approach requires the researcher to play an active role in the data collection (Wimmer and Dominick, 1997) but with "empathetic neutrality" (Patton, 1990, p. 55). Similarly, Lincoln and Guba (1985) consider humans as the instrument of choice for naturalistic inquiry. Humans are responsive to environmental cues and able to interact with situations. Such responsiveness is particularly useful in theory building (Grove & Fisk, 1992). As human responses to services delays can be complex and multi-dimensional in nature, interviews conducted in this project provided flexibility to observe and study various aspects of such behaviours. Further information on sampling and data collection procedures for the in-depth interviews follows in section 3.6 and 3.7 of this chapter.

**Online Questionnaire**

The second form of measurement instrument, utilised for studies 2 and 3, is the online questionnaire using standardised questions. Two types of issues are discussed namely: (1) issues relating to questionnaire design and (2) issues relating to online deployment of the questionnaire. Both issues are related to each other as deploying a questionnaire on the internet simply adds new dimensions to consider. Special care was taken in the design of the questionnaire to maintain clarity, simplicity and completion time. Leading questions which steered subjects towards a specific answer were avoided. Similarly, easy
and less intriguing attitude questions were placed in the first sections of the questionnaire and demographics were placed at the end.

Online questionnaires and surveys are new ways for researchers to collect data and are now widely used due to the tremendous growth of the internet over the last decade. Online questionnaires provide global access to customers without restricting them to responding to a survey at a particular time and location. While online surveys used in this research project were only for customers from NSW, these customers were provided a flexible time to respond to these and were not confined to a specific location. Using online surveys as an instrument when conducted properly has many advantages over other formats, such as: (1) very low financial resource implication (2) short response time (3) researcher control of the sample and (4) data can be directly loaded into analysis software (Ilieva, Baron & Healey, 2002).

More specifically, studies have shown that online questionnaires have significant advantages over postal surveys in terms of costs (Cobanoglu, Warde & Moreo, 2001; Adam & McDonald, 2003). Cost was an important factor for this research project due to budget constraints. After an initial online study is completed and the technological and software infrastructure established, the cost of further online studies is greatly reduced (Evans & Mathur, 2005). Further, online surveys are more flexible and easier to administer than other formats. Online surveys can be planned to deliver on a specific day that suits the research. Using an online survey benefited this research project by providing flexibility and control over the content presentation. This was important as
vignettes were presented to respondents in a sequential order ensuring balanced participants in each experimental cell.

However, despite the advances in online survey design problems still remain. A significant limitation stems from the available technology which often is insufficiently user-oriented (Ilieva, Baron & Healey, 2002). Similarly, other problems that need consideration are: (1) ensuring adequate response rates – this problem was addressed by using a precompiled database of consumers who have an interest in dining (2) sampling issues and (3) lack of appropriate software for experimental design. Hence, customized software was developed to address these issues. First, Adam and McDonald (2003) point out that past research has produced conflicting results on whether online surveys have a better response rate than postal surveys. One central argument against the use of online surveys is that internet users are overwhelmed by the amount of junk mail they receive every day. In the US, according to global internet security provider Symantec Corporation report, about 56% of total mail is screened as junk mail in a year. Therefore, customers can perceive a legitimate survey as junk mail. Most of the spam screening software such as used in hotmail and yahoo.com can treat a request for an online survey as spam. Such filtration could reduce chances of survey requests reaching potential participants and thus reduce the response rate. Further, sending emails to a group of internet users without knowing the demographics of potential respondents can result in unbalanced representation of the relevant sample. These two issues were addressed by using software that sends individual emails rather than sending as a group mail.
distribution. Further, a customer database was chosen that related to consumers having interest in dining at restaurants.

Researchers have provided suggestions to address issues of low response rate and an unbalanced representation of the sample. For instance, Sheehan and McMillan (1999) found that response rates increase with an increase in issue salience. The response rate is higher when respondents can relate a research project to their own area of interest. In one study, a number of respondents commented on how they appreciated the opportunity to have their say in the running of a club, to which they had expressed a strong attachment (Adam & McDonald, 2003). Similarly, by providing an incentive to participants, the response rate has been reported to increase (Evans & Mathur, 2005). In this study, participants of the online questionnaire were provided with a chance to win free Myers Department Store vouchers. However, incentives may have a negative impact on data quality as respondents can be tempted to distort data by, for example, entering the survey several times to increase their chances to win a prize (Ilieva, Baron & Healey, 2002). Accordingly, in this study, a mechanism was developed to ensure that each participant can enter only once into the lucky draw. Participants were restricted to one valid email address per lucky draw.

Another way to increase response rate is to use a customised list of customers appropriate for a research project. A number of recent web survey services provide access to certain populations by offering access to email lists generated from other online surveys conducted through the web survey service. Some list owners offer access to specialised
populations based on data from previous surveys (Wright, 2005). A company can hire a market research firm with a proven online panel (Evans & Mathur, 2005). Such lists are provided by marketing research companies at a nominal price. This strategy was used to collect data in studies 2 and 3 for this research project. A commercial list management company provided an email list of customers who have previously expressed an interest in dining at restaurants.

For this research project, it was considered appropriate to use a commercial list provided by a marketing research company. Hiring a marketing research company to provide a list of customers, who have a dining interest, is appropriate for three main reasons: (1) sending emails to internet users without knowing their demographic details would be less effective, as users might not mirror the entire population (Ilieva, Baron & Healey, 2002), whereas marketing research companies provide lists with a balanced representation (2) customers have an interest in the research topic and (3) customers have opted to participate in such surveys.

3.4 MEASUREMENT SCALES

This section contains information about the operationalisation of the constructs used in studies 2 and 3. Most of the scales for key variables, such as satisfaction, social regard, acceptability of waiting, sense of control and goal attractiveness in studies 2 and 3 are based on established scales. Taylor and Claxton (1994) have suggested that researchers should use established scales wherever possible. Further, only one measurement scale used in this research project is a single item scale. Overall, service quality is often
measured as a single item scale (Iacobucci & Ostrom, 1993) and this convention was followed for this project. All other scales are multi-item scales. These scales are grouped into in-process thoughts and feelings, in-process actions and post-process evaluations and are presented next.

3.4.1 In-Process Thoughts and Feelings

In this section, I describe four scales used to measure respondent’s feelings about the service experience. Four constructs used to tap this aspect are: (1) affect (2) social regard (3) sense of control and (4) acceptability to wait. A definition of each of these constructs was provided in section 2.5.1 to 2.5.2 of the literature review chapter.

Affect (negative)

Negative emotions like anger, uncertainty (Hui & Tse, 1996; Taylor, 1994) and helplessness (Hui & Zhou, 1996) are often the result of a negative waiting experience. Taylor (1994) has divided these reactions into two general types (1) uncertainty reactions and associated feelings of uneasiness, unsettledness, or anxiety and (2) anger reactions and associated feelings of annoyance, irritation or frustration. In addition, Hui and Tse (1996) and Hui and Zhou (1996) have suggested that a sense of lack of control over a situation or a sense of helplessness are related emotions of negative affect. Taylor (1994) and Taylor and Claxton (1994) have developed a multiple item scale to capture the anger, uncertainty and helplessness of a person resulting from a stimulus, such as waiting. Taylor and Claxton’s (1994) scale had six items in the scale. This measure has been adapted for the restaurant context and is used for studies 2 and 3. This scale was thought to be well suited for this research project as Taylor (1994) has used this scale to measure
negative affect caused by waiting. One item was added to their scale. The dimensions of anger and helplessness were measured with seven items to capture specific aspects of being bored, annoyed, powerless, angry, irritated, helpless, and frustrated. Similarly, uncertain reactions were measured by five items covering uncertainty reactions namely anxious, excited, uneasy, unsettled, and uncertain.

**Social Regard**

Social regard is defined by Butcher, Sparks, and O’Callaghan (2001) as a genuine respect, deference and interest shown to the customer by the service provider such that the customer feels valued or important in social interaction. Six statements were used to record whether respondents felt well regarded during the service encounter, the service provider acted honestly, took an interest in their needs and that they were treated with respect. These statements were based on the six item scale used by Butcher et al. (2001). Butcher et al. (2001) reported an alpha value of .90 for this scale. However, a few changes were made to the scale. First, items were rephrased to suit the specific research context and secondly, one item statement “He/she took a lot of notice of what I said” was excluded and replaced by the statement “I think that the waiter treated me honestly”.

**Acceptability to wait**

Acceptability to wait is defined as the waiting time considered acceptable by the customer. The original scale used to measure acceptability to wait by Hui and Tse (1996) only has two items: (1) extent to which duration information was acceptable to respondent and (2) the extent to which the respondent agreed / disagreed that the reported
waiting time was too long. The same scale was used by Houston, Bettencourt and Wenger (1998) to study customers’ acceptability of a service delay situation. Therefore, the two item scale from Hui and Tse (1996) was extended with three additional statements and with slight modification to suit the context used in this research.

Sense of control

A sense of control is defined as the degree to which a person feels in control of a situation and is able to influence outcomes (Bateson & Hui, 1992). The scale used in the study has been adapted from Bateson and Hui (1992). Bateson and Hui (1992) reported a low alpha of 0.64 for this scale. Four items were used from this scale. One statement “I felt it would be difficult to get my own way in this situation” was positively coded in study 3 as “I felt I could get my own way in this situation.”

3.4.2 In-Process Actions

One objective of conducting qualitative interviews was to understand the type of actions a customer would likely take in a situation similar to that presented in our scenario. A list of likely customer actions during a wait experience was thus extracted from the findings of the qualitative study. These actions are grouped together as in-process actions. These actions included items dealing with: (1) complaining to waiter (2) tipping the waiter (3) compensation (4) asking to see manager (5) leaving restaurant (6) complaining to the manager (7) refusing to pay for food (8) ordering another drink and (9) waiting for a dessert. These actions are all measured individually with single item scales.
3.4.3 Post-Process Evaluations

Satisfaction

Satisfaction is defined for this research project as a customer assessment of a service encounter in which a delay has occurred. One notable problem in measuring satisfaction is that satisfaction is very context-bound. Thus, measuring satisfaction with a general scale can cover some aspects of the experience as a whole, while leaving out some aspects which are situational. Specific to this research project, the researcher needed to measure satisfaction to include three levels of satisfaction/dissatisfaction: (1) satisfaction with effectiveness of a service intervention (2) satisfaction with a waiting experience or a service encounter (3) and overall satisfaction. Therefore, one additional item relating to satisfaction with how the service delay was handled was added to a widely accepted performance based scale for measuring satisfaction reported by Westbrook and Oliver (1991). Further work was done by Bitner and Hubert (1994). Using this scale, six items were selected from the nine item scale and were used to measure satisfaction. The selection of items was based upon specific items relevant to the context of the research.

Quality

I used a single item scale to measure the quality of the meal. I did not use a multi-item scale to measure quality in this research as our requirement was limited only to the quality of the meal provided. We asked one question to capture what the customer had thought about the quality of the meal. There were two purposes in recording customer’s quality evaluation. First, to record what the customer thought about the quality of the
meal to see how this affects the results. Additionally, the researcher wanted to ensure that when a subject related to an experience similar to the situation presented in our scenario, the quality of the meal was not a factor that could have influenced other service outcomes such as overall satisfaction with the service encounter.

**Repurchase intentions**

Repurchase intentions is defined as the likelihood and willingness that a customer will reuse the product or service. To measure repurchase intentions, a measure was adapted from Dodds, Manroe and Grewal (1991). Four statements used for this measure include probability of revisiting, consideration to revisit the restaurant, looking forward to having dinner at the restaurant again and willingness to revisit the restaurant.

**Word of mouth (Positive)**

Positive word of mouth is defined as a positive recommendation by a customer. Mostly word-of-mouth behaviour has been measured as a single item scale. For instance Richins (1983) asked subjects a single question “What is the likelihood that you would tell friends or relatives negative things about this restaurant?” On the other hand, Nordfält et al. (2002) used two statements relating to a general recommendation about a restaurant to friends and others. The Nordfält et al. (2002) two item scale was used in this research project to capture customer’s word-of-mouth behaviour.

### 3.5 INDEPENDENT VARIABLES (MANIPULATED)

As previously indicated, a 2x2x2 experimental design was employed for both studies 2 and 3. In this section, the three independent variables that have been manipulated are
briefly discussed and then the stimulus materials used to reflect each of these three variables are presented. The three independent variables are goal attractiveness, duration information and cause information. Goal attractiveness is theorised to moderate the two service interventions of duration information and cause information. Goal attractiveness is discussed first.

Goals are defined as internal representations of desired states, where states are broadly constructed as outcomes, events and processes (Austin & Vancouver, 1996). Goal attractiveness is defined as an individuals’ state of need and of the psychological ‘distance’ between an individual and the goal (Brehm, Wright, Solomon, Silka & Greenberg, 1981). Goal attraction, in this thesis, refers to the attraction of a waited-for-event. Goal attraction is different from transaction importance which Hui and Takoor (1996) and Houston et al. (1999) have used and have measured by asking a single statement “How important to you was completing this transaction today?” In this thesis, transaction importance is treated as one attribute of goal attractiveness. The other attribute is intensity of desire.

Only one study by Meyer (1994) could be found that has exclusively approached goal attractiveness in a service delay situation. Meyer (1994) has recorded goal attractiveness based on choice of participants at an exhibition of the work of Paul Gaugin. In one other related study, Brehm et al. (1981) asked subjects to indicate how desirable was $1 made available for completing 8 of the 10 problems correctly and how important it is to win the prize. In this thesis, I define goal attractiveness as the level of desire and importance to
reach a goal on time. Those customers who could afford a delay were defined as low goal attractive customers. Conversely, those customers who could not afford any delay would be treated as highly goal attractive customers.

The term “duration information” has been used by numerous researchers (Hui & Tse, 1998; Hui & Zhou, 1998; Delleart & Kahn, 2000; Clemmer & Schneider, 1993). Hui and Tse (1996) defined it as information on the expected length of a delay and treated duration information as a categorical variable with two states (present or absent). Similarly, Katz, Larson and Larson (1991) recorded duration information as given or not given. I have followed this dichotomous approach and treated the duration information condition as given or not given.

Clemmer and Schneider (1993) defined “information on causes” as an employee explanation for the delay. They recorded whether any explanation from the service provider was noticed by customers. Therefore, they treated “information on causes” as a categorical variable having two states – given / not given. This measurement suits the requirements for this study and has been adopted for this thesis.

3.5.1 Stimulus Material

In studies 2 and 3, two experiments were conducted. These experiments required eight different experimental conditions to test the effect of the three independent variables. Therefore eight scenarios were used as the stimulus material. Vignettes were developed to simulate different states for the three moderators identified from the existing literature.
Eight scenarios were required to test the different states of goal attractiveness, dining frequency and gender. These vignettes are presented in Appendix 2 and 5. In Study 1, different service delay situations were identified. These situations were used for the development of vignettes. Study 2 was conducted to test the effectiveness of the stimulus material. Changes were then made in Study 3 to further refine the vignettes. These changes are highlighted in Appendix 7. There were four scenarios representing the low goal attractiveness condition and four scenarios representing the high goal attractiveness condition. Respondents were told to imagine a restaurant scenario. Respondents who received scenarios in which high goal attractiveness was represented were shown a situation where the respondent visited a restaurant and had plans to attend the last performance of his or her favourite artist. They were further told that they did not want to miss a second of this music performance.

Respondents who received scenarios with a low goal attractiveness condition were told to imagine a situation where they were in a restaurant and had plans to listen to music after dinner. However, they did not know which artist was performing and they did not mind if they missed part of the performance. The two situations, one in which a favourite artist is performing versus any performance from an unknown artist, are thought to re-create high and low desirability conditions. The respondents who were to attend the last performance of their favourite artist were regarded as highly goal attractive. On the other hand, those respondents who just wanted to listen to some music and who did not mind if they missed it were regarded as having low attraction to their goal. In both types of scenario the goal of the respondents was to attend a musical performance after dinner.
Duration information was the second independent variable to be manipulated in the experiment. Two conditions were presented to respondents. In the scenarios where duration information was provided it was described that “the waiter comes to your table and tells you that there will be a 30 minute delay in serving the meal”. In the scenarios where duration information was not given respondents were presented with the statement “the waiter does not inform you about how long it will take to serve the meal.”

Cause information was the third independent variable to be manipulated in the experiment. Two conditions were presented to respondents. To create a situation where cause information was given, respondents were presented with the statement “the waiter tells you that the restaurant is busier today due to holiday bookings”. In scenarios where cause information was not given, a different statement was presented “You ask the waiter but he does not know the reason for the delay.”

For each of the three manipulated independent variables, a series of statements were included in the questionnaire to test for the effectiveness of the intended manipulation. Four statements were used to test the goal attractiveness manipulation. A further two statements were used to test the duration information manipulation and finally another two statements were included to see how well the cause information manipulation worked. In addition, a further two statements were included to check whether respondents found the overall scenario to be credible. The details of the manipulation and credibility checks are found at section 4.3.2.
Demographic Measures

A respondent profile was collected by asking for information relating to gender, age, education and frequency of dining out at the end of the questionnaire. The main purpose of this demographic information was to provide a profile of the sample. However, as discussed in section 2.6, gender is perceived to be a moderating factor. Similarly, the age of a customer can influence the way a customer relates to his or her past experiences. Older diners may possess greater and varied experiences in dining at restaurants and might have become more sceptical about service quality, which could influence how they relate to the situation presented in the scenario to their past experience. Other factors such as customer education level may influence their evaluations and were also included.

3.6 SAMPLING

In this section, sampling design issues and procedures are discussed. A non-probability sampling technique based on a convenience sample was used for study 1. In study 2, probability sampling was used but with a very narrow sampling frame, as the sample relates to staff members of a single company. Study 3 uses a sample provided by a list marketing company. Table 3.3 shows the general features of the three samples. Three important sampling issues are highlighted: (1) selection of context (2) sample representation and (3) problem of random assignment in experimental design.
Table 3.3
Sampling Design

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample</th>
<th>Size</th>
<th>Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Exploratory</td>
<td>Convenience – purposeful</td>
<td>12</td>
<td>Retrospection - recall basis</td>
</tr>
<tr>
<td>2 Experiment</td>
<td>Probability</td>
<td>130</td>
<td>Online questionnaire immediately after showing a vignette.</td>
</tr>
<tr>
<td>3 Experiment</td>
<td>Probability</td>
<td>698</td>
<td>Online questionnaire immediately after showing a vignette.</td>
</tr>
</tbody>
</table>

3.6.1 Selection of Context

Various contexts have been used to study service delay experiences, such as banks (Katz, Larson & Larson, 1991), airlines (Taylor, 1996), supermarkets (Tom & Lucey, 1995) and hospitals (Transik & Routhieaux, 1996). In addition, restaurants have been widely used as a context to investigate various dimensions of service delay experiences (Jones & Dent, 1994; Dawes & Rowley, 1996; McDougall, 1996; Mattila & Cranage, 2005).

Selection of a suitable service context is important as Jiang and Wang (2006) argued that context can moderate the effect of service evaluations. They further suggested that hedonic related service contexts are different in nature from utilitarian service contexts. That is, the influence of affect on service quality and service evaluation is stronger in
hedonic contexts than may be found in utilitarian contexts. Therefore findings from one type of context may not be generalised to other different contexts.

Restaurants were chosen as the experimental context for several reasons. Restaurants are an important context for service marketing research and in particular for studying service delays. Customers are increasingly concerned with the quality of service at restaurants and increasing competitiveness and high operational costs are resulting in more service related problems. Therefore, more research is warranted in this context to find innovative methods to improve quality at restaurants. Restaurants in general are also a useful context for research as they provide a rich environment of hedonic service experience to study behaviour, actions and service evaluations under various dimensions of service delivery processes. Restaurants are commonly visited places and service delays are common in restaurants and therefore people can easily relate to their own personal experiences of services in restaurants. Further, from the point of view of this research project, a context where service interventions, such as providing duration and cause information are usually practised was required. As a result, the use of restaurants, as a context for this research, was considered appropriate to study the effectiveness of service interventions.

### 3.6.2 Sample Representation for Interviews

A convenience sampling technique was used to explore the concepts and nature of service delays in restaurants. Twelve individuals were interviewed in the exploratory phase of study one. The individuals were staff members, operational managers and
customers of three different restaurants located in the Sydney Central Business District. The decision to use a convenience sample was made on practical considerations. Convenience samples tend to be low cost and less time consuming. In addition, they are useful in exploratory research, where the researcher is interested in understanding a concept and an approximation of a truth. However, the use of a convenience sample raises issues of sample representation and generalisability of findings across populations. Even though probability sampling is highly desirable to ensure representation, convenience sampling is widely used in social research for practical purposes. Similarly a convenience sample is quite common in service marketing (Hui & Tse, 1996; Taylor, 1997).

3.6.3 Random Assignment of Sample for Experimental Design

At the core of all experiments is the random assignment of subjects to treatment and control groups. In situations, where the researcher doesn’t have control on which group of subjects will have more or less participation within a cell, this may result in unbalanced representation of subjects to individual cells. Shaw and Mitchell-Olds (1993) highlighted problems with unbalanced data and suggested that rather than eliminating data from cells to balance out or fill the missing values, an appropriate mechanism should be used to provide balanced cells.

Unbalanced data were also an important issue for this thesis. While unbalanced data may not be a serious issue for a single factor design (Milliken & Johnson, 2001), multiple
factors can pose additional analysis problems. In this thesis, eight different groups were required for the experimental design with a balanced number of participants in the eight cells. Accordingly, the use of in-house developed software and an online questionnaire resolved this issue and facilitated keeping a consistent number of subjects within the eight groups. The software worked on the simple logic of reading the existing number of assignments in each group before making a decision about the next assignment of a participant to a treatment group. The software randomly assigned participants in a sequential manner to ensure that at any point of time, equal numbers of participants were assigned to each treatment group. This was also important from a statistical point of view as ANOVA/ MANOVA was used in this thesis to test differences between the groups. Unbalanced data in ANOVA / MANOVA would require additional considerations in interpretation and analysis of data.

3.7 DATA COLLECTION PROCEDURES

In this section, data collection procedures are discussed. Two data collection techniques were used for the three studies: (1) semi-structured interviews and (2) online questionnaire. These two data collection methods are discussed next.

3.7.1 Semi-structured Interviews

The first part of the research project was based on qualitative interviews from the operational staff at restaurants. Necessary permission was obtained to access staff members of three restaurants in Sydney. An interview script was developed and semi-
structured interviews were conducted with the owners and staff members of the restaurants. Interviews took between 30 to 45 minutes to complete. These interviews formed the basis which helped in the development of the online questionnaire used in subsequent studies.

3.7.2 Online Questionnaire

Two experiments were conducted for studies 2 and 3 and data were collected using an online questionnaire. Several commercial companies provide software to administer online surveys (e.g., EZSurvey, FormSite, SurveyCrafter, WebSurveyor, SurveyMonkey and HostedSurvey). However, there are problems associated with using such software. First of all, there are only a few software packages that can handle a project using an experimental design and could provide support for Likert scales. Secondly, commercial software is expensive and requires specialised knowledge to setup. Thirdly, software companies tend to provide a “feature” rich solution which makes it difficult for respondents with a lack of online experience and expertise. Some respondents may find difficulty in understanding and responding to an online survey.

One solution to address the above issues was to develop a customized web site containing only the features required by the current project. Accordingly, the researcher developed a web site to host the online survey with a database to store the answers. The researcher has a background in software development which was used to develop and deploy the site. Special consideration was given to ensure usability of the site. The web site was divided into three parts. First, an introduction and information about the project was presented.
Secondly, vignettes were presented to participants sequentially. Then the questionnaires were presented. The survey ended with a choice for participants to enter into a lucky draw. Clear instructions were provided at every page of the web site. The survey contained a small range of colours and simplified the presentation of the content. In addition, a module was developed to upload data directly from the web site to SPSS software for analysis.

In studies 2 and 3, participants were sent an invitation email with information about the project and were given links to the information sheet and to the survey website. Wright (2005) suggested that it is important for researchers to include contact information, information about the study, and something about their credentials when creating an invitation to participate in a survey. A second reminder email was sent after a few days. Participation in the online survey was voluntary. Participants could win a Myers Department Store voucher by providing their email address at the end of the survey. Email address records of participants were kept separate from the survey data and the data were secured using encryption.

A website was developed specifically to host the collection of data for the study. The site was developed and administered by the researcher due to two main reasons. First, most commercial sites are designed to administer questionnaires for survey design. Many of the available freeware softwares such as “WebExp2” do not support Likert scales. Furthermore, this freeware software didn’t allow for the mixing of different types of inputs. More importantly, most commercial sites don’t suit experimental design. Eight
different scenarios were required to be presented to respondents sequentially and an equal distribution was required to ensure an equal number of participants in each cell. A software program was developed that handled the allocation of a scenario to a participant and ensured equal distribution of scenarios among the respondents. Secondly, it was decided to develop a customised web site to ensure security of the emails submitted by the participants.

*Information Sheet / Consent Form*

A link to the information sheet was provided to each respondent. The information sheet contained general information about the project such as, name and contact addresses of the researcher and supervisor. Further, background information about the research project was provided. Participants were told about the reward for participation in the survey.

*Introductory Screens*

Those respondents who decided to participate by clicking the link to the web site were initially shown an introduction screen. The introduction screen provided summary level information about the project. Respondents were given an option to either quit the survey or to accept participation by clicking the next page. Those who gave their consent to participate were shown the next screen with a scenario.

*Allocation of scenarios*

Respondents were then shown a vignette and asked to imagine themselves as a customer in a situation depicted by a scenario. There were eight different scenarios and computer
software was used to assign a scenario to each respondent. The logic of allocation was initially on a sequential basis determined by the scenario allocated at the start of the experiment. However, this aspect posed a problem when multiple respondents accessed the web site at the same time. They would be allocated the same scenario number. This problem was resolved by including a second allocation logic based on storing scenario numbers in the computer memory. Two types of information regarding the scenarios were stored in the computer memory (1) current allocation of scenarios and (2) previous allocation of scenarios to each cell based on surveys already submitted. Together, both types of information were used to balance the numbers of respondents in each cell. This logic ensured that at any given time the number of participants in each cell was balanced.

3.7.3 Ethical Issues

Webster’s New World Dictionary defines ethics as conforming to the standards of a given profession or group. Ethics refers to the values by which one judges the conduct of individual researchers and the morality of the research strategies they use (Rosnow & Rosenthal, 1999). As a social researcher, it is important to be aware of four important ethical agreements (1) voluntary participation (2) no harm to participants (3) confidentiality and (4) researchers’ disclosure identity (Babbie, 2000). Participants need to be told that participating in the research is voluntary and should not be forced into a situation where they have to participate and must be given an opportunity to opt-out (Evans & Mathur, 2005).
In this research project, all four important ethical agreements mentioned above are considered. For instance, participation in the first interview and the subsequent surveys was voluntary. Further, the researcher informed participants about the purpose of the research as “understanding the waiting experiences of customers and improving the effectiveness of intervention strategies”. Additionally, the researcher provided his own identity to the participants as a research student in an Australian university.

3.8 DATA ANALYSIS

The research objectives in chapter 2 provided the primary focus for data analysis. Combining qualitative and quantitative data requires a different framework for analysing data. For the qualitative study, data were analysed following three major processes of codification, classification and thematisation (Bouma, 2000). A freeware software GTAMS Analyser version 4.2 was used to assist in the analysis of the qualitative data. This software provides text searches, document creation and management features and simplifies qualitative data analysis. However, use of this software was limited to its textual searching facility and required coding with use of a mark up style format. These markups tags have to be set manually in the system by reading the transcript and assigning text to codes. Other popular choices for qualitative data analyses are Ethnograph, Altas, HyperResearch, MAXqda2, NVivo2 and InfoRapid.
However, before using the GTAMS Analyser, data were transcribed into text files from the digital recorded interviews and then were manually coded and attached into GTAMS analyser for further analysis. GTAMS Analyser allows creating documents, identifying quotations, insertion of codes and memos within a single GUI (Graphical user interface) screen. Output reports in the shape of tables were produced by the software and were then further employed in the interpretation of the data.

For the two quantitative studies, data were analysed in five different stages: data collection, data preparation, data profiling, preliminary and major analyses. Several different types of tests were conducted during these stages as shown in table 3.4. This approach was consistent in both quantitative studies. These stages and tests are discussed next.
<table>
<thead>
<tr>
<th>Stage</th>
<th>Tests / Analyses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data collection</td>
<td>Online data validation and checks e.g. wild codes, singularity, completeness.</td>
</tr>
<tr>
<td>Data preparation</td>
<td>Conversion to SPSS data requirements from data stored in Access database.</td>
</tr>
<tr>
<td>Data profiling / quality</td>
<td>Outliers identification</td>
</tr>
<tr>
<td>Preliminary analysis</td>
<td>Scale reliabilities</td>
</tr>
<tr>
<td></td>
<td>Assumption testing</td>
</tr>
<tr>
<td></td>
<td>Reality checks</td>
</tr>
<tr>
<td></td>
<td>Manipulation check</td>
</tr>
<tr>
<td>Major analysis</td>
<td>Main effect t-tests</td>
</tr>
<tr>
<td></td>
<td>Interaction effects ( MANOVA)</td>
</tr>
<tr>
<td></td>
<td>Mean analysis of groups</td>
</tr>
</tbody>
</table>
3.8.1 Preliminary Analysis

One important benefit from using an online questionnaire, over the use of a hand distributed questionnaire, is the ability to validate data at the time of data collection. When questionnaires are hand distributed, data quality analysis can only be done once questionnaires are returned back. However, as an online data collection method was used for the quantitative studies, validation and integrity checks were developed as part of the data collection process. These checks eliminated the need for any subsequent quality checks, such as checks for completeness, qualification and appropriateness of answers. The software developed for data collection performed checks to ensure that questionnaires were completed. Further, the software identifies potential outliers by tagging responses which were either completed too fast or had a consistent pattern of data or if the respondent marked every question with a similar response. However, as software didn’t allow a questionnaire to be stored unless these checks were validated, no questionnaire was later required to be excluded.

The data preparation stage was facilitated by the online data collection. SPSS software was the main tool for data analysis which required that data were in a format (structure) that can be either imported into the SPSS software or otherwise entered manually. However, as the data collection software was developed by the researcher, special care was taken to ensure that data once collected did not require being re-entered. A separate software module (program) was developed that converted the data in Access format (a Microsoft database) to SPSS in less than a few seconds. This feature could be utilised at any given point of time without disturbing the data collection process. The software had
performed two types of transformations (1) it had restructured the data columns to a vertical layout to allow the researcher to view a respondent’s answers in a single row and (2) it saved the data in an SPSS format file to be directly used in the analyses software.

While the online software facilitated the identification of potential outliers, it was still necessary to manually browse through those responses that were tagged by the software. The data were checked to see whether respondents who answered too quickly or provided similar responses should be discarded. Accordingly, five responses were excluded from analysis.

A preliminary analysis of the data was conducted before any major analytical technique was employed for the quantitative studies. Preliminary analysis followed Pallant’s (2007) suggestion of performing three types of preliminary analysis (1) a test that helps to describe the sample used in the research (2) check for violation of assumptions underlying the major statistical techniques in a research and (3) reliability of the scales. First, descriptive statistics were generated to understand the characteristics of the sample. Secondly, various tests such as number of cells in each group, Levene’s test of equality of variance, Mahalanobis distances, Box M test of equality of covariance, Bartlett’s test of sphericity were conducted to ensure that the data did not violate the underlying assumptions of the major analytical technique of t-tests and MANOVA used in the research. Finally, Cronbach coefficient alphas were calculated to test for internal consistency of the scales.
3.8.2 Main Analysis

Three types of analytical techniques were used for the main analysis (1) t-tests (2) MANOVA and (3) simple mean score analysis. The selection rationale was driven by the research objectives. Independent t-tests were used to look at the main effect of service interventions on a number of dependent variables. Independent t-tests were conducted once normality and homogeneity of variance assumptions were met and were used to determine if the means of the two independent groups significantly differ.

Multiple analysis of variance (MANOVA) was the other primary technique used to assess whether an overall difference exists between groups. MANOVA is a commonly used technique to study differences between groups and is an extension of analysis of variance for use when there is more than one dependent variable (Pallant, 2001). Another alternative to MANOVA is to use multiple ANOVAs. However, such an approach may be vulnerable to inflated type 1 and 2 errors and may require a Bonferroni adjustment (Pallant, 2001). Numerous researchers in service marketing have used MANOVA to study groups’ differences (e.g., Hui, Thakor & Gill, 1998; Diaz & Ruiz, 2002; Miller, 2004).
3.9 SUMMARY

In chapter 3, the overall approach and methodology used to collect the data for the three studies were provided. Seven major areas were covered (1) overall design (2) measurement instruments (3) measurement scales (4) independent variables (5) sampling (6) data collection procedures and (7) data analysis techniques. Three studies were conducted in this research project. The first study was based upon qualitative methodology using in-depth interviews. The second and third studies employ quantitative methodology. In the next chapter, results of these three studies, based upon the methodology described in chapter 3 are presented.
CHAPTER 4

ANALYSIS AND RESULTS

4.1 INTRODUCTION

This chapter presents the analysis and results of the three studies conducted for this research project. Each study is presented in a separate section. The first section examines the results of study 1 which are derived from a series of in-depth interviews. The next two studies test a wait model based on how situation factors play a role in affecting customer thoughts, feelings, behaviour and evaluations. Two hypotheses were tested in study 2 to determine whether the impact of service interventions, such as providing duration and cause information, on customer’s in-process feelings, thoughts and behaviour and post-process evaluations are influenced by three moderating variables of goal attractiveness, level of dining usage and gender. Study 3 is an extension of study 2 and has a more diversified and larger sample size. Furthermore, an additional hypothesis in study 3 enabled further investigation and expansion of the findings of study 2. The results of hypothesis testing for studies 2 and 3 are shown later in this chapter. The results of the qualitative interviews in study 1 are reported first.

4.2 STUDY 1

Study 1 is qualitative and was designed to investigate the nature of the waiting problem in restaurants and to further explore the three important factors of goal attractiveness, level of dining usage and gender. These three factors were identified during the literature
review and required further contextual exploration. The issues arising from the literature review regarding these three factors are discussed in section 2.8.1 to section 2.8.3 of the literature review chapter. Three primary objectives were set for this study, as described in section 3.2.2 of the method chapter. To achieve these objectives, twelve in-depth interviews were conducted. Results of the in-depth interviews are presented next.

4.2.1 Participant Profile

Twelve participants were interviewed for study 1. There were three types of participants: (1) operations managers of restaurants (2) serving staff and (3) restaurant customers. The operational managers were males aged between 40 and 55. Two customers were male; one was female, all between the age of 25-45. The serving staff were all female in the age group 20 to 40 years. Each participant was asked to recall delay related incidents and what they felt about different aspects of that experience. Managers of restaurants were asked more wait-management specific questions with the objective of gathering information relating to the effect of delays and current practices used to manage customer waits in restaurants. Serving staff were probed more about differences in the behaviour of different groups of customers, such as those in a hurry or those who were more relaxed. Behavioural differences were also explored between frequent and infrequent diners and females and males.
<table>
<thead>
<tr>
<th>Interview</th>
<th>Code</th>
<th>Participant type</th>
<th>Participant profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ROM1</td>
<td>Restaurant owner</td>
<td>Male, 40-45 years old</td>
</tr>
<tr>
<td>2</td>
<td>OPM1</td>
<td>Operations manager</td>
<td>Male, 55-60 years old</td>
</tr>
<tr>
<td>3</td>
<td>ROM1</td>
<td>Restaurant owner</td>
<td>Male, 40-45 years old</td>
</tr>
<tr>
<td>4</td>
<td>WF1</td>
<td>Waitress</td>
<td>Female, 25-30 years old</td>
</tr>
<tr>
<td>5</td>
<td>WF2</td>
<td>Waitress</td>
<td>Female, 20-25 years old</td>
</tr>
<tr>
<td>6</td>
<td>CM1</td>
<td>Customer</td>
<td>Male, 25-30 years old</td>
</tr>
<tr>
<td>7</td>
<td>CM2</td>
<td>Customer</td>
<td>Male, 35-40 years old</td>
</tr>
<tr>
<td>8</td>
<td>CM3</td>
<td>Customer</td>
<td>Female, 40-45 years old</td>
</tr>
<tr>
<td>9</td>
<td>WF2</td>
<td>Waitress</td>
<td>Female, 35-40 years old</td>
</tr>
<tr>
<td>10</td>
<td>WF3</td>
<td>Waitress</td>
<td>Female, 30-35 years old</td>
</tr>
<tr>
<td>11</td>
<td>WF4</td>
<td>Waitress</td>
<td>Female, 35-40 years old</td>
</tr>
<tr>
<td>12</td>
<td>WF5</td>
<td>Waitress</td>
<td>Female, 25-23 years old</td>
</tr>
</tbody>
</table>
The qualitative analysis of the data collected for study 1 is reported in subsections. The first subsection reports on the overall issues perceived as responsible for service delays in restaurants. The second subsection relates to current practices in restaurants, especially in relation to providing information related service interventions. The final subsection presents data relating to three specific situations relevant to the proposed hypotheses for this thesis.

4.2.2 Nature of service delays in restaurants

The first part of the qualitative analysis presents data about the overall nature of service waits in restaurants. Restaurant owners, serving staff and operational managers were asked to highlight key factors which they considered tend to lead to service delay related problems in restaurants. There were a number of comments made by serving staff and managers that identified what they perceived as the main reasons for delays and these reasons are synthesised under: (1) reservation and booking issues (2) demand and supply issues and (3) staff training and skills issues. These three themes are discussed next.

Reservation and booking related issues

The lack of an adequate reservation system was identified as one of the issues which can result in service delays. Most notably, it was reported by serving staff that restaurants have a tendency to overbook reservations on weekends, to ensure that in case of cancellations there are always enough bookings to avoid loss of business. In addition, it was found that restaurants overbook through a fear that some customers will not turn up
after booking. Similarly, in the case of group bookings, it was thought to be a common issue that not all members of a group turn up. These fears were mentioned by several operational staff as the following exemplars indicate:

*Customers book on the telephone but don’t turn up (ROM1)*

*Large bookings of people change their minds, you never know if they will turn up or not (ROM1)*

However, serving staff reported that consistently overbooking to counter the ‘classic no-show’ tends to reduce the effectiveness of a reservations system, especially when all customers turn up and serving staff are required to serve them all. It was also reported that, in some cases, over booking has also resulted in customers leaving the restaurants.

*When you have bookings in the evenings, if everybody comes at once, everybody needs their drinks at once, everybody needs their menus at once, and everything at every table needs to happen at once (WF5)*

*There was a big table, customers left as they thought they were waiting too long, but we were waiting for their other friends to turn up, we waited for the whole table to arrive, therefore it was bad communications (WF1)*
Demand and supply issues

The second theme, evident from the service provider’s perspective, suggests that restaurant management struggles to correctly predict customer demand. While most restaurants tend to be busier on weekends, it was reported that there were unexpected situations resulting in weekdays which could get just as busy as the weekend. Managers found it difficult to correctly arrange supplies and staffing levels due to unpredictable demand. Consequently, when restaurants become unexpectedly busy, the lack of adequate staffing levels and shortage of supplies can result in substantial delays. The following exemplars highlight the problems associated with correctly predicting demand levels faced by management:

_Fridays and Saturdays are mostly the busiest time, other days sometimes it gets very busy as well (ROM1)_

_Thursday, Friday and Saturdays are really busy, but any day can be busy, last week even Tuesday was very busy (ROM1)_

_I usually keep two days stock, but you never know when you are short of something as some times customers can pop in unexpectedly (ROM1)_
I don’t know when customers can come, one day there was no booking and then suddenly I started receiving bookings and take away orders in evenings and I didn’t have enough staff to handle the orders (WF4).

Staff training and skills related issues
There was strong evidence that restaurants mostly hired casual staff. This is mostly to fill variable demand levels. Most restaurants acknowledged that they didn’t have a formal training program for new staff members. As a result, service delays may occur due to inexperience of a new staff member. Managers found themselves in a catch-22 situation where they couldn’t afford the cost of formal staff training but recognized the problem of using inexperienced staff to service customers. The following exchanges from the kitchen and frontline staff highlight these issues:

I usually hire casual staff for serving, but we prefer kitchen staff to be permanent employees, but finding the right staff is always a problem (ROM1)

I don’t have the time to train staff; I usually hire those who have previous experience in restaurants (OPM1)

No training is provided to me about what to do…. I learn on the job (WF2)

Most of the time, delays are due to kitchen staff, especially when new staff is in kitchen
Kitchen was not prepared, because there was a new staff in the kitchen, somebody took the wrong food to the wrong table, customers were still waiting as food needed to be cooked for them after the wrong order (WF3)

4.2.3 Current Practices of Managing Waits in the Restaurant Industry

A second objective of conducting in-depth interviews was to understand the current practices relating to the provision of information related service interventions in restaurants, in order to manage undesired customer waits. Serving staff and operations managers were asked about whether they provided any delay related information to customers and if so, under what situations did this occur. Mostly, serving staff indicated that they do tend to provide the expected length of time of an order, at the time of taking the order. However, in the case of a service delay, it was apparent that there was no standard practice of whether delay information should be provided or not. It was found that in most cases it was left to the serving staff to decide whether any information should be provided to the customers or not. As a result, serving staff were undecided about the need to provide information to a customer. Some of the comments made by the serving staff are given below:

I provide information if there is a delay, but I usually don’t tell customers about what is happening, unless there is something very obvious (WF5)

There is no standard practice; I provide information to the customer if I feel there is a need (WF1)
Most people really understand, but if you avoid them they are not happy, it is all about communications, they need to be informed if there is a breakdown, so we talk and tell them what is happening (WF1)

I usually give an indication of how long it will take when it is very busy, how long the customer has to wait to be seated, mostly they are happy with the time, few times customer said we can’t wait that long and leave (WF4)

4.2.4 Effects of Situational Factors

In the literature review chapter, I presented three situational factors which could influence customers’ waiting experiences (sections 2.7.1 to 2.7.3). To further investigate the potential effects of the three factors of goal attractiveness, level of dining usage and gender on customers’ waiting experience in restaurants I asked staff a series of probing questions related to such situational factors. In particular, participants were asked to specifically recall customers who had to attend some important task after dining, any differences between the behaviours of frequent or regular restaurant customers with infrequent diners and finally any behavioural differences between female and male customers. The results of probing respondents on these three situational factors are presented next.
**Goal attractiveness**

Questions probed for any perceived differences between customers who are in a hurry and those who have more time at their disposal. Respondents gave a number of comments that identified that there were some customers who were more relaxed than others and had different serving requirements. For instance, it was reported that business customers tended to be in a hurry at lunch time. Similarly, those who come early to restaurants usually have some plans for the night and tend to leave early as well. On the other hand, customers on holidays were reported to be more relaxed.

*My business clientele customers are always in a hurry at lunch time, if you don’t serve them quickly enough they will leave after a drink (WF1)*

*Foreigners who are on holidays or visitors are more relaxed, they have more time, they are enjoying. They don’t like you to rush the orders; there is a fine line between rushing an order and a delay (WF1)*

*It’s often those who come early, leave early as they may have to go somewhere, you have to serve them as they want or otherwise you will not see them again (WF4)*

Furthermore, participants also indicated that customers more often do not let the server know if they are in a hurry. Rather, servers tended to know from the customer’s body language, especially the look on their faces that they were in a hurry. Hence, those
servers with an inability to understand a customer’s non-verbal communication will miss such signals. The following comments highlight the reliance on non-verbal cues:

*Body language of a customer tells you that some customers are in hurry, they look at you more often as well, and they seem to be more keen to know what is happening*(WF2)

*Sometimes the customers tell us they want to be served quicker and have to go somewhere, these customers will not tolerate if you don’t serve them as promised *(WF1)*

*Those who are short of time don’t always say anything to you; it’s the look on their face that tells you that they are expecting you to serve now*(WF2)*

A few serving staff indicated that when there were delays, a few customers, who were in a hurry, left the restaurant without completing their intended meal arrangements.

*Food was late and I have seen a table leave, they only paid for the wine and just left, I knew they had some other plans *(WF1)*

*People come in and a table is not ready, they leave, they don’t want to wait for a table.... There are many other restaurants where they can eat quickly if they want *(WF5)*

Similarly, several customers provided comments to indicate that their selection of a restaurant could be based upon their serving requirements. That is, respondents reported
that when they were in a rush they preferred to eat at a fast food restaurant or a table restaurant which could serve them quickly. Interestingly, comments from managers indicated that serving customers too quickly could also result in a service problem. Customers served too quickly could also feel that the restaurant doesn’t care about them and just simply want to get rid of them. Some of the comments made by customers and serving staff indicating different serving requirements are:

*When we were in Amsterdam, I was with my girl friend, we had to fly and wanted to eat something quickly, we would have left if not served quickly that night. We should have gone to McDonalds instead (CM1)*

*I usually don’t go to a restaurant if I am in hurry, or tell them that I want to be served quickly, but you don’t enjoy if you cannot relax and enjoy your meal, but sometimes you don’t have an option (CM3)*

*It depends upon what frame of mind you are in and how much time you have, at times you need to rush, then even a small mistake can become big, it all depends (CM1)*

*Some people are happy waiting and relaxing and want a pause between their orders; others just want to eat food and leave, they are unhappy if you rush the orders as they feel you are trying to get rid of them quickly (WF1)*
**Level of Dining Usage**

A further aim of the qualitative interviews was to find out if customers who frequently visit a restaurant or have more dining experience were different in any way from those who were not regular customers. The main source of evidence was provided by the serving staff who reported that regular customers were more tolerant, friendlier and easier to serve than non-regular customers. The following comments identify differences between customers with different levels of dining usage. Furthermore, respondents also identified that regular customers usually give more tips.

*Most of the customers who come here are regular customers; they don’t give us a hard time (WF3)*

*Frequent regular clientele give me more tips (WF4)*

*People who don’t come here often, don’t tip (WF5)*

A few respondents indicated a sense of bonding and relationship formation with frequent diners, who because of the long term relationship tend to show more tolerance to servers’ mistakes than those customers who don’t visit the restaurant on a regular basis. The relationship aspect is reflected in the following comments:
Some customers behave like surrogate parents, I got a couple come here who don’t have children of their own, I know they treat me like one of their kids, it becomes a very very nice relationship which you would not get with a non-regular clientele (WF1)

We all come closer for a reason, its all about an experience; they (regular customers) ignore small mistakes (WF1)

Regulars are easier to serve, a lot easier than the people who just walk off the street (WF4)

Straight away barriers are down and you know you are comfortable with them, they also don’t complain a lot (WF4)

Frequent customers are more tolerant, I guess to mishaps specially when it has not happened too often, infrequent customers perhaps have more service expectations and aren’t impressed when something goes wrong (WF1)

They (regular customers) are more relaxed, easier to serve, more approachable, it is the familiarity of the place, they know the menu, they know me, and with regulars you have a comfort zone, where as for newcomers there is no comfort zone (WF4)
Gender

Respondents provided comments that indicated behavioural differences between male and female customers. The source of evidence came from serving staff but did not present a conclusive picture of differences between male and female customers. Two aspects of the differences between females are males were probed: (1) general differences in behaviour and (2) tipping behaviour. While respondents reported that males were easier to serve than females, no conclusive picture of differences in their tipping behaviour emerged. For example, one set of evidence suggests that females and males both tip in a similar manner. In addition, it was reported that male customers complain less than female customers. The following exemplars highlight these differences:

Women tip here as much as men (WF4)

Professional women usually tip the same as men (WF1)

Women in a group who had a good time usually tip very well (WF2)

Males are easier to serve than females, women complain more as well (WF1)

Men tend to complain less than females (WF3)
4.2.5 Summary (Study 1)

In study 1, three areas of the wait situation were investigated through in-depth interviews. First, the nature of the waiting problem in restaurants was explored and three themes identified that shed further light on the wait experience. Second, a view of current practices with respect to delay information was canvassed. Finally, possible moderating factors that can influence customer’s behaviour and actions identified in the literature review were further investigated. Respondents were mostly operational, serving staff of restaurants. Insights into restaurant management practices and differences between groups of customers were identified which facilitated the development of a wait model. This model was tested in studies 2 and 3. In the next section, results of the first quantitative study are presented.
STUDY 2

The existing literature on waiting provided some support for how situational factors, such as goal attractiveness, can influence the effectiveness of service interventions in a service delay. Further support and some insights into the role played by situational factors were provided by study 1. However, the next step was to empirically test the effect of specific situational variables on service outcomes. Therefore, a quantitative study was planned to investigate whether the three situational variables of (1) customer attractiveness to his/her individual goals, (2) level of dining usage and (3) gender could influence the effectiveness of two types of service interventions: (1) providing duration of delay and (2) explanation of cause information on a range of dependent variables. The rationale for the selection of the independent and dependent variables was presented in the literature review chapter.

The format of reporting the results for both studies 2 and 3 is the same for both studies and covers six types of analysis or description. Sample characteristics are presented first. Next, the reliability of measurement scales and a preliminary analysis of the data provide information on the measures used in both studies and the results of credibility and manipulation checks. Fourth, in the main analysis using MANOVA, main effects are reported followed by an analysis of the interaction effects of situational variables. While effect size is often reported with MANOVA, in both studies 2 and 3, the specific effect size is not reported but rather I focus more on the mean scores and direction of effect. This is a more practical approach for managers as they are generally more familiar with
mean scores than the effect size. This approach is consistent with Hui, Tse (1996) and Hui, Zhou (1996; 2006) who both reported interaction effects and mean scores to report the moderating influences of service interventions. Therefore, the results of the mean analysis are the last analytical technique reported and show the direction of interaction effects. Figure 4.1 shows the sequence of these six types of analysis.

Figure 4.1: Six Types of Analysis for Studies 2 and 3

In Study 2, one hundred and thirty subjects recruited from a professional IT company participated in an online survey. Two hypotheses were tested. The findings indicate that the effectiveness of providing duration and cause information is not consistent between groups based on goal attractiveness, dining experience and gender. More interestingly however, certain situations were identified in which service interventions, such as
providing duration and cause information, could even be counterproductive to the desired aim of the service intervention.

4.3.1 Sample Characteristics

Out of a total of 130 subjects who participated in the study, 51 were females (39.2%) and 79 were males (60.8%). As the sample was drawn from working professionals from a single company and subjects were predominately from the information technology industry, most of the subjects were in a young age group of between 25-34 years old (84 subjects, 65%). Of the remaining subjects, 39 (30%) were in the age group 35-44 and the remaining 7 subjects were over the age of 45.

The education levels of the participants were recorded within four categories. The first category contained participants who had completed high school education. Only 6 participants (4.6%) had only completed high school education and had not had further studies. Only 3 participants had completed college as the highest level of education. Most of the subjects had either a trade qualification 86 (66.2%) or a university degree 33 (25.4%). The high numbers of participants who had a trade qualification also included those who had some kind of information technology certification from companies, such as Microsoft and Sun. This group also included accountancy professional qualifications from institutions such as the Institute of Cost and Management Accounts and Institute of Chartered Accountants.
Each subject was asked to nominate the frequency of restaurant visits. A dichotomous scale was used to measure customer’s dining usage. Respondents who have visited a restaurant for at least once a fortnight were regarded as frequent diners. Those who visited a restaurant less than once a fortnight were regarded as having low dining usage. 92 (70.8%) respondents were found to be high frequency diners and 38 (29.2%) respondents were found to be in the low frequency diner group. One of eight different scenarios was randomly allocated to each of the 130 subjects. The subjects within each cell were balanced with computer software which randomly assigns and checks each cell before allocating a subject.

The next section presents the results of preliminary analysis of the data.

4.3.2 Preliminary Analysis

Three sets of preliminary analysis are reported. First, tests were conducted to ensure that the data have not violated the assumptions of MANOVA, which is the primary analytical technique used in this study. Second, a series of credibility and manipulation checks were conducted to ensure that the scenarios were working as desired. Third, the main effects of both service interventions on all service outcomes are reported for comparison between the moderating effects (if any) of situational variables.
Assumption Checks for MANOVA

The data were collected using an online web site. All submitted responses were completed, as the survey software validated the data for completeness before storing in the database. Data were transformed into an SPSS compatible format for further analysis. The distribution of subjects within each cell was controlled by the software and consequently no responses were required to be deleted to balance the participation within each cell. MANOVA is sensitive to outliers in the data (Pallant, 2005) however, no outliers were found during the preliminary analysis using the explore function in SPSS and tests for the Mahalanobis distance. Consequently, all responses (130) were then used for further analysis of the data. When correlations among dependent variables are high there may be problems due to multicollinearity (Coakes & Steed, 2003). Bartlett’s test of sphericity (Bartlett, 1950) was also not found to be significant (p < 0.05) indicating that there was no multicollinearity problem with the data. Similarly, data have not violated the assumption of equality of covariance matrices, as the Box’s test of equality of covariance matrices reported a significance value larger than 0.01. Similarly, the Levene’s Test of equality of error variances showed significance values in excess of 0.05. Consequently, the data were considered suitable for further analysis.

Credibility and Manipulation Checks

Overall, participants reported a modest belief in the credibility of scenarios. Three statements were included in the survey instrument to test the credibility of the scenarios.
The three statements measuring scenario believability had mean scores of 5.2, 5.9 and 5.4 on a 1-7 scale, indicating modest agreement that the scenarios were credible.

Each of the three variables manipulated were also checked for efficacy of the manipulation. Thus, the three independent variables, namely goal attractiveness, duration information and cause information were checked using an independent samples t-test to compare the scores between high and low groups. All three manipulations worked as planned. A summated scale was used to check the goal attractiveness manipulation. There is a significant difference of mean scores at the 95% level between subjects that were provided with a high goal attractiveness scenario (M=5.5) and those subjects provided with a low goal attractiveness scenario (M = 4.2) indicating the effectiveness of the manipulation. Similarly, a significant difference was found at the 90% level between the group that was provided duration information (M = 4.2) and the second group which did not have information (M = 3.6). Hence, the duration information manipulation worked marginally. Further, to assess the effectiveness of the manipulation for the independent variable information on cause of delay, a summated scale was used. There was a significant difference at the 95% level in mean scores between the group that was provided information on cause (M = 4.8) and the other group which did not have this information on the reason for the delay (M = 3.0).
4.3.3 Reliability of Measurement Scales

First, I present an overview of the reliability tests conducted for this study followed by the details for each measure. To analyse the reliability of the measurement scales, two types of tests were conducted. Cronbach’s Alpha value for each scale was calculated to evaluate the internal-consistency reliability of a scale. Cronbach Alpha is a widely used measure of reliability and measures the extent to which the scale score measures the true scores. Table 4.2 shows the overall result of measures used in the study. The theoretical basis for developing the individual scales is covered in section 3.4 of the method chapter. All scales were adapted from established scales in the literature. Furthermore, I have used Murphy and Davidshofer (1994) recommended reliability levels as a guide to acceptability of the measure. They considered a Cronbach Alpha score of 0.60 as unacceptable, 0.70 as low, 0.80-0.90 moderate to high and 0.90 as high. In study 2, only one variable “sense of control” reported a low alpha value (α = 0.64). While a value of at least 0.70 is the threshold limit for internal consistency, low values of alpha have been reported in the service and marketing literature, especially for exploratory work. However, it is recognized that using a measure with low reliability can make it more difficult to detect true differences in the data. Next, I present information for each measure used in study 2. Each scale has been adapted from previously used scales in the relevant literature but slightly modified to suit the scenario context used in the experimental design.
<table>
<thead>
<tr>
<th>Scale Item</th>
<th>No of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>6</td>
<td>0.94</td>
</tr>
<tr>
<td>Repurchase intentions</td>
<td>4</td>
<td>0.91</td>
</tr>
<tr>
<td>Word of mouth ( positive)</td>
<td>3</td>
<td>0.91</td>
</tr>
<tr>
<td>Social regard</td>
<td>6</td>
<td>0.86</td>
</tr>
<tr>
<td>Acceptability of wait</td>
<td>5</td>
<td>0.83</td>
</tr>
<tr>
<td>Affect ( negative)</td>
<td>7</td>
<td>0.80</td>
</tr>
<tr>
<td>Sense of control</td>
<td>4</td>
<td>0.64</td>
</tr>
<tr>
<td>Quality</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>
Affect (negative)

The affect scale was adapted from the Taylor (1994) and Taylor and Claxton (1994) multiple item scales which were designed to capture the anger, uncertainty and helplessness of a person resulting from a stimulus, such as waiting. Affect is defined as a negative set of emotions such as frustration, uncertainty, anger and irritation a customer feels as a result of a service experience. An alpha value of 0.80 is reported for this study. Seven statements were used as shown below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Item-total correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt angry with the time it took to serve the meal.</td>
<td>.647</td>
</tr>
<tr>
<td>I felt anxious due to the length of wait in this restaurant.</td>
<td>.629</td>
</tr>
<tr>
<td>I felt frustrated with the length of wait in this restaurant.</td>
<td>.687</td>
</tr>
<tr>
<td>I felt irritated with waiting for the meal.</td>
<td>.530</td>
</tr>
<tr>
<td>I felt uncertain due to waiting in this restaurant.</td>
<td>.538</td>
</tr>
<tr>
<td>I felt uneasy during this dining experience.</td>
<td>.522</td>
</tr>
<tr>
<td>I felt unsettled about the time it took to serve the meal.</td>
<td>.565</td>
</tr>
</tbody>
</table>

Acceptability to wait

Acceptability to wait is defined as the waiting time considered acceptable by the customer. The scale, used in this study, was adapted from Hui and Tse (1996). The
following 5 statements were given to the respondents. The Cronbach’s alpha for this scale is 0.83.

**Acceptability to wait : Statements**

<table>
<thead>
<tr>
<th>Item</th>
<th>Item-total correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Given the circumstances, the delay was acceptable.</td>
<td>.821</td>
</tr>
<tr>
<td>I think length of the delay to serve the meal was fine.</td>
<td>.576</td>
</tr>
<tr>
<td>I think that length of the delay was adequate.</td>
<td>.681</td>
</tr>
<tr>
<td>I think that the time taken to serve the meal was acceptable.</td>
<td>.637</td>
</tr>
<tr>
<td>I think the delay was acceptable.</td>
<td>.719</td>
</tr>
</tbody>
</table>

**Sense of control**

A sense of control is defined as the degree to which a person feels in control of a situation and is able to influence outcomes (Bateson & Hui, 1992). In this study, their two item scale has been extended to include two further items. However, the scale was found to have a Cronbach alpha score of 0.64. It is noted that Bateson and Hui (1992) reported an alpha score of 0.61 for their measure. The following four statements were used to measure sense of control:

**Sense of control: Statements**

<table>
<thead>
<tr>
<th>Item</th>
<th>Item-total correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt I would get my own way in this situation</td>
<td>.487</td>
</tr>
<tr>
<td>I felt that I could have influenced the way things went</td>
<td>.484</td>
</tr>
<tr>
<td>I felt that I knew what to do in this situation.</td>
<td>.621</td>
</tr>
</tbody>
</table>
Social Regard

Social regard is defined by Butcher, Sparks, and O’Callaghan (2001) as a genuine respect, deference and interest shown to the customer by the service provider such that the customer feels valued or important in social interaction. In this study, Butcher et al’s six item scale was extended and used to record whether respondents felt important and well regarded during the service encounter. The Cronbach’s alpha for this scale is 0.86. The following statements were used to measure social regard:

<table>
<thead>
<tr>
<th>Item</th>
<th>Item-total correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt as though I was well regarded by this restaurant.</td>
<td>.705</td>
</tr>
<tr>
<td>I felt valued as a customer in the restaurant.</td>
<td>.614</td>
</tr>
<tr>
<td>I think that the waiter treated me honestly.</td>
<td>.670</td>
</tr>
<tr>
<td>Staff took an interest in me.</td>
<td>.531</td>
</tr>
<tr>
<td>Staff treated me in a way that made me feel important.</td>
<td>.673</td>
</tr>
<tr>
<td>The restaurant staff treated me with respect.</td>
<td>.680</td>
</tr>
</tbody>
</table>
A widely used satisfaction measurement by Westbrook and Oliver (1981) was used in this study. Using this scale, satisfaction with a transaction and overall satisfaction is measured. A Cronbach alpha of 0.94 is reported for this measurement. The following six statements were used to measure customer satisfaction with the delay experience:

**Satisfaction: Statements**

<table>
<thead>
<tr>
<th>Item</th>
<th>Item-total correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I really enjoyed my visit to this restaurant</td>
<td>.873</td>
</tr>
<tr>
<td>I was happy that I visited this restaurant</td>
<td>.804</td>
</tr>
<tr>
<td>Overall, I am pleased with the service I experienced in this restaurant</td>
<td>.838</td>
</tr>
<tr>
<td>Overall, I am satisfied with my decision to visit the restaurant</td>
<td>.795</td>
</tr>
<tr>
<td>Overall, I am satisfied with the way the delay was handled by staff of this restaurant</td>
<td>.725</td>
</tr>
<tr>
<td>Overall, my visit to the restaurant was satisfying</td>
<td>.825</td>
</tr>
</tbody>
</table>
Quality

A single statement was used to measure the quality of the meal. The main objective of using this measure was to ensure that when a subject related to an experience similar to the situation presented in our scenario, the quality of the meal was not a factor that could otherwise have influenced other service outcomes, such as overall satisfaction with the service encounter. The statement used was – *overall the quality of the meal is good.*

Repurchase intentions

A measure of repurchase intentions was adapted from Dodds, Monroe and Grewal (1991). An alpha of 0.91 is reported for this scale. The following four statements were used to measure whether the customer would be likely to come back to the restaurant:

**Repurchase Intentions: Statements**

<table>
<thead>
<tr>
<th>Item</th>
<th>Item-total correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would consider revisiting this restaurant</td>
<td>.854</td>
</tr>
<tr>
<td>I think that the probability of revisiting this restaurant is high</td>
<td>.814</td>
</tr>
<tr>
<td>I am willing to revisit this restaurant</td>
<td>.782</td>
</tr>
<tr>
<td>I am looking forward to having dinner at this restaurant again</td>
<td>.769</td>
</tr>
</tbody>
</table>

Word of mouth (positive)
Word of mouth is defined as a recommendation by a customer. The Nordfält & Söderlund (2000) measurement scale was adapted for this study and consisted of two statements to capture customer’s positive word-of-mouth behaviour:

**Word of mouth: Statements**

<table>
<thead>
<tr>
<th>Item</th>
<th>Item-total correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would recommend this restaurant to my friends</td>
<td>.743</td>
</tr>
<tr>
<td>If someone asked me for information about a good restaurant, I would recommend this one</td>
<td>.743</td>
</tr>
</tbody>
</table>

**In-process Actions**

A list of likely customer actions during a wait experience was extracted from the findings of the qualitative study. Nine individual statements were used to measure customer’s intentions during a service encounter. These statements are:

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would likely complain to the waiter for the delay</td>
</tr>
<tr>
<td>I am unlikely to tip the waiter</td>
</tr>
<tr>
<td>I would expect compensation for the service delay I experienced</td>
</tr>
<tr>
<td>I would likely ask to see the manager</td>
</tr>
<tr>
<td>I would leave without waiting for the meal to arrive</td>
</tr>
<tr>
<td>I would likely complain to the manager</td>
</tr>
<tr>
<td>I would likely refuse to pay for the food I could not eat</td>
</tr>
<tr>
<td>I am unlikely to order another drink after dinner</td>
</tr>
</tbody>
</table>
In the next section, results from the main analyses are presented.

4.3.4 Main Effects of Duration and Cause information

Prior to testing for moderating influences, further analyses were undertaken to check which interventions, if any, had a main effect on service outcomes. For these analyses, and later analyses to test the hypotheses, a series of tests using multiple analysis of variance (MANOVA) was conducted. While a Bartlett’s test of sphericity was not significant ($p < 0.05$), indicating the appropriateness of the dependent variables for MANOVA testing, each set of dependent variables is viewed as theoretically related. That is, variables have been separately grouped into: (1) in-process thoughts and feelings (2) in-process behaviours and (3) post-process evaluations and intentions. Accordingly, three MANOVA tests were conducted separately. In the first MANOVA, in-process feelings and thoughts of a customer are captured using four variables, namely affect, acceptability to wait, sense of control and social regard. These variables reflect feelings, emotions and thoughts of a customer in a delay situation, such as anger, uncertainty and whether customers felt control over a situation and the way they were treated during the service encounter. In the second MANOVA in-process behaviours were grouped together. In-process behaviour is treated separately from in-process thoughts and feelings, and the former indicates a customer’s likely actions and behaviour in a given situation, such as tipping, ordering more food and drinks and even leaving without consuming the
meal. For the third MANOVA, post process evaluations and intentions were grouped together. Post-process evaluations consist of measures which indicate customer appraisal of the service encounter, such as satisfaction with the service and future intentions to reuse the service.

First, the main effects of both the duration and cause information interventions are reported. While both service interventions had a main effect on different service outcomes, the effects were not uniform. The main effect of providing cause information is much stronger and more widespread than duration information. However, both types of information produced a positive impact on the subjects and influenced a series of subjects’ in-process thoughts and feelings, in-process behaviour and actions and post-process evaluations. That is, across the board mean scores rose or fell in the expected direction, as a result of intended service interventions.

For the first MANOVA which tested the effect of providing duration information on subjects’ in-process thoughts and feelings, the main effect of providing duration information was found to be significant. Subjects reported that they felt that providing duration information to them indicated that the service provider respected them and regarded them well. The main effect of duration information on social regard is highly significant (F=10.16, p<0.001). However, no significant effect of duration information was found on other in-process thoughts and feelings, such as subjects’ negative affect (F=0.01, p>0.1), acceptability to wait (F=0.36, p>0.1) and sense of control (F=1.47, p>0.1).
For the second MANOVA, which tested the effect of providing duration information on subjects’ in-process actions, providing information affected subjects’ tipping and complaining behaviour but did not affect their further ordering of meal items, expectations to be compensated, intentions to leave the restaurant and refusal to pay for the meal they did not eat. Subjects reported a positive intention to tip a waiter \( (F=7.41, \ p<0.05) \), if they were provided duration information. Additionally, subjects have also showed reduction in inclination to complain to the manager about the delay \( (F=4.65, \ p<0.05) \).

However, for the third MANOVA, which tested the effect of duration information on subjects’ post-process behaviour, the main effect of providing duration information was not found to be significant on any of the post-process service outcomes: satisfaction \( (F=1.50, \ p>0.1) \), repurchase intentions \( (F=1.53, \ p>0.1) \) and positive word of mouth \( (F=0.12, \ p>0.1) \). In summary, the main effects of duration information were found on in-process thoughts, feelings and actions but were not found to be significant on post-process outcomes.

The second intervention, of providing cause of delay information, has an overall stronger main effect on a broader range of service outcomes, than providing duration of delay information. For the first MANOVA, which tested the effect of cause information on subjects in-process thoughts and feelings, a significant effect of providing cause information was found to be on affect \( (F= 17.2, \ p<0.001) \). However, the effect of cause
information was not found to be significant on customers’ acceptability to wait (F=0.024, p>0.1), sense of control (F=1.35, p>0.1) and social regard (F=0.27, p>0.1). For the second MANOVA, which tested the effect of cause information on subjects in-process actions, the main effect of providing cause information was found to be widespread on the customer’s actions; to complain to the waiter (F=11.33, p<0.01), complain to the manager (F=24.51, p<0.001), tip the waiter (F=7.6, p<0.01), order another drink (9.86, p<0.01), ask to see the manager (F=14.53, p<0.001), expect compensation (F=8.44, p<0.01) and wait for dessert (F=4.64, p<0.05). However, providing cause information did not affect customers’ intentions to leave the restaurant and intentions to refuse to pay for the food they did not eat. In addition, the mean scores for each significant main effect were found in the favourable direction.

For the third MANOVA, which tested the effect of providing cause information on subjects’ post-process evaluation, the effect of providing cause information was found to have long term implications but did not influence subjects’ transaction specific assessments. There is a positive effect of providing cause information on subjects’ long term intentions to revisit (F=7.74, p<0.05) and positive word of mouth recommendations (F=4.37, p<0.05). Providing an explanation, however, did not affect subjects’ satisfaction with the service encounter.
4.3.5 Interaction Effects of Situation Factors on Duration and Cause Information

Two types of delay related service interventions of duration and cause information were tested and the main effects reported in the last section. In this section, three situational characteristics of goal attractiveness, level of dining usage and gender and their moderating roles on in-process feelings, in-process behaviours and post-process evaluations are reported.

The first objective was to find out whether either service intervention was more or less effective for customers, who have to attend to important tasks after a dining encounter, who have different levels of dining usage and whose gender is different. Two hypotheses were tested in study 2, as presented in sections 2.7.1 – 2.7.3 of the literature review chapter. Hypothesis 1 predicted a difference among groups having different levels of goal attractiveness, dining usage and gender when provided with duration information about the delay. I found support for hypothesis 1, as subjects reported differences in the effectiveness of providing duration information on their in-process thoughts, feelings and behaviour and post-process evaluations.

Similarly, the effectiveness of cause related information being provided to customers was tested in hypothesis 2. Following hypothesis 1, the moderating effect of the three situational variables of goal attractiveness, level of dining usage and gender were tested on subjects’ in-process thoughts, feelings and post-process evaluations. I found partial support for hypothesis 2, as the effectiveness of cause information is reported to have
different effects on subjects with different levels of goal attraction and dining usage. However, no differences were found between males and females regarding their responses. Consequently, hypothesis 2 is partially supported. In the next sections, the individual results of hypotheses 1 and 2 are presented.

**Effect of Situation Factors on Duration Information**

Hypothesis 1 predicted that situational factors would influence the effectiveness of providing duration information. Hypothesis 1 consists of three hypotheses as presented in section 2.7 of the literature review chapter and referred to here as H1a (goal attractiveness), H1b (level of dining usage) and H1c (gender).

**Goal Attractiveness**

H1a predicted differences in the effectiveness of duration information between high and low goal attractive customers. Hypothesis H1a was found to be supported. Goal attractiveness had influenced subjects’ in-process thoughts and feelings, actions and their post-process evaluations.

For the first MANOVA, which tested the effect of goal attractiveness on effectiveness of duration information, subjects who were given high goal attractiveness scenarios reported more positive benefits of providing duration information on their in-process thoughts and feelings, such as affect (F=9.28, p<0.01) and social regard (F=10.73, p<0.01). Thus the effect is in the expected direction. However, subjects who were from the low goal attractive group reported an increased level of negative affective responses (Given
M=5.2, Not Given M=4.8) and felt lower social regard (Given M=3.5, Not Given M=3.6) when duration information was provided to them. Thus, the intervention effect is in the opposite direction to that expected. Therefore, providing duration information had a positive effect on one group and at the same time had a negative effect on the other group. The subjects did not report any differences in their acceptability of waiting and their feelings of sense of control of situation, as shown in table 4.3

Table 4.3
Interaction Effect: Goal Attractiveness * Duration Information In-Process Thoughts and Feelings

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Duration Information</th>
<th>Means Goal Attractiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Affect</td>
<td>9.28**</td>
<td>Given</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.2</td>
</tr>
<tr>
<td>Acceptability of wait</td>
<td>0.63</td>
<td>Given</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.0</td>
</tr>
<tr>
<td>Social regard</td>
<td>10.73**</td>
<td>Given</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.2</td>
</tr>
<tr>
<td>Sense of control</td>
<td>0.84</td>
<td>Given</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.1</td>
</tr>
</tbody>
</table>

*p<0.05 **p<0.01 ***p<0.001

Similarly, for the second MANOVA, which tested the effect of goal attractiveness on in-process behaviours, there were differences between high and low goal attractiveness subjects in their in-process actions. The high goal attractiveness subjects reported positive inclinations towards not complaining to the waiter (Given M=4.0, Not Given M=5.4). However, interestingly, high goal attractive subjects showed a strong intention to leave the premises, once duration information was provided to them (Given M=5.0, Not Given M=4.3). This negative intention did not affect their post-process evaluations to
revisit the restaurant, indicating that, although such customers decided to leave, they
don’t hold negative feelings towards the restaurant. On the other hand, low goal
attractiveness subjects showed a series of negative affects and were more inclined
towards complaining to waiter (Given M=3.3, Not Given M=2.8), as shown in table 4.4.
As shown for in-process thoughts, it is noted that the provision of a service intervention
has a counterproductive effect on the low goal attractiveness group.

Table 4.4
Interaction Effect: Goal Attractiveness * Duration Information

<table>
<thead>
<tr>
<th>In-Process Actions</th>
<th>F</th>
<th>Duration Information</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Goal Attractiveness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Not to tip the waiter</td>
<td>0.10</td>
<td>Given</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>6.3</td>
</tr>
<tr>
<td>Complain to the manager</td>
<td>0.40</td>
<td>Given</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.0</td>
</tr>
<tr>
<td>Complain to the waiter</td>
<td>8.04**</td>
<td>Given</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.4</td>
</tr>
<tr>
<td>Leave the restaurant</td>
<td>11.19**</td>
<td>Given</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.3</td>
</tr>
<tr>
<td>Not to order any more drink</td>
<td>0.48</td>
<td>Given</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.5</td>
</tr>
<tr>
<td>Unlikely to wait for dessert</td>
<td>6.37*</td>
<td>Given</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>2.8</td>
</tr>
<tr>
<td>Expect compensation</td>
<td>1.20</td>
<td>Given</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.3</td>
</tr>
<tr>
<td>Refuse to pay for order</td>
<td>0.44</td>
<td>Given</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.3</td>
</tr>
<tr>
<td>Ask to see the manager</td>
<td>2.12</td>
<td>Given</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.1</td>
</tr>
</tbody>
</table>

*p<0.05 **p<0.01 ***p<0.001
For the third MANOVA, which tested the effect of goal attractiveness on post-process evaluations, the effect of goal attractiveness has a relatively smaller impact on post-process evaluations. Results for the satisfaction and positive word of mouth recommendation scales between high and low goal attractiveness subjects were not significantly different. Subjects from both groups only showed a difference in their intentions to revisit the restaurant \( (F=5.11, p<0.05) \). The high goal attractiveness subjects reported positive intentions (Given M=3.5, Not Given M=2.9) to revisit the restaurant when compared to the low goal attractiveness group of subjects (Given M=2.7, Not Given M=3.3) who responded, not just with a different intensity, but in the opposite manner.

In summary, these results indicate that providing duration information has a positive impact on high goal attractiveness subjects but at the same time has an opposite effect on subjects with low goal attractiveness. In tables 4.3 and 4.4, these counterproductive interactions can be seen on affect, social regard, complaining behaviour, intentions to leave and revisit intentions, which indicates that the benefits of providing duration information are not uniform across all types of subjects and can have the opposite effect on another group. For instance, providing duration information had a positive effect on high goal attractiveness subjects on their negative affect, feeling of how they were regarded and their intentions to revisit the restaurant but at the same time had a negative effect on subjects who were given low goal attractiveness scenarios. This finding indicates that effectiveness of duration information is inconsistent between the groups.
More importantly, it had a counterproductive effect on subjects with a low level of goal attractiveness to that which was intended by this service intervention.

*Level of Dining Usage*

The H1b hypothesis predicted the moderating effect of level of dining usage on the provision of duration information. A series of interaction effects on service outcomes were found for subjects with different levels of dining use. Therefore H1b is supported. However, subjects who frequently visit restaurants and thus have a higher level of dining experience responded more positively to duration information than those subjects who were infrequent visitors to restaurants.

The first MANOVA tested the effect of service experience on in-process thoughts and feelings. The effect of level of dining usage was found to be widespread on subjects’ in-process thoughts and feelings. In particular, subjects with high levels of dining usage reported a reduction in affect (Given M=4.8, Not Given M=5.9), an increase in their feelings of social regard (Given M=3.9, M=2.5) and an increase in their acceptability to wait (Given M=3.4, Not Given=1.8). Conversely, subjects with low levels of dining experience displayed an increase in affect (Given M=4.7, Not Given M=4.3), a reduction in their feelings of social regard (Given M=3.8, Not Given M=3.7), and a decrease in their tolerance to waiting (Given M=2.7, Not Given M=3.2), when provided with duration information.
Therefore, high level dining usage subjects displayed a positive influence from the provision of duration information on their negative affect, social regard and acceptability to waiting. On the other hand, low dining usage subjects indicated that providing duration information actually had a negative effect on them. These counterproductive effects can be seen in table 4.5. No significant difference was found between groups for subjects’ sense of control.

### Table 4.5

**Interaction Effect: Level of Dining Usage * Duration Information**

**In-Process Thoughts and Feelings**

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Duration Information</th>
<th>Means</th>
<th>Level of Dining Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Affect</td>
<td>29.23***</td>
<td>Given</td>
<td>5.3</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.9</td>
<td>4.3</td>
</tr>
<tr>
<td>Acceptability of wait</td>
<td>19.92***</td>
<td>Given</td>
<td>3.4</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>1.8</td>
<td>3.2</td>
</tr>
<tr>
<td>Social regard</td>
<td>7.50**</td>
<td>Given</td>
<td>3.9</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>2.5</td>
<td>3.7</td>
</tr>
<tr>
<td>Sense of control</td>
<td>0.78</td>
<td>Given</td>
<td>3.5</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.1</td>
<td>3.3</td>
</tr>
</tbody>
</table>

*p<0.05  **p<0.01  ***p<0.001

For the second MANOVA, which tested the effect of level of dining experience on in-process actions, the effect of providing duration information has a comparatively weaker effect on subjects’ in-process behaviour and actions than on their in-process feelings and thoughts. Most notably, high dining usage subjects showed a stronger inclination to give
tips to waiter (F=17.36, p<0.001) than lower dining usage subjects when they were provided with duration information as shown in table 4.6.

Furthermore, high level of dining usage subjects showed that they were willing to wait for the dessert if they were told about the expected duration of delay. This is consistent with the previous results in which they showed their willingness to accepting a longer

### Table 4.6

**Interaction Effect: Level of Dining Usage * Duration Information**

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Duration Information</th>
<th>Means Level of Dining Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Not to tip the waiter</td>
<td>17.36***</td>
<td>Given</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>6.4</td>
</tr>
<tr>
<td>Complain to the manager</td>
<td>0.01</td>
<td>Given</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.1</td>
</tr>
<tr>
<td>Complain to the waiter</td>
<td>0.01</td>
<td>Given</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.6</td>
</tr>
<tr>
<td>Leave the restaurant</td>
<td>0.01</td>
<td>Given</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.7</td>
</tr>
<tr>
<td>Not to order any more drink</td>
<td>1.68</td>
<td>Given</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.3</td>
</tr>
<tr>
<td>Unlikely to wait for dessert</td>
<td>4.41*</td>
<td>Given</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.3</td>
</tr>
<tr>
<td>Expect compensation</td>
<td>0.39</td>
<td>Given</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.5</td>
</tr>
<tr>
<td>Refuse to pay for order</td>
<td>0.22</td>
<td>Given</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.6</td>
</tr>
<tr>
<td>Ask to see the manager</td>
<td>5.40*</td>
<td>Given</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*p<0.05 **p<0.01 ***p<0.001
wait than the low dining usage subjects. However, both groups reported a desire to see the manager. The high dining usage group of subjects have shown an overall positive effect of providing duration information. In addition, as they have not shown any inclination to complain to a waiter or manager, any desire to see a manager may be to seek more information or for other reasons. However, as subjects with low dining usage reported an increased level of negative feelings and a lower acceptability of waiting, this may be a factor in their decision to not tip a waiter who provided them with duration information. However, their negative feelings and thoughts did not induce them to complain any differently from the other group although they reported differences in their service evaluations, as reported in the next section.

For the third MANOVA, table 4.7 shows that the group of subjects with a low level of dining experience have negatively evaluated the service encounter when provided with duration information. They reported a lower level of overall satisfaction than subjects not provided with such information. In addition, the same group showed a lower inclination to revisit the restaurant when provided with duration information. This finding indicates a widespread pattern of the negative effect of providing duration information to low level of dining usage subjects. On the other hand, experienced diners responded favourably to the service intervention.
Table 4.7
Interaction Effect: Level of Dining Usage * Duration Information
Post-Process Evaluations

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Duration Information</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Level of Dining Usage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>11.05***</td>
<td>Given</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>2.1</td>
</tr>
<tr>
<td>Repurchase Intentions</td>
<td>5.51*</td>
<td>Given</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>2.6</td>
</tr>
<tr>
<td>Word of mouth (positive)</td>
<td>1.49</td>
<td>Given</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.8</td>
</tr>
</tbody>
</table>

*p<0.05  **p<0.01  ***p<0.001

The above results show that providing duration information to subjects with high and low dining usage yields different results. High level of dining usage subjects showed positive impacts from the provision of duration information, yet they were also interested to see a manager. The group of lower level of dining usage subjects showed a widespread negative effect from the provision of duration information. Thus, providing duration information has a positive impact for one group but at the same time was having a negative impact on the other group. This finding mirrors the broad pattern reported for goal attractiveness, in the previous section.

**Gender**

Hypothesis H1c predicted the impact of gender on the effectiveness of providing duration information on service outcomes. I found support for H1c. However, the effect of gender was only found for subjects’ in-process actions and post-process evaluations. Gender
appears to have a weaker impact on the effectiveness of duration information than did either goal attractiveness or level of dining use, as discussed earlier.

For the first MANOVA, which tested the effect of gender on in-process thoughts and feelings, both male and female subjects reported no significant difference in providing duration information between groups. While, for the second MANOVA, female and male subjects showed differences in intentions to see the manager (F=5.45, p<0.05). Females reported a stronger desire to see the manager when duration information was not given (Given M=2.8, Not Given M=3.0) compared to males who reported a lower desire to see the manager (Given M=3.7, Not Given M=2.8). No further actions were significantly different between female and male subjects. For the third MANOVA, which tested the effect of gender on post-process evaluations, female and male subjects showed differences in their assessment of the service encounter. Group differences were evident in their intention to revisit the restaurants, when provided with duration information (F=4.72, p<0.05). Males showed a positive effect of revisiting a restaurant when duration information was provided (Given M=3.4, Not Given M=2.9) compared with females (Given M=2.5, Not Given M=3.2). However, no group differences were detected for satisfaction and word of mouth recommendation.

**Effect of Situational Factors on Cause Information**

This section covers results of the second type of service intervention, namely providing an explanation for a delay. In this thesis, I use the term cause information. Hypothesis 2 predicted that the situational factors of goal attractiveness, level of dining usage and
gender would influence the effectiveness of providing cause information on service outcomes. I follow the same format as the presentation of results for duration information, and use the same set of dependent variables.

**Goal Attractiveness**

Hypothesis H2a predicts that goal attractiveness will moderate the effect of providing cause information. I found support for H2a, as subjects of high and low goal attractiveness rated the effectiveness of cause information differently across various outcomes.

For the first MANOVA, which tested the effect of goal attractiveness on in-process feelings and thoughts, providing cause information to subjects resulted in different effects on high and low goal attractiveness groups. The results show that when cause information was provided to high goal attractiveness subjects, they reported a reduction in their negative feelings and thoughts as measured by affect (Given M=4.7, Not Given M=5.2). Conversely, providing cause information to low goal attractiveness subjects increased affective responses (Given M=5.4, Not Given M=4.7). That is, a counterproductive effect was produced for low goal attractiveness customers. This finding is similar to that found for the first service intervention. While group differences were found for affect, there were no notable differences between groups for the acceptability of waiting, feeling how well they were treated and their sense of control of the situation.
The second MANOVA tested the effect of goal attractiveness on cause information for in-process actions. The group of subjects with high goal attractiveness showed limited differences in their behaviours and the likely actions they would take with the low goal attractiveness group. Significant differences were found only for their intention to complain and were not seen to have an effect on any other in-process behaviour or action. In this case, high goal attractiveness subjects showed a reduction in their inclination to complain to the waiter (Given M=4.1, Not Given M=5.2). Conversely, for those subjects who were not pressed for time, the provision of cause information resulted in a negative effect and they were more likely to complain to the waiter (M=5.8, Not Given M=5.3). This counterproductive pattern follows previous results.

The third MANOVA tested the effect of goal attractiveness on the cause information intervention for post-process evaluation. The interaction effect on cause information was found to be significant for only one variable of post-process evaluations. High goal attractiveness subjects reported a more positive effect on their repurchase intentions (Given M=4.4, Not Given M=3.3) when an explanation was given. Low goal attractiveness subjects reported a lower positive effect on their repurchase intentions (Given M=3.1, Not Given = 2.9). No other differences were found on subjects’ post-process evaluations.

In summary, the results of providing cause information, follows the same pattern that was found for duration information. That is, where the moderating effect was significant the intervention actually decreases positive service outcomes for one group rather than
having the intended effect of enhancing service outcomes for both groups. For instance, where cause of delay information is provided to diners in the low goal attractiveness group they are more likely to complain to a waiter than they would without this information. However, in the high goal attractiveness group diners indicated that they would have a lower intention to complain, if the reason for the delay was explained. Similar counterproductive effects were found on subjects in process feelings, as measured by affect.

*Level of Dining Usage*

Hypothesis H2b predicts that level of dining usage will moderate the effect of providing cause information. I found support for H2b, as groups of subjects with different levels of dining usage rated the effectiveness of providing cause information differently. However, the effects are not as widespread as was found in the case of duration information.

For the first MANOVA, which tested the effect of level of dining experience on in-process feelings and thoughts, the subjects from high and low dining usage responded differently (F=5.83, p < 0.01). The subjects with a high level of dining usage reported a reduction in their negative affect when they were provided an explanation of the delay (Given M=4.5, Not Given M=4.8). Furthermore, a very small effect, in the opposite direction, can be seen for the group of low level of dining usage subjects’ on the affect, variable. Thus, indicating that providing cause of information to subjects who don’t visit restaurants frequently had a counterproductive reaction (Given M=4.2, Not Given M=4.1). However, no significant differences were found between groups for acceptability of wait, social regard or sense of control.
Similarly, for the second MANOVA, which tested the effect of level of dining use on in-process actions, high dining usage subjects also showed favourable actions and behaviour in response to cause information. High dining usage subjects showed a reduced inclination to complain to waiter about the delay (Given M=4.5, Not Given M=5.0) in contrast to the opposite effect for low level of dining usage subjects (Given M=2.8, Not Given M=2.5). Similarly, the frequent dining group reported a reduction in complaining behaviour (Given M=4.5, Not Given M=5.0) and intention to leave the restaurant (Given M=4.3, Not Given M=5.0). In contrast, results indicate that customers with less dining experience responded negatively to the provision of cause related information. Infrequent diners expressed an increased desire to complain to waiter (Given M=2.8, Not Given M=2.5) and would be more likely to leave a restaurant in the case of a delay (Given M=4.9, Not Given M=4.1). Hence, counterproductive effects of providing cause information were found on subjects’ in-process behaviours and actions as shown in table 4.8. This indicates that similar to providing duration information, the effect of providing cause information is not consistent across groups with different levels of dining experience.
### Table 4.8
**Interaction Effect: Level of Dining Usage * Cause Information**

#### In-Process Actions

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Cause Information</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Level of Dining Usage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Not to tip the waiter</td>
<td>0.14</td>
<td>Given</td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.8</td>
</tr>
<tr>
<td>Complain to the manager</td>
<td>0.60</td>
<td>Given</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.6</td>
</tr>
<tr>
<td>Complain to the waiter</td>
<td>6.34**</td>
<td>Given</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.0</td>
</tr>
<tr>
<td>Leave the restaurant</td>
<td>5.72**</td>
<td>Given</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.0</td>
</tr>
<tr>
<td>Not to order any more drink</td>
<td>0.27</td>
<td>Given</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.6</td>
</tr>
<tr>
<td>Unlikely to wait for dessert</td>
<td>1.75</td>
<td>Given</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>2.7</td>
</tr>
<tr>
<td>Expect compensation</td>
<td>1.87</td>
<td>Given</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.3</td>
</tr>
<tr>
<td>Refuse to pay for order</td>
<td>0.06</td>
<td>Given</td>
<td>3.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.7</td>
</tr>
<tr>
<td>Ask to see the manager</td>
<td>2.23</td>
<td>Given</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>2.9</td>
</tr>
</tbody>
</table>

*p<0.05  **p<0.01  ***p<0.001

For the third MANOVA, the effect of providing cause information was not significantly different between the high and low dining usage subjects on service evaluation factors of satisfaction, revisit intentions and positive word of mouth.

**Gender**

The third hypothesis, H2c, predicted that gender will moderate the effect of providing cause information. However, this hypothesis was not supported as no significant
differences were found between females and males, on the rating of in-process feelings or thoughts, in-process actions and service outcomes. This hypothesis is thus rejected.

4.3.6 Summary of Results (Study 2)

One hundred and thirty subjects participated in study 2. The main objective of the study was to determine the moderating effect of the three situation variables: goal attractiveness, level of dining usage and gender on the effectiveness of two service interventions: duration and cause information. A series of independent t-tests showed that all experimental manipulations had worked, although the duration information manipulation was marginal. Further tests of MANOVA to investigate the moderating effect of situation variables on the effectiveness of service intervention were conducted. I found support for hypothesis H1 and partial support for hypothesis H2 as no moderating effect of gender was found in the case of cause information. Providing duration and cause information has, overall, been shown to have a positive impact on subjects. However, subjects responded differently to both interventions, based on different groups. Therefore, the effects of such interactions are not uniform and some service interventions are actually counterproductive when targeting certain customer segments.
4.4 STUDY 3

Study 2 was conducted to test the moderating effects of situational variables on duration and cause information using a limited sample. I found interesting results in study 2 that indicated that the effectiveness of a service intervention could vary between different groups of participants in different situations. To investigate further and to reconfirm the findings of study 2, a new study was planned as an extension to study 2. Notable differences in Study 3 are: (1) a larger and more diversified sample size of 697 participants is used in study 3 (2) participants that had some form of interest in dining were recruited and (3) one additional hypothesis to test the moderating role of situation on the combined effect of duration and cause information was added.

This section follows the format for reporting of results in study 2, as shown in Figure 4.1. This section describes the analyses used to test the conceptual model and report the results of study 3.

4.4.1 Sample Characteristics

The sample used in study 3 has some differences from the sample used in study 2. First of all, study 3 employs a much larger sample size. The recruited subjects have some interest in dining out and are from different occupational and educational backgrounds and are living in both urban and rural suburbs in NSW, Australia. A total of 697 subjects participated in study 3, comprising 417 males (59.8%) and 280 (40.2%) females. Most of the subjects are in the 25-34 years (281 subjects 40.3%) and 35-44 years (218 subjects 31.3%) age groups. A further one hundred and twenty four participants (17.8%) are in the
45-54 years age group. Only 28 participants (4.0%) are in a younger age group of 18-24 years and finally 46 participants (6.6%) are above 55 years of age. Most of the subjects have a university degree (287 participants, 41.2%) or a college/TAFE/certificate (164 participants, 23.5%). A further one hundred and nineteen subjects (17%) have completed a high school education. Eighty nine subjects (12.8%) have a diploma. Only 35 subjects (5.0%) have a trade qualification. Three subjects (0.43%) have indicated qualifications / education other than reported above. Most subjects 486 (69.7%) were found in the low dining usage group who visit a restaurant less than once a fortnight. The remaining 211 (30.3%) were found to be in the high dining usage group who visit a restaurant more than once a fortnight.

4.4.2 Preliminary Analysis

Assumption Checks for MANOVA

The main analytical technique used in study 3 is MANOVA. The data were checked to ensure that they conform to certain assumptions. MANOVA requires that the minimum number of cells in a group is more than the dependent variables (Spacer, 2004). The data in each cell for all groups were found to be greater than the number of dependent variables. Similarly, MANOVA requires that dependent variables are not strongly correlated and that no multicollinearity problem exists in the data. Dependent variables were found to be moderately correlated with no correlation values above 0.80. A high correlation among the variables may indicate that variables are redundant. A Bartlett’s test of sphericity (Bartlett, 1950) was not significant (p<0.05) and the data showed no
multicollinearity problem. Further, MANOVA is sensitive to outliers in data such as having a very high value for one variable and very low for the other. However, this problem is of more significance for small sample sizes (Pallant, 2005). Univariate outliers were checked using the explore option of SPSS and no outliers were found. Similarly, the data have not violated the assumption of equality of covariance matrices, as the Box’s test of equality of covariance matrices reported a significance value larger than 0.01. Further, the Levene’s Test of equality of error variances showed significance values in excess of 0.05. Similarly, data have not violated the assumption of equality of covariance matrices, as the Box’s test of equality of covariance matrices reported a significance value larger than 0.01. Therefore, the data were found to be suitable for further MANOVA testing.

*Credibility and Manipulation Check*

Three statements were used to measure the believability of the given scenarios. All three statements measuring scenario believability received mean scores of 5.4, 5.5 and 5.8 on a 1-7 scale indicating modest agreement that the scenarios were credible. Furthermore, each of the three independent variables of goal attractiveness, duration and cause information were checked for efficacy of manipulation using independent sample t-tests to compare scores between the high and low groups. The results of the manipulation checks of the independent variables are discussed next.

Four statements were used to test the effectiveness of the goal attractiveness manipulation and then summed to produce a scale. A Cronbach alpha score of 0.89 is reported for this
scale which is slightly higher than for the same scale in study 2. An independent t-test was conducted to assess the effectiveness of the goal attractiveness manipulation. There is a significant difference ($p < 0.001$) between the high and low goal attractiveness groups. Those subjects who received a high goal attractive scenario reported a mean of 6.0 compared to a mean score of 4.5 for those subjects who received the low goal attractiveness scenario. Hence the goal attractiveness manipulation has worked as was intended.

Only one statement was used to test the effectiveness of the duration information manipulation. Subjects were asked to rate their agreement with the statement “I was provided with information on the expected length of the wait” on a seven point Likert scale. An independent sample t-test was conducted to compare the mean scores between the group that was provided duration information and the second group which did not have this information. There is a significant difference at the 95% level ($p < 0.001$) between the two groups. Those subjects who received duration information reported a mean score of 3.9 compared to a reported mean score of 2.5 for those subjects who did not receive the duration information. Hence, the duration information manipulation worked as planned, although it is noted that both mean scores are lower than desired.

Three statements were used to test the effectiveness of the cause information manipulation and were then summed to produce a scale. A Cronbach alpha score of 0.81 is reported for this scale. A Cronbach alpha value of 0.86 was reported for the same measure in study 2. An independent t-test was conducted to assess the effectiveness of
the cause information manipulation. There is a significant difference (p <0.001) between the two groups indicating that the cause information manipulation worked as planned. Those subjects who received cause information reported a higher mean score of 4.9 compared to a mean score of 2.6 for those subjects who did not receive cause information.

4.4.3 Reliability of Measurement Scales

The measurement scales used in study 3 reported slightly lower alpha values compared to the same scales used in study 2. However, Study 3 employs a much bigger sample size. Values for Cronbach alpha may be affected by sample size and the bigger the sample, the smaller the Cronbach alpha score (Churchill & Peter, 1984). Minor changes were made to the measures used in study 2. A handful of statements were replaced with improved wording. Accordingly, five measures were slightly adapted from the ones used in study 2. The statements used in study 2 are presented in section 4.3.2 of this chapter. For study 3, two statements were added for the acceptability to wait measurement. Three items were added to the satisfaction measurement. Similarly, one additional statement from sense of control and quality measures was added. The changes made to the measurements used in study 3 are presented in Appendix 7. The reported alphas for study 3 are given in table 4.9. While refinements were made to the measures I note that ‘sense of control’ still has a Cronbach alpha score below 0.7.
Table 4.9
Measures: Cronbach’s Alpha

<table>
<thead>
<tr>
<th>Measure</th>
<th>No of Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affect (negative)</td>
<td>7</td>
<td>0.80</td>
</tr>
<tr>
<td>Acceptability of wait</td>
<td>5</td>
<td>0.85</td>
</tr>
<tr>
<td>Sense of control</td>
<td>4</td>
<td>0.65</td>
</tr>
<tr>
<td>Social regard</td>
<td>5</td>
<td>0.83</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>5</td>
<td>0.84</td>
</tr>
<tr>
<td>Repurchase intentions</td>
<td>4</td>
<td>0.90</td>
</tr>
<tr>
<td>Word of mouth (positive)</td>
<td>3</td>
<td>0.83</td>
</tr>
<tr>
<td>Quality</td>
<td>2</td>
<td>0.76</td>
</tr>
</tbody>
</table>

4.4.4 Main Effects of Duration and Cause Information

The main effects of both duration and cause information were found to be widespread on subjects’ in-process thoughts, feelings and actions and their overall service evaluations. Duration information had a much stronger and widespread influence on subjects than cause information. Overall, subjects reported positive impacts of providing duration and cause information.

More specifically, the effect of providing duration information had a positive effect on subjects’ feelings of how they were regarded (F=12.68, p<0.001). Those subjects who received duration information reported an improvement in social regard from a mean
score of 3.0 to 3.3. Similarly, positive effects of providing duration information were reported on subjects’ in-process actions. Subjects who had received duration information were found to be less likely to complain to a waiter (F=8.48, p<0.01, Given M=5.1, Not Given M=5.6) or to complain to a manager (F=4.10, p<0.05, Given M=4.5, Not Given M=4.9). Subjects also showed a decrease in asking to see a manager (F=12.5, p<0.01, Given M=4.2, Not Given M=4.7), expecting compensation (F=3.97, p<0.05, Given M=3.9, Not Given M=4.2) or leaving the restaurant (F=6.98, p<0.01, Given M=4.3, Not Given M=4.8). Duration information had also a main effect on post-process evaluations of revisit intentions (F=12.08, p<0.01, Given M=4.3, Not Given M=4.1) and favourable word of mouth (F=6.23, p<0.05, Given M=2.8, Not Given M = 2.1). However, providing duration information did not influence subjects’ satisfaction with the service encounter.

Like duration information, providing cause information has a positive influence on subjects. The strongest effect of providing cause information is in a reduction of affect (F=22.5, p< 0.001). Subjects reported a lower level of negative affect when cause information was provided, with mean scores improving from 5.3 (Not Given) to 4.6 (Given). Providing cause information also influenced subjects’ in-process behaviours. Significant effects were evident for intentions to see the manager (F=3.94, p<0.05, Given M=4.6, Not Given M=4.3) and tipping (F=4.59, p<0.05, Given M=4.2, Not Given M=3.9) Similarly, cause information positively affected subjects overall satisfaction (F=13.41, p<0.001, Given M=2.7, Not Given M=2.4) and intentions to revisit the restaurant (F=7.37, p<0.001. Given M=4.3, Not Given M=4.1). However, providing cause information did not influence subjects’ positive word of mouth recommendations.
4.4.5 Interaction Effect of Situational Factors on Duration and Cause Information

Three hypotheses were tested in Study 3. Hypothesis 1 predicted a moderating effect for three situational factors of goal attractiveness, level of dining usage and gender on duration information. A second hypothesis tested the effectiveness of providing cause information under the three situational conditions. Finally, hypothesis 3 predicted a moderating effect of the three factors on a combination of providing duration and cause information. I found support for hypothesis 1 and partial support for hypotheses 2 and 3.

Effect of Situation Factors on Duration Information

This section presents the results of the three moderating variables of goal attractiveness, level of dining experience and gender on the effectiveness of providing duration information. Goal attractiveness, level of dining usage and gender were found to significantly influence the effectiveness of providing duration information. Hence, H1 is supported.

Goal Attractiveness

The effect of goal attractiveness on duration information was found on subjects’ in-process feelings, thoughts and behaviour. Therefore, hypothesis H1a is supported. However, the effectiveness of providing duration information was found to be inconsistent between low and high goal attractiveness subjects. The high goal attractiveness group reported a positive influence while the low goal attractiveness group reporting a negative response to the provision of duration information. Thus, providing
duration information was found to be useful overall for the high goal attractiveness subjects but counterproductive for subjects in the low goal attractiveness group.

More specifically, both groups reported significant differences in their in-process feelings and thoughts. Most importantly, subjects who had received the high goal attractiveness scenarios reported a reduction in their negative feelings and thoughts. This group showed an improvement in the mean score of affect (Given M=4.4 to Not Given M=5.2), indicating that duration information has a very positive effect on high goal attractiveness subjects. Similarly, this group also indicated that by having information on the expected delay, they had felt more regarded and well treated. However, low goal attractive subjects reported a reverse effect when provided with duration information. They felt more negative feelings and thoughts and felt less regarded than high goal attractive subjects. This finding indicates that while providing duration information was useful for high goal attractiveness subjects and reduced their affective responses, providing duration information has a reverse effect on low goal attractiveness subjects’ affective responses and feeling of social regard. These counterproductive effects are shown in table 4.10.
Table 4.10
Interaction Effect: Goal Attractiveness * Duration Information
In-Process Thoughts and Feelings

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Duration Information</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Goal Attractiveness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Affect</td>
<td>10.87*</td>
<td>Given</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.2</td>
</tr>
<tr>
<td>Acceptability of wait</td>
<td>.465</td>
<td>Given</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.2</td>
</tr>
<tr>
<td>Social regard</td>
<td>8.78*</td>
<td>Given</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>2.3</td>
</tr>
<tr>
<td>Sense of control</td>
<td>1.24</td>
<td>Given</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.5</td>
</tr>
</tbody>
</table>

*p<0.05 **p<0.01 ***p<0.001

The influence of goal attractiveness was found to be strongest on customer’s complaining behaviour to both the waiter and the manager. High goal attractiveness subjects were found to have a lower intention to complain. However, low goal attractiveness subjects showed an increase in their desire to complain, in the presence of duration information. Similar counterproductive effects were found in subjects’ intentions to see the manager, as shown in table 4.11. However, interestingly, it was found that in spite of the overall positive effects of providing duration information to high goal attractiveness subjects, they indicated a higher intention to leave the restaurant after receiving the duration information.
Table 4.11
Interaction Effect: Goal Attractiveness * Duration Information

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Duration Information</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Goal Attractiveness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Not to tip the waiter</td>
<td>3.8**</td>
<td>Given</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.2</td>
</tr>
<tr>
<td>Complain to the manager</td>
<td>1.41</td>
<td>Given</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.1</td>
</tr>
<tr>
<td>Complain to the waiter</td>
<td>44.27***</td>
<td>Given</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>6.2</td>
</tr>
<tr>
<td>Leave the restaurant</td>
<td>7.25**</td>
<td>Given</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.6</td>
</tr>
<tr>
<td>Not to order any more drink</td>
<td>0.17</td>
<td>Given</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.6</td>
</tr>
<tr>
<td>Unlikely to wait for dessert</td>
<td>0.49</td>
<td>Given</td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>6.0</td>
</tr>
<tr>
<td>Expect compensation</td>
<td>3.01</td>
<td>Given</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.3</td>
</tr>
<tr>
<td>Refuse to pay for order</td>
<td>0.60</td>
<td>Given</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.0</td>
</tr>
<tr>
<td>Ask to see the manager</td>
<td>30.2***</td>
<td>Given</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.1</td>
</tr>
</tbody>
</table>

*p<0.05 **p<0.01 ***p<0.001

Similarly, subjects from high and low goal attractiveness groups reported differences in their post-process evaluation which can be seen best in customers’ repurchase intentions. High goal attractiveness subjects showed an overall slight favourable improvement in their intentions to revisit the restaurant when duration information was provided. However, customers’ in the low goal attractiveness group showed an unfavourable response when provided with duration information. The mean scores indicate that when duration information was provided to low goal attractiveness subjects their intentions to
revisit dropped (Given M=3.9 to Not Given M=4.1), indicating a counterproductive effect of such a service intervention.

In summary, goal attractiveness moderated the effectiveness of providing duration information. The high goal attractiveness subjects showed a favourable effect from duration information. Conversely, low goal attractiveness subjects showed a negative response when provided with duration information. Hence, the effect of providing duration information is inconsistent between low and high goal attractiveness subjects.

*Level of Dining Usage*

Hypothesis H1b predicted that the level of dining usage or experience will influence the effectiveness of providing duration information. H1b is supported as providing duration information influenced subjects in-process feelings, thoughts and behaviour. However, the results indicate that providing duration information was more useful for experienced dining customers. Conversely, providing duration information to those subjects who are new to a dining situation or who don’t dine frequently had a negative and reverse effect on their in-process thoughts and feelings. Surprisingly, subjects from both high and low dining usage reported no major differences in their post-process evaluation and intentions. This indicates that providing duration information had either a negative or positive effect on the two groups in-process feelings, thoughts and actions but this effect did not influence their overall post process assessment. These findings are now elaborated.
The subjects who had a greater level of previous restaurant experience reported positive effects on how they felt and thought during the service experience when provided with duration information. The estimated mean scores for affect improved from $M=5.2$ to $M=4.6$ indicating a reduction in their negative feelings when duration information was provided. Similarly, subjects with a high level of prior dining experience indicated that they felt better regarded when duration information was provided. The estimated mean score of social regard for this group improved from $M=3.0$ to $M=3.3$, as shown in table 4.12.

**Table 4.12**

**Interaction Effect: Level of Dining usage * Duration Information**

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Duration Information</th>
<th>Mean scores</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Level of Dining usage</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Affect</td>
<td>5.77*</td>
<td>Given</td>
<td>4.6</td>
<td>4.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.2</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>Acceptability of wait</td>
<td>5.20</td>
<td>Given</td>
<td>2.7</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>2.5</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>Social regard</td>
<td>10.24***</td>
<td>Given</td>
<td>3.3</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.0</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Sense of control</td>
<td>0.42</td>
<td>Given</td>
<td>3.4</td>
<td>3.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.4</td>
<td>3.4</td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05  **p<0.01  ***p<0.001

Similarly, the positive effect of duration information on subjects with a high level of dining experience can be seen in several in-process behaviours, such as complaining behaviour and desire to see the manager. High level of dining experience has shown a lower inclination to see the manager duration information was provided (Given=4.3, Not Given=4.5), compared with low dining experience subjects (Given=4.9, Not Given 4.1).
who showed a higher inclination to see the manager when duration information was provided. Further, high level subjects reported less likely to complain to the waiter (Given =5.2, Not Given=5.4) than low level of dining experience subjects (Given=5.7, not Given =5.0) who reported a high desire to complain to waiter when duration information is provided. Similarly, experienced subjects showed stronger revisit intentions (Given M=4.7, Not Given M=4.1) than the low dining usage subjects (Given M=4.1, Not Given M=4.4). However, subjects from neither group reported any major differences in their post-process assessment of the service encounter.

**Gender**

Hypothesis H1c predicted that gender would moderate the effectiveness of providing duration information. This hypothesis is supported as providing duration information influenced subjects’ in-process feelings, thoughts and behaviour differently depending on whether subjects were female or male. However, the moderating effects were less widespread compared to the effects of goal attractiveness and level of dining usage on duration information.

The first MANOVA tested the moderating influences on in-process feelings and thoughts. Subjects reported differences in the effectiveness of providing duration information in the way they felt during a service encounter. Both genders reported positive impacts of providing duration information on how they felt they were treated during the service experience (Social Regard F=7.36, p<0.01). However, males reported a much stronger positive effect (Given M=2.8, Not Given M=2.5) when provided with
duration information than females (M=2.8, M=2.7). No significant differences were found on acceptability to wait, sense of control and affect.

The second MANOVA tested moderating influences on in-process actions. Gender also influenced subjects’ in-process actions. Males were more inclined to pay for the food they did not eat, as they reported a reduction in their intentions of not paying (Given M=3.5, Not Given M=4.1) when duration information was provided to them. However, females showed a slight reduction in their intentions to pay the food bill (Given M=3.3, Not Given=3.4) in the presence or absence of duration information. No other significant effect of gender was found on the effectiveness of duration information for in-process actions.

Finally, no significant differences were found in the post-process assessment of the service encounter between males and females. This indicates that while males responded more positively to duration information than females with regard to several in-process variables, their post-process assessment did not differ from that of the female group.

The results of testing hypothesis 1 reflect that the situational factors of goal attractiveness, level of dining usage and gender have an impact on the effectiveness of providing duration information. However, the presence of a counterproductive effect indicates that such effects are not the same for all groups of subjects. In particular, high and low goal attractiveness and dining experience subjects reported an opposite effect, to that planned and desired, when provided with duration information. That is, the benefit of
providing duration information is not uniform across groups when differentiated by goal attractiveness, level of prior dining experience or gender.

**Effect of Situation Factors on Cause Information**

Hypothesis 2 tested whether three situation factors moderate the effectiveness of providing an explanation of a delay. Partial support for H2 was found, as only goal attractiveness and level of dining usage moderated the effect of cause information on service outcomes. No moderating effect for gender was found from the provision of cause information to customers. In addition and consistent with results of hypothesis 1, a series of counterproductive effects from the provision of cause information were found. The individual results of the three situational factors are presented next.

*Goal Attractiveness*

Hypothesis H2a predicted a moderating effect of goal attractiveness on the effectiveness of cause information. This hypothesis was supported. However, the effects of goal attractiveness were not as widespread as they were on the effectiveness of duration information. However, cause information had similar benefits for high goal attractiveness subjects and also showed a negative effect on those respondents who were given low goal attractiveness scenarios. This finding indicates that providing delay related information about the expected time and reason for a delay is only beneficial to those customers who are pressured by time due to external factors. Conversely, cause information can produce negative emotions, behaviour and evaluations for those who have more time at their disposal.
The first MANOVA tested the effect of goal attractiveness on in-process feelings and thoughts. More specifically, the effect of goal attractiveness was found to be limited to subjects’ affective responses. Goal attractiveness moderated the effect of cause information on affect \((F=19.42, p<0.001)\). High goal attractive customers found cause information to be more useful and therefore rated the impact of providing the reason for the delay positively. The estimated mean score for affect reduced from \(M=5.4\) to \(M=4.6\). The effect of the same information for low goal attractiveness customers is in the opposite direction. The mean scores of affective responses for low goal attractive customers increased from \(M=4.8\) to \(M=4.9\) indicating that providing cause information to such customers is counterproductive. No other in-process variables were significantly influenced by goal attractiveness.

Second, the effect of goal attractiveness on subjects’ behaviours during a service encounter was also limited. A significant effect was found for complaining to the waiter \((F=10.08, p<0.01)\). High goal attractiveness subjects reported that they were less likely to complain to a waiter \((\text{Given } M=5.4, \text{ Not Given } M=5.8)\) if they were provided with cause information. However, low goal attractiveness subjects were found to be more likely to complain to a waiter \((\text{Given } M=5.3, \text{ Not Given } M=4.8)\) when they were provided with a reason for a delay. As a result, the positive effect of providing cause information for high goal attractive subjects is counteracted by a negative effect on the low goal attractiveness subjects. No other significant effects were found on in process behaviours.
Finally, the positive benefits of providing cause information to high goal attractiveness subjects were extended to their post process evaluations. A significant effect was found on their intentions to revisit the restaurant (F=17.16, p<0.001). High goal attractiveness subjects seemed to be happier when they were provided with the reason for a delay and showed greater intentions to revisit the restaurant (Not Given M=4.4, Not Given M=4.2). This indicates that they were more likely to come back to the restaurant (Given M=3.8, M=4.2). While the high level goal attractiveness subjects showed a positive intention to visit the restaurant, there was no difference in their satisfaction and word of mouth recommendations about the restaurant with that of the low level of goal attractiveness subjects.

Level of Dining Usage

Hypothesis H2b predicted that differences in subjects’ experience or frequency in dining will moderate the effectiveness of providing cause information. This hypothesis is supported. The effects of levels of dining usage on the effectiveness of cause information were found to be more widespread over subjects’ in process thoughts, behaviour and post-process evaluations than was found for goal attractiveness. However, consistent with my findings in study 2, the positive impact of providing cause information was only for the group who had more service experience. The provision of cause information produced a negative effect on subjects who don’t frequently visit restaurants.

First, level of dining usage was found to influence subjects’ in-process thoughts and feelings by influencing their affective state of mind. In particular, dining use moderated the effectiveness of cause information on affect (F=6.90, p<0.01). The results show that
experienced subjects reported a reduction in affective responses (Given M=4.8, Not Given M=4.9) when provided with an explanation. Conversely, infrequent diners who had lower levels of dining usage found increased affective responses (M=5.1, Not Given M=4.6) when cause information was provided. This counterproductive pattern of the effectiveness of cause information is shown in table 4.13. However, no other effects were found on the other in-process variables of social regard, acceptability to wait and sense of control.

**Table 4.13**

**Interaction Effect: Level of Dining Usage * Cause Information**

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Duration of Information</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Level of Dining Usage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Affect</td>
<td>6.90*</td>
<td>Given</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.9</td>
</tr>
<tr>
<td>Acceptability to wait</td>
<td>3.76</td>
<td>Given</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>2.5</td>
</tr>
<tr>
<td>Social regard</td>
<td>0.68</td>
<td>Given</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.2</td>
</tr>
<tr>
<td>Sense of control</td>
<td>0.01</td>
<td>Given</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.2</td>
</tr>
</tbody>
</table>

*p<0.05  **p<0.01  ***p<0.001

Second, the level of dining usage had a significant interaction effect on particular subjects’ behaviours during the service encounter. These behaviours were related to complaint behaviour, either to a waiter or manager and a desire to see the manager. Both groups differ in their decision about complaining to the manager (F=4.67, p<0.05), complaining to the waiter (F=6.25, p<0.05) and their desire to see the manager (F=6.86,
The subjects in the high level dining usage group showed a positive effect to provision of information on their complaints to the waiter (Given M=5.0, Not Given M=5.6) and desire to see the manager (Given = 4.5, Not Given=5.1). However, the subjects with low dining usage displayed a negative effect when provided with cause information and had higher intentions to complain to the waiter (Given M=5.4, Not Given M=5.3). Similarly, low service dining usage subjects have shown a stronger desire to see the manager (Given 4.7, Not Given M=4.2).

Table 4.14
Interaction Effect: Level of Dining Usage * Cause Information

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Duration Information</th>
<th>Means Level of Dining Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not to tip the waiter</td>
<td>.42</td>
<td>Given</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.3</td>
</tr>
<tr>
<td>Complain to the manager</td>
<td>4.67*</td>
<td>Given</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.6</td>
</tr>
<tr>
<td>Complain to the waiter</td>
<td>6.25*</td>
<td>Given</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.3</td>
</tr>
<tr>
<td>Leave the restaurant</td>
<td>.51</td>
<td>Given</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.6</td>
</tr>
<tr>
<td>Not to order any more drink</td>
<td>1.38</td>
<td>Given</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.5</td>
</tr>
<tr>
<td>Unlikely to wait for dessert</td>
<td>0.97</td>
<td>Given</td>
<td>5.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.6</td>
</tr>
<tr>
<td>Expect compensation</td>
<td>.655</td>
<td>Given</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.8</td>
</tr>
<tr>
<td>Refuse to pay for order</td>
<td>0.97</td>
<td>Given</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.7</td>
</tr>
<tr>
<td>Ask to see the manager</td>
<td>6.86**</td>
<td>Given</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4.2</td>
</tr>
</tbody>
</table>

*p<0.05  **p<0.01  ***p<0.001
Finally, a limited effect was found for the interaction between level of dining use and cause information on post-process evaluations. The effect of cause information was only found to be significant on the subjects’ longer term intentions. Groups were not found to be substantially different in their satisfaction evaluations or word of mouth recommendation but found to be significant on revisit intentions ($F=6.50, p<0.05$). The high level of dining usage subjects showed a higher desire to revisit the restaurant (Given 4.1, Not Given 3.9) than the lower level of dining usage subjects (Given 4.1, Not Given 4.4). Again, it is noted that an opposite effect was found for the low attractiveness group. Thus, the counterproductive pattern evident in study 2 has been repeated for this study.

**Gender**

Hypothesis H2c predicted that gender would influence the effectiveness of providing cause information. However, this hypothesis is rejected. No substantial differences between males and females were found on subjects’ (1) in-process thoughts and feelings (2) in-process behaviours and (3) post-process evaluations. The results indicate that the effectiveness of cause information on all outcome variables remained the same regardless of gender.

**Effect of Situation Factors on the Combined Effect of Duration and Cause Information**

Hypothesis H3 predicted that situational factors namely goal attractiveness, level of dining usage and gender, will moderate the combined effect of providing both duration and cause information. That is, when both types of information were provided jointly to subjects. The results indicate partial support for hypothesis 3, as goal attractiveness and
level of dining usage moderated the combined effect of providing both types of information. However, gender did not influence the effectiveness of providing duration and cause information together. Further, results indicate that the combined effect of providing duration and cause information was different from the effect of individual service interventions. More interestingly, the positive benefits of providing duration information on high goal attractiveness subjects, such as a reduction in affect and stronger repurchase intentions was found to decrease in strength. In particular, the combined effect was found to be considerably different from that of providing duration information alone.

Goals Attractiveness

H3a predicted that providing both types of information will produce different effects for subjects with different levels of goal attractiveness. This hypothesis is partially supported, as goal attractiveness moderated the effectiveness of the combined effect of both service interventions. However, the result also indicates that the effects were found to be different from those effects reported for individual service interventions as seen in table 4.15.

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Both Information</th>
<th>Means Goal Attractiveness</th>
<th>Goal Attractiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complain to the waiter</td>
<td>22.40***</td>
<td>Given</td>
<td>5.1</td>
<td>5.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.9</td>
<td>5.2</td>
</tr>
<tr>
<td>Repurchase Intentions</td>
<td>10.20**</td>
<td>Given</td>
<td>4.4</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.2</td>
<td>4.0</td>
</tr>
</tbody>
</table>

*p<0.05 **p<0.01 ***p<0.001

Note: These results are an aggregate of two separate MANOVAS to highlight mean scores of significant factors.
First, the combined effect of both types of information on subjects’ in-process thoughts and feelings was not found to be significantly different between the high and low goal attractiveness subjects. This result is different from the individual effects of providing duration or cause information. For both duration and cause information, when applied separately, significant difference was found between high and low goal attractiveness groups on their affective responses. This result was not found for the combined effect of duration and cause information.

Second, the combined effect of duration and cause information significantly influenced subjects’ in-process behaviours. The combined effect of providing duration and cause information on complaining to waiter was different between the low and high goal attractive subjects (F=22.40, p<0.001). However, this effect was not quite as strong as the individual effect of goal attractiveness on the provision of standalone duration information to high goal attractiveness subjects. However the combined intervention was stronger than the provision of standalone cause information to the high goal attractiveness group. Thus, providing duration information only to high goal attractiveness subjects produced the most positive outcome of reducing their complaining behaviour. For low goal attractiveness subjects, providing both types of information together still produced a negative effect on their complaining to the waiter (Given M=5.3 Not Given M=4.8). This was found to be the case for the provision of duration and cause information individually. Thus, low goal attractiveness subjects showed a negative effect from both types of service interventions provided individually or together.
Finally, I found a significant effect for the joint intervention on post-process evaluations. The combined effect of providing duration and cause information on high goal attractiveness subjects was in a favourable direction. High goal attractiveness subjects reported a higher desire to revisit the restaurant (Given M=4.2, Not Given M=3.9) when both types of information were provided. Conversely, for low goal attractiveness subjects the combined effect of providing duration and cause information still produced a negative effect on their repurchase intentions (Given M=4.0, Not Given M=4.1). Therefore, the counterproductive effects seen on the effect of individual service interventions were also evident when both types of information were provided.

**Level of Dining Usage**

Hypothesis H3b predicted that providing both types of information together will produce different effects on customers with different levels of dining usage. First the findings indicate a significant moderating effect of the combined duration and cause information on affect (F=9.4, p<0.01). When compared with the individual results of providing duration and cause information, the intensity of negative affective responses for high level of dining usage subjects was at a much higher level (M=5.3). This finding indicates that when no information was provided to high level dining usage subjects, they felt the strongest negative emotions and feelings. Similarly, affective responses were lowest when both types of information were provided to this group (M=4.5). This indicates that providing both types of information to high level of dining usage subjects is more beneficial in reduce their affective responses than providing only one type of information.
For low dining usage subjects the intensity of affective responses was found to be at the highest level when both types of information were provided (M=5.1) indicating a counterproductive effect. These counterproductive effects are shown in table 4.16

Table 4.16
Interaction Effect: Level of Dining Usage * Duration Information * Cause Information on Service Outcomes

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Both Information</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Level of Dining Usage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Affect</td>
<td>9.4**</td>
<td>Given</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.3</td>
</tr>
<tr>
<td>Complain to the manager</td>
<td>5.10*</td>
<td>Given</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.2</td>
</tr>
<tr>
<td>Complain to the waiter</td>
<td>8.00**</td>
<td>Given</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>5.4</td>
</tr>
<tr>
<td>Ask to see the manager</td>
<td>8.10**</td>
<td>Given</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>4.4</td>
</tr>
<tr>
<td>Repurchase Intentions</td>
<td>4.41*</td>
<td>Given</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not Given</td>
<td>3.9</td>
</tr>
</tbody>
</table>

*p<0.05 **p<0.01 ***p<0.001
Note: These results are an aggregate of two separate MANOVAS to highlight mean scores of significant factors

Second, there was a limited effect on in-process behaviours. Overall, the effect of providing both types of information has a positive effect on the high level of dining usage subjects. However, unlike the individual effects for duration information and cause information, in which the positive effects were more widespread, the combined effect only influenced subjects complaining behaviour. The combined effect of providing both types of information seemed to influence subjects’ complaining behaviour to a waiter (F=5.10, p<0.05), manager (F=8.0, p<0.01) and their intentions to see the manager (F=8.10, p<0.01). The high level dining usage subjects showed a positive inclination to
not to complain to the waiter (Given M=5.4, Not Given=5.8). Similarly, low level service experience subjects also reported a lower intention to complain to the waiter when both types of information were provided (Given M=5.0, Not Given 5.7). However, there was a counterproductive effect noticed on how these two groups will tip the waiter. High level service experience subjects have shown a stronger inclination to tip the waiter when they have been provided with both types of information (Given M=5.3, Not Given M=5.2) as compared to low level service experience subjects who reported a negative effect of providing both types of information on tipping to the waiter (Given M=4.7, Not Given M=5.0).

Finally, there was a limited effect on post-process evaluations. The combined effect of both interventions was found to be significant between the two groups on their revisit intentions (F=4.40, p<0.05). High level of dining usage subjects showed a more positive response to both types of information together than the lower level of dining usage subjects. This finding is consistent with the individual findings related to the effectiveness of duration information but different to findings related to the effectiveness of cause information when applied individually. Providing cause information individually was found to be significantly different between the high and low level of dining usage subjects. In the case of providing both types of information, there was a more positive impact on the high level of dining usage group on their long term revisit intentions (Given M=4.2, Not Given M=3.9) than the low level of dining usage (Given M=4.0, Not Given M=4.1). Thus the provision of the combined duration and cause information had different effects on service evaluations than the individual service interventions.
However, consistent with our previous findings of individual service interventions, the counterproductive effects were also found on the combined effect of duration and cause information. There were no significant differences found on subjects post-process evaluations between the two groups.

Gender

Hypothesis 3c predicted that the effectiveness of providing both types of information would differ between females and males. However, no significant difference was found on (1) in-process feelings and thoughts, (2) in-process behaviours, and (3) post-process evaluations between females and males. Therefore, this hypothesis is rejected.

4.4.6 Summary of Results (Study 3)

Six hundred and ninety seven subjects participated in study 3 and all cases were used in the final analysis. The main objective of study 3 was to further investigate the moderating influence of situation on the effectiveness of service interventions. T-tests showed that all experimental manipulations worked. Subjects found scenarios moderately believable. Three hypotheses were tested. Hypothesis 1 was supported, as the situational variables: goal attractiveness, level of dining usage and gender were found to have influenced the effectiveness of providing duration information. However, hypotheses 2 and 3 were only partially supported, as only goal attractiveness and level of dining usage were found to moderate the effects of providing cause information or a combination of both interventions jointly. Further, providing both types of information jointly had different
effects on service outcomes than providing individual service interventions. However, the findings of study 3 are consistent with the findings from study 2 and indicate a widespread counterproductive effect of providing duration and cause information for some groups. Thus, the positive effects of a service intervention were not found to be consistent across groups. More importantly, providing duration and cause information can actually produce a negative impact on some groups.

4.5 SUMMARY

In chapter 4, the results of all three studies have been reported. My findings indicate that providing duration and cause information has an overall positive impact on customers in the wait situation. However, such positive impacts were not found to be consistent across subjects with different levels of goal attractiveness, levels of dining usage and gender. Therefore, providing duration and cause information for some groups of customers can produce negative impacts. These major findings are consistent for both studies 2 and 3. Hypothesis H1 is fully supported in both studies. H2 is partially supported. Similarly, Hypothesis H3 is partially supported in study 3. The hypothesis results are presented in table 4.17.

In conclusion, providing duration information was found to be more useful for high goal attractiveness customers who are pressured by time. Similarly, for customers who have a high level of dining usage, providing duration information produces positive impacts. In addition, males also responded more positively to the provision of duration information than did females. In the case of cause information, providing an explanation for the delay
has positive impacts on both females and males. However, my findings indicate that providing cause information is more beneficial for higher goal attractiveness customers and customers with a higher level of dining experience. Cause information has a counterproductive effect on other groups. Therefore, providing cause information can produce positive impacts on one group but at the same time can produce negative impacts on another group.

### Table 4.17
**Results of Hypothesis Testing**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Study 2</th>
<th>Study 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: Goal attractiveness will moderate the effect of duration information on service outcomes</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b: Customer level of dining will moderate the effect of duration information on service outcome</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>H1c: Gender will moderate the effect of duration information on service outcome</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>H1: Situation will moderate the effect of duration information on service outcome</td>
<td>Fully Supported</td>
<td>Fully Supported</td>
</tr>
<tr>
<td>H2a: Goal attractiveness will moderate the effect of cause information on service outcome</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>H2b: Customer level of dining will moderate the effect of cause information on service outcome</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>H2c: Gender will moderate the effect of cause information on service outcome</td>
<td>Not Supported</td>
<td>Not Supported</td>
</tr>
</tbody>
</table>
### H2: Situation will moderate the effect of cause information on service outcome

- Partially Supported

### H3a: Goal attractiveness will moderate the combined effect of duration and cause information on service outcome

- Supported

### H3b: Customer level of dining will moderate the combined effect of duration and cause information on service outcome

- Supported

### H3c: Gender will moderate the combined effect of duration and cause information on service outcome

- Not Supported

### H3: Situation will moderate the combined effect of duration and cause information on service outcome

- Partially Supported

---

In chapter 5, results obtained from all three studies are discussed. The discussion first relates the findings of this thesis to the findings of previous work undertaken in the wait literature. Further, implications of the findings for theory and practice are discussed. Finally, contributions made by this thesis together with the limitations of the research and future directions of research are presented.
CHAPTER 5

DISCUSSION AND CONCLUSIONS
CHAPTER 5

DISCUSSION AND CONCLUSIONS

5.1 INTRODUCTION

In this thesis, the research problem “How do goal attractiveness, level of dining usage and gender moderate the effect of service interventions on service outcomes” was investigated. In chapter 2, gaps within the existing literature were identified. It was noted that existing research did not look at the moderating effects of situational factors on providing duration and cause information to customers waiting for service. The main approach taken by earlier researchers was to find an overall solution on whether providing duration and cause information was useful in the wait situation. However, numerous scholars (e.g., Maister, 1985; Meyer, 1994; Houston et al., 1998; Begri, 2004; Hui & Zhou, 2006) stressed the need to examine the role situational factors play in waiting for service.

In chapter 2, three situational factors were identified. The first factor was the customer’s attraction to their individual goals and the importance they assigned to achieving such goals. The second factor was the customer’s level of dining usage or frequency of dining in restaurants. The third factor was the customer’s gender. A number of authors noted that these three factors of goal attractiveness (Meyer, 1994), level of dining usage or service experience (Fournier & Mick, 1999) and gender (McCull-Kennedy et al., 2003) could influence a customer’s experience of a service encounter. Therefore, three research objectives were formulated as follows:
1. How do situational factors of goal attractiveness, level of dining usage and gender influence the effectiveness of duration information on service outcomes?

2. How do situational factors of goal attractiveness, level of dining usage and gender influence the effectiveness of cause information on service outcomes?

3. How do situational factors of goal attractiveness, level of dining usage and gender influence the effectiveness of a combination of both types of information on service outcomes?

In chapter 3, the methodology used in the thesis was presented and justified in sections relating to overall research design, sample selection, data collection procedures, limitations of the methodology and data analysis techniques. The methodology involved three studies, comprising one qualitative and two quantitative studies. Two instruments, in-depth interviews and an online questionnaire were used to collect data for the research. The hypotheses formulated in chapter 2 were tested in studies 2 and 3.

In chapter 4, the results of the three studies were presented. It was found that providing duration and cause information had an overall positive impact on customers. However, the moderating effects of the three situational factors showed that there were situations in which the effects were counterproductive to the effects intended by the service
intervention. That is, effects were positive for one group and, at the same time, were negative for another group of customers.

The purpose of Chapter 5 is to draw conclusions on the findings of the three studies, discuss the theoretical and practical implications arising from the results and highlight contributions made by this thesis. The chapter concludes with an acknowledgement of the limitations of the research and suggestions for future research.

5.2 CONCLUSION OF RESEARCH ISSUES

5.2.1 How do situational factors moderate the effectiveness of duration information on service outcomes?

The first research issue addressed the question of whether the effectiveness of providing duration information was moderated by factors, such as a customer’s goal attractiveness, level of dining usage and gender. Section 2.7 of the literature review highlighted issues relating to providing duration information to customers, most notably that previous research found mixed results relating to the effectiveness of providing duration information in delay situations to customers. The overall results relating to this research objective are discussed first. Then, further discussion relates to the individual hypotheses of the first objective for each situational factor: (1) moderating effects of goal attractiveness on the effectiveness of providing duration information, (2) moderating effects of level of dining usage on the effectiveness of providing duration information
and (3) moderating effects of gender on the effectiveness of duration information. Each of these three parts presents a discussion relating to three types of outcomes as presented in chapter 2, namely: (1) in-process thoughts and feelings of customers, (2) in-process customer actions and (3) post-process service outcomes.

Overall, providing duration information had a positive impact on customers. However, further analysis of the findings revealed that the overall positive benefits of providing duration information were not consistent across all groups of customers. Most importantly, there was a negative effect of such information for particular groups of customers. That is, the positive effects of providing duration information were dependent upon the level of goal attraction, dining usage and gender. Therefore, providing duration information as a service intervention strategy was not always useful for customers in particular situations. These inconsistent effects of providing duration information could be considered acceptable in the case of positive or no effects because at least some customers might have benefited. However, a negative effect of providing duration information to a particular group of customers was undesirable and reflected the problematic nature of providing duration information across all types of customers.

Findings relating to this research objective might provide an explanation for the mixed results obtained by previous research studies. Results indicated that the efficacy of providing duration information could vary between different types of customers. If each sample from a particular study included respondents that belonged to different groupings that were likely to respond differently to duration information, it was possible that such
groupings negated the impacts of each other. Accordingly, a particular intervention might or might not work due to the heterogeneity of the population sampled. On the other hand, where a sample was biased toward one particular group, significant results might be obtained. This explanation suggests that further research may uncover those interventions that may be applied more generally across all groupings from those interventions that appear to affect particular groups more strongly.

The first moderating factor was goal attractiveness. As hypothesised, results showed a strong influence of goal attractiveness on the effectiveness of duration information on customer’s in-process feelings, actions and post-process evaluations. Scenarios relating to high goal attractiveness involved participants being told that they were to attend their favourite artist’s music concert after dining. Such customers reported a positive outcome from the receipt of duration information and reported a higher level of acceptability to waiting for service. Interestingly, the same group showed a strong tendency to leave the restaurant once information was provided but still retained a more positive and favourable long term attitude towards the service provider. These findings indicated that once high goal attractive customers were informed about the expected length of a delay, they might leave to ensure that their goals were achieved. However, doing so did not necessarily mean that such customers had negative feelings towards the service provider. Hence, there might be a short term loss for a service provider by losing such a customer. The service provider could appreciate that such customers were taking unfavourable steps not because they were angry with the service provider but instead were more intent on reaching their goal. This was further evident, given the findings that high goal attractive
customers did not order any further drink or food items but would still tip the waiter for providing such information. In part, this confirmed what Katz et al. (1991) suspected; that customers might leave a service once duration information was provided to them. However, Katz et al.’s (1991) suggestion only applied to high goal attractive customers as low goal attractive customers did not show any inclination to leave the service. Further, a strong inclination towards leaving the service for such customers might also be due to cognitive appraisal. Lazarus (1981) suggested that affective reactions were linked to customer appraisal. Therefore, once a wait length was known to a high goal attractive customer, he/she assessed the situation to judge the impact of such information on future plans. Accordingly, in such situations, acceptance of waiting was linked to the outcome of the cognitive process. Likewise, according to Lazarus (1981), people who were more committed to their goals tended to employ a problem solving approach to cope with the threat posed by an event rather than an emotion based approach. Therefore, Lazarus (1991) contended that high goal attractive people who employed a problem solving approach would take associated action to reduce the threat posed by the situation. The findings from this study suggested that customers who were in a high goal attractive group might decide to leave a service as an option to reduce the risk posed by the delay.

In contrast, low goal attractive customers who did not have any important tasks to attend to after dining experienced a negative impact from the provision of duration information. Interestingly, low goal attractive customers demonstrated a strong negative reaction to the receipt of duration information and reported higher levels of anger and a lower acceptance to wait. Further, negative impacts of information were also widespread on in-
process customer actions during the service encounter and post-process evaluations of the service encounter. Such customers showed a negative inclination to spread positive recommendations about the service provider and were less likely to revisit the service provider. While the reason for this effect was uncertain, there could be a few possible explanations. First, Meyer (1994) indicated that low goal attractive customers had different time orientations compared with high goal attractive customers and were more focused on the passing of time. Consequently, providing information to such customers might have attracted more of their attention towards the passing of time. Accordingly, low goal attractive customers evaluated the wait more negatively. Another possible explanation might be that, as low goal attractive customers were not under any time pressure, their main concern was to have a smooth and enjoyable dining experience. Any information that indicated otherwise might be of no use to them and, consequently, the information was treated as an interruption. This latter idea was supported by the findings in this study where such customers showed an inclination not to tip the waiter. Further, low goal attractive customers had a stronger tendency to complain to the waiter rather than complaining to a manager. Therefore, such customers might also be unhappy with the server who provided the information. For instance, the qualitative interviews with the servers in study 1 indicated that unnecessary interruptions from the server were not welcomed by some customers. This was especially the case when customers were in a relaxed mood and wanted to spend private time with their partners. Future research can further investigate by looking exclusively at why low goal attractive customers would react negatively towards the information provided to them.
In summary, while providing duration information showed an overall positive effect, the different outcomes of providing duration information for high and low goal attractive customers indicated that providing duration information might be counterproductive if it were applied routinely to different groups of customers. The findings suggested that only the high goal attractive group of customers showed a positive response to the provision of such information. The same intervention for the other group showed an opposite effect. In this study, high goal attractive customers were under more time pressure than low goal attractive customers and evaluated the provision of duration information positively.

The second moderating factor was customers’ level of dining usage. It was hypothesised that a customer’s level of dining usage or experience would moderate the effectiveness of providing duration information. Results indicated significant differences in feelings, thoughts, actions and assessments between the experienced customer who had a higher level of dining usage and those customers who were newer to a service and less experienced. Experienced customers showed more tolerance to the delay and reported a higher level of acceptance to waiting. Such customers also felt better regarded by the service provider and reported a more positive assessment of the service encounter and greater repurchase intentions. One explanation for this effect was that experienced customers might have more accurate expectations of the level of service. As was found by Jones and Peppaitt (1996), more experienced customers tended to be less anxious and less uncertain than less experienced customers. Further, it was noted in the qualitative study of this thesis that customers who frequently visited the restaurant became friendlier with the server and restaurant staff. Accordingly, customers appeared more lenient
towards a negative element in a service as pointed out in an interview by one server: “Frequent diners are like family members; they are easy going and more relaxed”

Similarly, findings were partly consistent with Nordfält and Söderlund’s (2002) work who found that the experienced customer was more generous to a service problem if the outcome of a service was positive. However, findings from this research project indicated that experienced customers were only generous to a service provider, when they were properly informed about the service problem. When uninformed, experienced customers responded negatively to the delay situation. In addition, results also indicated that providing information to experienced customers generated more favourable actions towards a service provider, such as not complaining to the waiter and not wanting to see the manager. Such customers also showed a stronger commitment to a long term relationship with the service provider when they were told the expected length of the wait. In addition, experienced customers considered that the service provider had not treated them with proper respect when the service provider did not provide any information to reflect the expected time to serve the meal. Therefore, results suggested that experienced customers would only keep a long term relationship with a service provider if they were well informed about the likelihood of a negative event.

However, less experienced diners showed more anger and uncertainty than experienced diners and responded negatively towards the provision of duration information. The negative effects were widespread across customers’ feelings, thoughts and actions. Consequently, such customers showed a negative desire to build a long term relationship
with the service provider. Jones and Peppaitt (1996) warned that new customers to a service or less experienced customers were more vulnerable to the negative elements of a service. They strongly suggested taking special care of such customers. Results from this study indicated that providing duration information to such customers could increase their anger and negative evaluations of a service. One possible explanation for this effect was that, as less experienced customers had less exposure to dining problems, their expectations towards the expected service might not be in line with reality. Another explanation was that the delay annoyed such customers in the first place and their subsequent evaluations were overshadowed by their initial negative experience. This effect was known as Gestalt. Hence, when duration information was provided to such customers, it might have further aggravated their anger by reminding them of the delay.

The third moderating factor was customers’ gender. This study found the effect of gender on the effectiveness of providing duration information to be much smaller than the previous two moderating factors. First, there was a significant difference in the level of social regard felt between female and male customers. Males felt better regarded when duration information was provided. However, females reported a lower positive effect on their feeling of regard in the presence of such information. Further, males showed more tendencies to pay for the food they did not eat than females did when duration information was provided. This result supported a study by Snipes, Thomson and Oswald (2006) that found a significant difference between males and females in their perceptions of service fairness and treatment. These authors reported that males tended to rate the fairness of a service encounter higher than females. In this study, males also showed a
more positive intention to revisit the restaurant than females. No other significant
differences were found between male and female customers in the way they evaluated the
service encounter in the presence or absence of duration information.

In summary, the first aim of the research objective was to find the effect of goal
attractiveness, level of dining usage and gender on the effectiveness of service
interventions. It was found that, while providing duration information had an overall
positive effect, under different situations this impact changed in both scope and nature.
Gender had a negligible moderating effect on the effectiveness of providing duration
information on service evaluations and long term intentions of customers. While a
number of authors (e.g., McColl-Kennedy et al., 2003) suggested that gender might be a
critical situational variable, in this study other situational characteristics warranted higher
priority. However, goal attractiveness and level of service use (dining frequency) made
substantial contributions to the intervention strategy. In the case of goal attractiveness,
significant interaction was on service outcome variables. Several of these interactions
were moderate to strong in effect size. The findings from this study highlighted the
necessity of being wary in applying service interventions without regard to their efficacy
under differing circumstances. However, what was not clear was why different groups of
respondents reacted to such interventions in different ways. In addition, it appeared
necessary to search for those circumstances that provide a fertile environment for a more
universal application of one intervention over another.
5.2.2 How do situational factors moderate the effectiveness of cause information on service outcomes?

The second research issue addressed the question of whether the effectiveness of providing a second type of information, referred to as *cause information*, was moderated by factors such as customers’ goal attractiveness, level of dining usage and their gender. Section 2.7 of the literature review highlighted issues relating to providing cause information to customers. As was pointed out in the literature review, providing explanation of a wait was reported to generate mixed results. That is, some researchers found that providing an explanation for the delay had a positive impact on customers. However, others found that providing such information had no effect on customers.

Following the same approach used for the previous research objective, three hypotheses were formulated to test for any moderating effects for this second research objective. Thus, the study investigated the effects of goal attractiveness, level of dining usage and gender on the effectiveness of providing an explanation on customer’s in-process feelings and thoughts, behaviour and post-process assessment of the service encounter. First, providing an explanation to customers produced a positive impact on customers overall. In particular, the explanation reduced anger towards the service provider and had a positive impact on a customer’s future intentions. Further, providing such information reduced unfavourable responses towards a service provider, such as complaining to a manager about the service delay. The overall positive impacts of providing cause information were consistent with previous research and suggestions. For instance,
Maister (1985) and Osuna (1985) suggested that explaining waits was better. Similarly, other researchers (e.g., Groth et al., 2006; Coye, 2003; Taylor, 1996) pointed out the positive benefits of providing an explanation for a wait and linked such an intervention to positive service outcomes.

One possible explanation for the present finding was that the reason for the delay, which was provided to the customers in the current research project, indicated that the cause was due to an external factor over which the service provider had little or no control. As a result, customers did not attribute the reason for the delay to the service provider. This idea was consistent with Taylor’s (1996) findings that when customers felt circumstances were beyond the service provider’s control, providing a reason for a delay had positive impacts. This finding was also consistent with other researchers, such as Hui and Zhou (2006), who linked the positive impacts of providing cause information to the outcome of an attribution process.

Findings of this study indicated no significant effect of providing an explanation of a wait on a customer’s feeling of social regard. However, as cause information had a significant influence on customer anger, a non-significant effect of cause information on social regard suggested that a decrease in customer anger and the affective responses due to the cause information were not linked to their assessments of social regard. This finding differed from researchers who found that providing an explanation for wait was linked to fairness perceptions (Shaw, Wild & Colquitt, 2003). One explanation for this finding might be that customers did not expect a service provider to explain the reason for the
delay but considered the provision of the duration information as a social norm instead. As a result, customers might not have felt lack of respect by not being provided with cause information.

Little previous research existed to determine the effect of providing cause information on customers’ in-process behaviour in restaurant settings, with the exception of work by Mattila (2006) that found that providing cause information to customers showed a positive impact on customer tipping. The findings of this study provided further support for Mattila’s (2006) work in that providing cause information did affect customers’ tipping behaviour. Further, it was found that providing cause information also had a positive impact on customer intentions to see the manager about the delay. Customers who received an explanation for the delay showed fewer tendencies to see the manager than those who did not receive cause information.

The first moderating factor on this second intervention strategy was goal attractiveness. As hypothesised, results showed a strong moderating influence of goal attractiveness on the effectiveness of cause information on customer’s feelings, actions and post-process evaluations. However, such effects were not consistent across different groups of customers. As was found with the first intervention of duration information, a counterproductive effect of providing cause information was noted in various components of customer behaviour and assessments. High goal attractive customers showed positive responses to the provision of cause information. In particular, high goal attractive customers reported a lower negative affect than low goal attractive customers.
However, a negative effect of providing information was found for low goal attractive customers. Low goal attractive customers reported a strong desire to complain to the waiter after receiving the information. Further, low goal attractive customers were less likely to revisit the restaurant after receiving information. Therefore, providing cause information appeared to be useful for high goal attractive customers but had a negative effect on low goal attractive customers.

The second moderating factor of level of dining usage was found to have an impact on customers’ in-process thoughts, feelings and actions and their post-process evaluations. However, like the effect of goal attractiveness, a series of counterproductive outcome effects of providing cause information were evident for high and low dining usage groups. The counterproductive effect was even greater than that found between the high and low goal attractive customers. Less experienced customers showed a stronger desire to see the manager, along with complaining to the waiter. One possible explanation for why experienced customers demonstrated a positive reaction while less experienced customers responded negatively to cause information was the expectation factor of experienced customers. Boulding et al. (1993) suggested that, as customers become more experienced with a service or service provider, the customer has a more accurate picture of what would happen in a given situation.

The third moderating effect was gender. It was hypothesised that gender would moderate the effectiveness of cause information. However, this hypothesis was not supported as
there were no significant differences between females and males relating to the effectiveness of cause information.

5.2.3 How do situational factors moderate the combined effect of providing duration and cause information on service outcomes?

The third research issue addressed whether goal attractiveness, level of dining usage and gender moderated the effectiveness of both duration and cause information when provided together. Researchers mostly investigated the effects of providing duration and cause information separately. However, in a study by Hui and Zhou (2006), the effect of providing cause and duration information together was examined. Hui et al. investigated internal and external moderators that could influence the effectiveness of providing duration and cause information together. In the current study, this line of inquiry was extended to the effects of goal attractiveness, level of dining usage and gender on providing duration and cause information together. Furthermore, the study looked at a broader range of affective and cognitive components of the customer experience, including customer in-process feelings and thoughts, in-process behaviour and post-process evaluations. The findings furnished further evidence that providing duration and cause information separately or providing both types of information together did not have a consistent impact on all types of customers and the benefits varied in different situations.
Findings from this research indicated that the first moderating factor, goal attraction, had an influence on customers’ in-process actions and their long term revisit intentions. However, the results indicated that the combined effect of providing duration and cause information was different from the effect evident when providing this information individually. The same conclusion could be drawn about the second moderating factor, level of dining usage, as results of the combined effect were different from the individual results of providing duration or cause information. However, there was one consistent outcome regardless of whether individual or combined intervention strategies were used. The counterproductive effects, which were noticed on individual service interventions, were also evident in the combined intervention as experienced customers showed a positive impact from knowing the length of and reason for a delay, while less experienced customers responded negatively to such information. This finding indicated that even providing both types of information together would not produce a consistent effect for all customers. Some possible explanations for the counterproductive response to individual intervention strategies were discussed in the previous section and the same explanation might also be relevant to combined interventions. However, because such combined strategies became even more complex, further research would be required to unravel the true reasons.

The third moderating factor, gender, did not have any influence on any combined service intervention strategy. This finding indicated that, while providing duration information on its own had a positive impact on females, when both types of information were provided jointly, there were no differences between genders. Therefore, in this study, gender was
not found to be a critical factor as suggested by McColl-Kennedy et al. (2003). Comparatively, the moderating effects of goal attractiveness and level of dining usage were more substantive and stronger than gender.

5.3 CONTRIBUTION OF THESIS

In the previous section, the findings and how they related to the body of existing literature were discussed. This section will further extend the discussion by highlighting the contribution of this thesis to: (1) framework building and (2) enhancing the effectiveness of service interventions. In particular, the discussion will focus on the idea that the effectiveness of delay-related information depends upon the situation of a customer.

5.3.1 Service Intervention Framework

This research focused on the role of moderating variables in the wait situation. Section 2.6 of the literature review provided findings from previous research on how service interventions could influence service outcomes. However, as noted in the literature review chapter, previous research found mixed results and an unclear picture of the usefulness of service interventions emerged. It was shown in section 2.7 of the literature review chapter that moderating variables, such as goal attractiveness, level of dining experience and gender, might influence customers’ waiting experience, behaviour and their assessment of a service encounter. While previous researchers acknowledged the role of moderators on the waiting experience of customers, previous research did not look at the effects of moderating variables on the effectiveness of service interventions in a
wait situation. Hence, in this thesis, the impact of moderators was modelled to influence a broad range of in-process behaviour and post-process service outcomes.

The thesis contributes to the field of service intervention inquiry in several ways. First, it offers a comprehensive overview of the wait-related literature. Although Durrande-Moreau (1998) presented an extensive review of the literature on waiting, he focused his review on the ten years of literature prior to 1996. Similarly, no comprehensive literature review existed that covered wait-management strategies in general or the influence of wait-related information on service and behavioural outcomes, in particular. This thesis synthesised the literature by combining four major areas: (1) waiting literature grounded in service marketing and service encounter literature; (2) waiting in line literature in general; (3) service intervention literature, focused on wait-related information of duration and cause information; and (4) likely role of moderators on the waiting experience. Similarly, this thesis presented a broader range of cognitive and affective responses to waiting and wait-related information at different stages of a service encounter than was presented in other major studies, such as Hui and Tse (1996) and Hui and Zhou (1996). Additionally, this thesis synthesised and presented context specific waiting literature exclusive to the hospitality industry in general and restaurant businesses in particular. This industry context had particular importance to the practical nature of service intervention inquiry.

The second contribution of this thesis is the conceptualisation of a framework to determine the effectiveness of service interventions. In this thesis, customer experiences
of waiting and responses to service interventions were modelled in three major stages: (1) in-process feelings and thoughts, (2) in-process behaviour and response actions and (3) post-process evaluations. The first and second stages occurred during the delivery of a service and, thus, covered customer feelings and thoughts in response to service interventions and the likely actions that could affect restaurant businesses, such as ordering more food, leaving the service, complaining and intention to tip. The third stage was modelled to include customers’ assessment of a transaction, such as satisfaction and longer term intentions to reuse the service or provide positive recommendations. Similarly, moderators, which influence interventions across all three stages, were modelled. It was shown in figure 2.3 that situational variables of goal attractiveness, previous level of dining experience and gender might influence the effectiveness of service interventions by influencing different components of customer feelings, thoughts and behaviour in response to wait-related information.

5.3.2 Effectiveness of Service Interventions

The major contribution of this thesis is in enhancing the effectiveness of the service intervention strategies of providing duration and cause information. This contribution was presented in five areas: (1) explaining mixed results of previous research on duration and cause information; (2) role of moderators in the effectiveness of providing delay-related information; (3) influence of service interventions on customer’s likely actions during a service encounter; (4) influence of service interventions on a long term relationship between a service provider and customer; and (5) effect of providing both types of information together.
First, findings from this thesis can be used to assist understanding the mixed findings from previous research, in which effectiveness of providing duration and cause information was provided. Maister (1985) suggested a positive impact would occur if customers are told how long they will have to wait. Researchers (e.g., Dubé et al., 1995; Leclerc et al., 1995) found support for Maister’s proposition and asserted that customers responded positively to information. However, Osuna (1985) suggested that providing wait information might not be the most effective way to manage customer perceptions of wait. Similarly, other researchers, such as Dellaert and Kahn (1999), found that providing information did not improve customer satisfaction with the service. Hui and Tse (1996) found that providing information was useful in short waits (5 minutes) but not useful in longer waits (overall 15 minutes). Consequently, the existing research provided an inconclusive picture of whether businesses should provide delay-related information or not. Results presented in this thesis suggested that one reason for arriving at such mixed results was because the research was conducted in different contexts and situations in which customers had different requirements and needs for information. Thus, participants might respond positively or negatively according to their unique characteristics and situations.

Second, an important contribution of this research project is in improving the understanding of the role of moderators in determining the effectiveness of duration and cause information. Previously, researchers investigating the wait experience acknowledged that moderators influenced customer waiting experiences. However, such
research was limited to a few factors, such as length of delay and distance from the goal. Researchers did not look comprehensively at the role of moderating variables in evaluating the effectiveness of service interventions. This current research provided insights into the role moderating variables of goal attractiveness, level of dining usage and gender played in the customer experience of waiting and effectiveness of service interventions. It was found that customers’ time pressure caused by external goals could influence their thoughts, actions, and service assessments. Further, the level of customer experience in the dining situation was found to have a significant impact on a broad range of cognitive and affective aspects of their customer wait experience and the effectiveness of delay-related information. Similarly, the impact of gender was also found to be significant on the effectiveness of such information when customers were judging how well they were treated during the service encounter. Consequently, this research project found that the unique situations of customers and their personal characteristics could moderate the effect of providing duration and cause information. More importantly, it was found that, in some situations, providing duration and cause information had negative impacts on customers.

Third, findings from this research can improve our understanding of the impact of service interventions on customer actions during a service encounter. No previous research was found that exclusively researched the impact of service interventions on customers’ likely actions during a service encounter in an Australian restaurant setting. While constructs, such as service quality and customer satisfaction, were important to business owners or managers, more concrete observable indicators of customer’s actions during service
delivery might yield more practical benefits to profitability. Customer actions, both favourable and unfavourable to businesses, were investigated. It was found that different types of customers responded differently to information during service encounters. Such differences were found to be significant for customers across a battery of actions, such as complaining behaviours, further ordering of food items and drinks, intentions to leave and tipping. Further, the findings indicated how such actions could be translated into customer assessments of a service encounter and in long term intentions of reusing the service. It was found that, in some situations, unfavourable responses, such as leaving a restaurant, did not always mean that the customer was dissatisfied and would not return to that restaurant.

Fourth, findings of the current research indicated how providing such information could influence the longer term intentions of customers. Previous research conducted on waiting mostly focused on customer satisfaction and service quality as a benchmark of how a wait was managed. However, little research was undertaken to investigate the impact of waiting and the effectiveness of service interventions on longer term assessments of customers. In particular, no previous research on service interventions in waiting situations exclusively looked at the impact of providing such information in restaurants on the longer term relationship between service provider and customer. It was found, in this study, that providing duration and cause information produced both positive and negative effects on customer’s long term intentions based upon their level of attraction to their external future goals and their level of dining experience. Customers who were under time pressure because of their after dining goals and customers who had
a greater level of dining experience showed greater positive long term future intentions toward the business compared to other customers who were not under time pressure or were new to dining at restaurants. The latter group responded negatively towards having a longer term relationship with the service provider.

Finally, an interesting contribution was the assessment of the impact of providing both types of information together. Most studies on duration and cause information looked at the impact of such information individually. In this research project, one key objective of the research was to find out how providing both types of information together could influence the effectiveness of such information. It was found that the effectiveness of providing duration and cause information separately might vary from providing such information together. Results from the current research provided some insight into the differences associated with providing both types of information together to different types of customers. The findings further supported the proposition that individual differences in customer situations could lead to differences in the effectiveness of service interventions. Such differences in customer assessments indicated that a single answer to whether delay-related information was useful might not be the most effective approach in implementing service interventions as a wait-management strategy. Accordingly, a more targeted approach might be required to enhance the effectiveness of providing duration and cause information.
5.4 Implications for Theory

In section 5.2, the discussion focused on how the current findings related to the body of literature and drew conclusions from the findings of this research project. In this section, the implications of the findings for theory are discussed. It is argued that the current findings have implications in two areas of wait-management theory: (1) approach towards waiting and (2) approach towards maximising the effectiveness of service interventions.

5.4.1 Approach towards waiting

Results from the current project demonstrated that it is imperative to consider the importance of individual and situational differences between customers in a wait situation. It was found that different groups of customers assessed their waiting experience differently due to inherent differences in their situations and personal characteristics. The results showed that applying the findings from previous research without taking into account the moderating effects of customer goal orientation, level of dining usage and gender might result in a counterproductive effect of applying a service intervention.

First, the theoretical implications of the current research findings related to the general approach used towards waiting problems. Waiting was mostly regarded as a negative experience, which could generate a broad range of negative emotions. As a result, focus was given to minimising the perceived duration of a delay and improving the wait experience for customers. Consequently, perceived time was considered the main factor
in determining whether the customer experience was negative or positive. An underlying assumption in major studies on waiting was that a shorter perception of time led to a positive waiting experience. However, this notion was challenged by Hui and Tse (1996) who argued that using perceived time as the sole factor to determine the outcome of a waiting experience might not be the most effective approach to examine the waiting problem. They suggested that researchers should look into affective and cognitive dimensions of the customer experience. Similarly, Meyer (1994) argued that customer time orientation depended upon customers’ individual goals. Yet, researchers had not investigated the influence of goals on the customer wait experience. In this current project, a broad range of emotional and behavioural components were modelled to find a more comprehensive picture of the wait experience for a customer. It was found that the importance of the time and speed with which a service should be delivered was different between different types of customers. In the qualitative study for this research project, it was found that customers did not always look for a shorter time in waiting. Rather, their individual situations determined whether they wanted to be served quickly or would prefer a slower delivery of service. In particular, for some customers who had ample time at their disposal, a slower delivery was preferred. For instance, when a wait was more enjoyable, such as a dining experience with a close friend, customers were in a relaxed mood. As was found in the first study of the current research project, serving too quickly was often considered undesirable and might be viewed as an act to be rid of a customer as quickly as possible. Further, the findings indicated that a customer’s individual goals, their level of dining usage and gender could influence their experience of waiting. A high goal attractive customer felt and behaved differently from those with low attraction to
their external goals. Similarly, experienced customers showed more tolerance to waiting than those who were new to a service.

Secondly, a common approach used in most of the waiting literature was to treat customers as a homogeneous group. Hence, their individual differences and differences in their situations were mostly under investigated or neutralized in investigations of other aspects of the wait experience. However, the current findings indicated that the customers’ individual goals and their attraction towards their goals could influence their behaviour and assessments of the service encounter. Further, customers could take different actions as a response to a waiting situation. This idea was consistent with Maister’s (1985) suggestion that customers reacted and readjusted to a situation and should not be considered as machines, which always behaved in a consistent fashion. These results showed that those customers who had important goals to attend to once the wait was over reacted differently from those who had ample time and were not in a hurry. The results were in line with Meyer’s (1994) work in which it was found that there were differences between customers with high and low goal attractiveness. In addition to the goal attractiveness variable, the current research examined two further important moderators thought to influence the customer experience of waiting and effectiveness of service interventions. First, customer level of dining usage was modelled as a moderator. It was found that those who were more experienced with similar services had more tolerance towards the service delay when compared to the newer users of the service. The third moderating factor of gender was found to have a limited effect on customers’ in-process behaviour.
5.4.2 Approach towards the effectiveness of service interventions

Most previous research to determine whether providing duration and cause information was useful focused on trying to find a generic answer to this problem. The results from major studies either indicated that providing such information was useful or had no effect. However, one important unanswered question was what made service interventions effective. This research project showed that providing duration and cause information could be useful if applied as a targeted approach; that is, acknowledging the customer’s individual and situational differences, rather than using a standard script for everyone. Consequently, instead of focusing on finding a general solution to achieve greater effectiveness of service interventions, researchers should focus more on the situational differences of customers. Solutions should be specific to particular types of customers. This notion was supported by Miller (2004) and Begri (2005). In this research, significant differences between groups split on their goal attractiveness and level of dining experience on a wide range of customer emotions, behaviour and service outcomes. The results indicated that one blanket strategy could not successfully work for all types of customers. More importantly, results indicated that applying service interventions of duration and cause information, as part of a general script, would make such interventions counterproductive. That is, many customers experienced a negative impact from the provision of such information. Hence, delay-related information might be useful for one group of customers, while others might be negatively affected.
5.5 IMPLICATIONS FOR MANAGEMENT PRACTICE

This research project has implications for the hospitality industry in general and for the three main stakeholders of restaurant businesses, namely owners of restaurants, managers and serving staff. Implications for each of these four areas are now discussed.

5.5.1 Implications for the Hospitality Industry

According to the International Hotel and Restaurant Association, one of the major problems facing the hospitality industry was the shortage and availability of skilled labour (source: http://www.ih-ra.com). This problem was further aggravated due to the rising costs, including staff wages, of operating hospitality related businesses. Both issues had direct and indirect implications for the quality of the service provided by a firm. In particular, restaurants were heavily reliant on temporary staff to cover the shortages of manpower. However, this was a short term approach because temporary and casual staff members often lacked the desire to take up the profession permanently. This lack of commitment to the profession raised other service related problems and resulted in a lower quality of service. Further, staff shortages in restaurants could put increasing pressure on existing staff and might contribute to service delays. Consequently, service related issues, such as delays, were very common in restaurants and even more common than food related complaints.

Restaurant managers have limited options to deal with service problems. The option of adding more manpower resources or restructuring business operations to deal with services delays means adding more costs to the already substantial operating costs of
restaurants. As a consequence, restaurant management requires other low cost techniques to retain the existing customer base and add new and satisfied customers. This can only be achieved if restaurants provide consistent high quality service. Restaurants must ensure that crisis situations, such as those that originate from giving slow service to customers, are handled properly and that negative impacts of such service encounters are managed through a carefully constructed wait-management strategy. Based on these findings, managers could improve key aspects of their wait-management strategies related to the provision of delay-related information to customers.

5.5.2 Implications for Restaurant Owners

According to the National Restaurant Association of the United States of America, up to 80% of restaurant sales came from repeat customers. Repeat customers patronize the restaurant if there is a consistent high quality level of service. One implication of this research project for restaurant owners was that wait management strategies might be enhanced with little, if any, financial commitment from restaurant owners. As existing research on restaurants showed, customer service was the most important reason for customer dissatisfaction. Therefore, it is important for owners to examine low cost techniques to improve customer satisfaction. The findings from the current research project provided some insight into how the effectiveness of service interventions in waiting situations could be enhanced by customer segmentation based upon a customer’s situational characteristics.
5.5.3 Implications for Restaurant Managers

Cornell Hotel and Restaurant Administration Quarterly (Nov, 2004) published a report identifying major concerns for restaurant managers. According to this report by Enz (2004), the most troubling issue for restaurant owners and managers was to find and keep good quality staff and to compete in tight economic conditions. Staff turnover is very high in restaurants, which directly influences the quality of service. As a result, service related issues, such as service delays, are very common in restaurants and result in the loss of customers. Therefore, it is important for managers to find cost effective strategies to manage customers’ waits and improve their service experiences.

The result of this research project can be helpful for managers to manage service delays in two areas: (1) operational and (2) relationship.

Operational considerations

The findings from this research project suggested that the effectiveness of service interventions could be improved if information were provided only to customers who responded positively to such information. Customers who were more experienced in dining and those who were under time pressure or have important tasks to attend to after the dining experience showed more positive responses to the provision of duration and cause information. However, a negative effect of providing information for newcomers and customers who had plenty of time at their disposal was found. These findings suggested that it made sense to understand the segments being serviced by the service business. For instance, a service business with a customer base of heavy users might
require different scripts to a customer base of light users of the service. Without such consideration, managers could waste considerable time, effort and expense to develop and execute a flawed service recovery strategy for a delayed service delivery. However, if such a segmented approach were not possible due to the associated effort involved, service businesses may be better off not applying any service intervention, rather than applying one inappropriately. Most effects from this study were in the small to moderate range. Hence, one could argue that managers should not concern themselves too much with these particular situational variables. However, on closer examination, even a small effect in the opposite direction to that anticipated by the service provider renders the intervention counter-productive. In particular, the provision of duration information may incur a substantially counterproductive outcome to that intended. Consequently, the application of a standard script to manage customer perceptions of wait by providing delay-related information to all customers will not be effective under all conditions. Therefore, restaurants need to improve their understanding of the type of situations facing customers and develop strategies to suit such situations.

Findings relating to two areas of customer in-process behaviour have important implications for managers. These areas are: (1) complaint management and (2) unfavourable responses from the customers during a service encounter. It was found that, in unfavourable situations, customers were more likely to complain to the waiter than to the manager. This finding gives rise to three important issues for managers. The first issue relates to the need of waiting staff training to handle such complaints. Pratten (2003) argued that restaurants are hiring young and inexperienced waiting staff to provide
a young look to customers and not giving enough attention to the training of waiters and serving staff. However, this research indicated that the way employees responded to a service situation influenced the service outcome. Therefore, managers are advised to either ensure that waiters are provided with adequate training to handle negative situations, such as ones that arise out of a delay, or take a more proactive approach. The latter approach may require an increase in their own involvement to ensure that complaints are handled properly. Badly handled complaints have a strong negative influence on customers. A set of recommendations is provided, which managers can include in their wait-management strategy and staff training.

Hence, managers need to ensure that service recovery interventions will improve the customer experience. Parasuraman & Berry (1991) suggested that, if a service recovery is not managed properly, it could result in even greater anger and dissatisfaction from a customer. The first qualitative study in this research project showed that, according to restaurant managers and waiting staff, the decision to provide information and explanation was left entirely at the discretion of waiting staff. Staff either follows a general script developed by a restaurant or decides when to provide or not to provide particular information. The problem with this approach is that waiting staff vary in experience to handle situations such as delays. Proper training should be provided to employees to handle crisis situations. These findings supported industry led programs to ensure more emphasis was given for employees to gain such experience while on the job. Another important implication of the research findings for managers was in the way they could improve relationships with customers and ensure longer term customer retention.
The findings provided support for the idea that providing duration and cause information could have long term implications for customers under different conditions. Customers who are in a hurry or more experienced customers respond more positively to information by having a stronger long term desire to revisit the service and are also more likely to spread positive word of mouth about the restaurant. In contrast, new or inexperienced customers or customers who have plenty of time at their disposal have an inclination toward unfavourable revisit intentions and negative word of mouth following the presence of such information. Accordingly, inexperienced customers should be handled differently.

Finally, this research project emphasises the importance of collecting customer related information, which can be helpful to segment customers and in planning effective service interventions specific to customer situations. While it is obviously not possible to cater to all types of customer situations, collecting data from customers can help identify common situations and further facilitate the development of wait-management plans for specific actions.

*Recommendations for Managers*

The following recommendations were developed for restaurant managers, based upon the research findings of this project to help managers in improving their wait strategies and staff training relating to service delays.
To improve wait-management strategies:

1. Collect as much information as possible about customers to identify different types of customers. A key finding from this research project indicated that different groups of customers behaved differently to service interventions. As a result, a generic wait-management strategy may be ineffective.

2. Do not provide duration and cause information to all customers as part of a general script. Provide duration and cause information to customers who are in a hurry and under time pressure. Such customers have shown a positive impact to the receipt of such information. Similarly, provide duration and cause information to experienced and frequent customers. Such customers have shown more tolerance to a delay but would only respond positively to a delay when they are fully informed. When such information is not provided to them, experienced and frequent customers respond more negatively towards a delay.

3. Provide delay-related information to customers who are in hurry, even if they may leave or not order any further drink or meal items after receiving the information. The findings from this project indicated that such customers were more likely to revisit a restaurant and had a stronger inclination to recommend a restaurant positively. Therefore, on a long term basis, providing delay-related information will have positive outcomes.
4. Do not provide delay-related information to new or inexperienced customers. Findings indicated a negative effect from the provision of such information to customers with a low level of service experience. However, as it may be more difficult to identify inexperienced customers than to identify frequent customers, the manager can restrict providing delay-related information to frequent customers.

5. Factors, such as customer time pressure and their previous level of dining experience, have a much stronger influence on the effectiveness of service intervention than that of other factors, such as gender. The results from this project indicated that, while gender had some effect on the effectiveness of service intervention, other factors had a much stronger effect. Therefore, more emphasis should be given on how to handle these two groups.

6. Take a proactive role in complaint management. In the case of a service delay, talk to customers; the findings indicated that when a delay occurred, customers were more likely to complain to a waiter than to a manager.

To improve staff training relating to wait-management strategy:

Managers can incorporate the following recommendations into their existing staff training programs to improve staff responses to service delays:
1. Formulate a list of common situations unique to the restaurant by identifying common delay-related situations and how staff should respond to these situations. For instance, overcrowding at the general waiting area reflects a different situation than a service delay in serving a meal and, therefore, requires a different approach. Similarly, customers who want a quick meal or customers who want to enjoy a relaxed meal may reflect two different situations and should be dealt with differently.

2. Identify common types of customers who visit the restaurant and their time orientations or other unique characteristics. Once particular types of customers are identified, special care should be taken to manage delays related to such customers.

3. Identify what types of delay-related information should be provided to customers based upon their unique situations and time orientations, service experiences and gender.

5.5.4 Implications for serving staff

This research also has implications for serving staff. It is clear that serving staff can improve their tips by showing respect and regard for a customer. One way to achieve this is to provide useful information to particular customers. This research showed that customers in a delay situation would still give tips if they found information useful. In particular, experienced and frequently visiting customers were more likely to give tips to
waiters if they provided them with adequate information about how long they had to wait before being served. Similarly, such groups of customers were more likely to tip if they were provided with an explanation of why there was a delay. One other important implication for waiting staff was that females were more sensitive to the provision of delay-related information and considered such information as a way of giving them respect. Therefore, waiting staff can expect more tips from females and frequently visited customers by providing them with information, even when such customers have to face a delay. In contrast, this research project demonstrated that new or inexperienced customers were more vulnerable to service problems and more likely to complain to waiters about the delay when duration information was provided to them. Similarly, such customers also showed an inclination to talk to a manager about the delay. Consequently, waiting staff should be careful about providing delay-related information to such customers and instead focus on other measures to distract them from any delay.

5.6 LIMITATIONS

This research project made several contributions towards improving the effectiveness of service interventions in the hospitality industry. However, there were limitations associated with the methodology and design of this research project that should be considered.

One limitation was associated with the online data collection method and sample used in studies 2 and 3 of this project. One reservation against using an online method was that not all customers who visited restaurants had access to computers and the Internet.
Consequently, there was a possibility that a particular type of customer was represented in the sample obtained online. However, the phenomenal growth of the Internet in recent years reduced that risk and a typical profile of customers who dine out had access to online surveys. However, that potential bias in this method is acknowledged.

A second limitation was that the current project was limited to one type of industry and service context and, therefore, results could be generalised only to within the same contexts or similar service settings. Further studies will be required to determine the role of situations in wider services settings, such as banks and airline businesses, and with a more generalised population sample.

A third limitation was that this research project focused only on in-process delays, while delays could occur pre-process or even close to the end of a service encounter. As the stage of a delay can influence customers differently, future research should further use the situational approach used in this thesis but applied to different stages of delays and their impacts on service outcomes.

A fourth limitation was that in studies 2 and 3 for the high and low goal attractive scenarios presented in this research, subjects were assumed to have similar attraction to the internal goals and events relating to a service encounter, such as attraction to food. Similarly, other internal events and factors of a service encounter, which subjects might have experienced in their real life situations, could influence their behaviour and intentions. This may be one reason why they only moderately believed the scenarios
presented in this research project. As a result, subjects might have viewed the imaginary situations differently based upon their own personal past experiences.

A fifth limitation of the study was the use of experimental design for Studies 2 and 3. In both studies vignettes were used to represent the required conditions. While every effort was made in the development of the vignettes that these represent real life situations, it is not entirely possible to simulate the dynamic nature of real life situations. Hence, use of experimental design in this research project is acknowledged here to have some associated limitations.

5.7 FUTURE RESEARCH

This thesis reviewed the waiting literature and identified three situational factors that could influence the effectiveness of providing duration and cause information. Based upon the literature, a model was presented which supported a situational approach to evaluate the effectiveness of service interventions. However, factors covered in the model were not exhaustive and much remains unresolved. Therefore, two areas are suggested for future researchers to address. These directions are: (1) to test other factors that could influence the effectiveness of service interventions and (2) to further explore the counterproductive effect of service interventions found in this thesis.

One important factor that could influence the effectiveness of service interventions is the length of a delay and its relation to how the effectiveness of an intervention varies. In the current research, length of delay was controlled by giving a fixed time in the scenarios. In
particular, long duration services, such as immigration and education services which require more time for processing, might present different outcomes. Similarly, future research could also look at internal events and their influence on the effectiveness of service interventions, such as accuracy and reliability of duration and cause information and how the information was presented.

One interesting outcome of the current research was that some groups of customers responded negatively to the provision of duration and cause information. However, clear reasons for such effects are unknown and more research is required to explore why low goal attractive customers and customers with a lower level of dining experience found the provision of duration and cause information to be unfavourable in the current project. Future research can also look at whether a delay has a much stronger effect on the low level of goal attractive and less experienced customers, which might be the reason for their unfavourable responses to service interventions.

Finally, researchers could explore other contexts to test the model presented in this thesis further. In this thesis, research was restricted to the restaurant industry and, hence, could not be generalised directly to other types of services. Future research can look at other types of restaurants or further broaden the focus by testing the model developed for this research in other types of contexts, such as banking and retail.
REFERENCES


Appendix 1

Cover Letter of Study 2

Dear [Name of the participant],

Mr. Asad Kayani is conducting a research project which is approved by Charles Strut University. The objective of this project is to help reduce and manage customers waiting experiences at the restaurants.

You can participate in the online survey at www.business-research.net. The survey should not take more then 6-8 minutes to complete. You will also get an opportunity to win Meyers’ $200 vouchers.

More information regarding this project can be obtained from www.business-research.net/information.aspx. However, if you have any questions and need explanation regarding this online survey, please don’t hesitate to contact Mr. Kayani at asad.kayani@csu.edu.au

Your prompt response would be much appreciated. Please click this link to participate in the survey now at www.business-research.net.

[Name of Director]
[Director Operations]
Appendix 2

Scenarios Used in Study 2

Vignettes

This study describes a dining experience at a restaurant. Please read the scenario carefully and try to imagine yourself as the customer in a restaurant. Take your time to read the scenario before completing the questionnaire. There is no right or wrong answer; I am only interested in your thoughts and feelings about the service situation. You can always come back to read the scenario again.

SCENARIO 1

(GA high, DI given, Cause given)

Imagine the following situation as if you are a customer

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You plan to attend the last performance of your favourite artist in the city. You and your partner have been waiting for this performance for the last 12 months and don’t want to miss a second of this performance. The performance is expected to start at 9:00 PM.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After 20 minutes, the waiter comes to your table and tells you that there will be a delay in serving. He tells you the meal will take another 30 minutes. The waiter tells you that the restaurant is busier today due to the music concert.
The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the night ahead.

SCENARIO 2
(GA high, DI given, Cause not given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You plan to attend the last musical performance of your favourite artist in the city. You and your partner have been waiting for this performance for the last 12 months and do not want to miss a second of this performance. The performance is expected to start at 9:00 PM.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After 20 minutes, the waiter comes to your table and tells you that there will be a delay in serving. He tells you the meal will take another 30 minutes. You ask the waiter but he does not know the reason for the delay.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the night ahead.
SCENARIO 3
(GA high, DI not given, Cause given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You plan to attend the last musical performance of your favourite artist in the city. You and your partner have been waiting for this performance for the last 12 months and do not want to miss a second of this performance. The performance is expected to start at 9:00 PM.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After 20 minutes, the waiter comes to your table and tells you that there will be a delay in serving. The waiter tells you that the restaurant is busier today due to the music concert.

After 40 minutes, you are still waiting and wondering when the main course will be served.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the night ahead…
Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You plan to attend the last musical performance of your favourite artist in the city. You and your partner have been waiting for this performance for the last 12 months and do not want to miss a second of this performance. The performance is expected to start at 9:00 PM.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After 20 minutes, the waiter comes to your table and tells you that there will be a delay in serving. After 40 minutes, you are still waiting and wondering when the main course will be served. You asked the waiter but he does not know the reason for the delay.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the night ahead.
SCENARIO 5  
(GA low, DI given, Cause given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You have planned to go out after dinner to listen to a musical performance in a theatre close by. You are not sure which artists are performing. You do not mind if you miss some part of this live event.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After 20 minutes, the waiter comes to your table and tells you that there will be a delay in serving. He tells you the meal will take another 30 minutes. The waiter tells you that the restaurant is busier today due to a major musical concert.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the night ahead.....
SCENARIO 6
(GA low, DI given, Cause not given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You have planned to go out after dinner to listen to a musical performance in a theatre close by. You are not sure which artists are performing. You do not mind if you miss some part of this live event.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After 20 minutes, the waiter comes to your table and tells you that there will be a delay in serving. He tells you the meal will take another 30 minutes. You ask the waiter but he does not know the reason for the delay.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the night ahead……
SCENARIO 7  
(GA low, DI not given, Cause given) 

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You have planned to go out after dinner to listen to some live musical performance in theatre close by. You are not sure which artists are performing. You do not mind if you miss some part of this live event.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After 20 minutes, the waiter comes to your table and tells you that there will be a delay in serving. After 40 minutes, you are still waiting and wondering when the main course will be served. The waiter tells you that the restaurant is busier today due to the music concert.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the night ahead.
SCENARIO 8
(GA low, DI not given, Cause not given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You have planned to go out after dinner to listen to a musical performance in a musical theatre close by. You are not sure which artists are performing. You do not mind if you miss some part of this live event.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After 20 minutes, the waiter comes to your table and tells you that there will be a delay in serving. After 40 minutes, you are still waiting and wondering when the main course will be served. You ask the waiter but he does not know the reason for the delay.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the night ahead..
Appendix 3
Questionnaire for Study 2

Please answer the questions on the next page regarding this imaginary scenario.

These questions seek information about how you felt about the scenario as the customer. Please rate your level of agreement or disagreement with each statement by circling one number on each row using the scale shown.

<table>
<thead>
<tr>
<th></th>
<th>1 = Strongly disagree</th>
<th>2 = Disagree</th>
<th>3 = Slightly disagree</th>
<th>4 = Neutral</th>
<th>5 = Slightly agree</th>
<th>6 = Agree</th>
<th>7 = Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The meal was inviting</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I felt that the situation was under my control.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I felt uneasy during this dining experience.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I felt frustrated with the length of wait in this restaurant.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I felt valued as a customer in the restaurant.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Staff took an interest in me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I think the delay was acceptable.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I felt that I knew what to do in this situation.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I felt that I could have influenced the way things went.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I think that the time taken to serve the meal was acceptable.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I felt I could get my own way in this situation.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I think that the waiter treated me honestly.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Given the circumstances, the delay was acceptable.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I felt as though I was well regarded by this restaurant.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. I felt irritated with waiting for the meal.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I felt uncertain due to waiting in this restaurant.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I felt angry with the time it took to serve the meal.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I would likely ask to see the manager</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I would leave without waiting for the meal to arrive.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>1 = Strongly disagree</strong></td>
<td><strong>2 = Disagree</strong></td>
<td><strong>3 = Slightly disagree</strong></td>
<td><strong>4 = Neutral</strong></td>
<td><strong>5 = Slightly agree</strong></td>
<td><strong>6 = Agree</strong></td>
<td><strong>7 = Strongly agree</strong></td>
<td></td>
</tr>
<tr>
<td>20. I was provided with information on the expected length of time to serve the meal.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>21. Attending the musical performance after dinner was very important for me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>22. Information on the expected wait length for the meal was adequate.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>23. Staff treated me in a way that made me feel important.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>24. I was provided with the reason for the delay.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>25. The restaurant staff treated me with respect.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>26. I had been looking forward to attending the musical performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>27. I cannot afford to miss the musical performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>28. The waiter told me the reason for the delay.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>29. This scenario about a restaurant experience is believable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>30. I would likely complain to the manager.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>31. The reason for the delay seemed to be genuine.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>32. I would likely complain to the waiter for the delay</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>33. I had a strong desire to listen to the musical performance after dinner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>34. I think service problems like this scenario do occur in real life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>35. I would expect compensation for the service delay I experienced.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>36. I really enjoyed my visit to this restaurant.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>37. I felt that I could identify with the customer in the scenario.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>38. I would likely refuse to pay for the food I could not eat.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>39. I think that I will revisit the restaurant again.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>40. I am unlikely to order another drink after dinner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>41. Overall, I am pleased with the service I experienced in this restaurant.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>42. I am unlikely to tip the waiter.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>43. I will recommend this restaurant to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>44. I am looking forward to having dinner at this restaurant again</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>45. Overall, my visit to the restaurant was satisfying.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
46. I think that the probability of revisiting this restaurant is high. 1 2 3 4 5 6 7
47. I am unlikely to wait for dessert. 1 2 3 4 5 6 7
48. I will recommend my friends and relatives about this restaurant. 1 2 3 4 5 6 7

Finally, we need some information about you. This information is confidential and used for analysis purposes only.

Q49. Gender:  o Female  o Male

Q50. Age:  o 18-24  o 25-34  o 35-44
          o 45-54  o 55-64  o 65+

Q51. Formal qualifications: (tick highest)
       o University degree  o High school
       o Certificate or Diploma  o Professional qualification
       o Not any of the above

Q52. How frequently do you visit restaurants?
       o Few times in a week  o Few times in a month  o Not very frequently
Appendix 4

Cover Letter for Study 3

Dear colleague

I am a doctoral candidate in the School of Marketing and Management at Charles Sturt University and seek your assistance with the conduct of a pilot study for a large scale survey. The project objective is to understand how a customer’s waiting experience affects service outcomes.

Kindly fill the survey and post it back to me using the self addressed envelops provided with this survey. You can also fill survey online at www.business-research.net. The survey should take about 6-8 minutes to complete. Completing this survey online gives you a chance to win four Myer’s vouchers worth $100 each.

Any data submitted through this online survey will be treated as confidential and will not be used for purposes other than stated above. Ethics committee approval has been obtained for this project. More information regarding this project can be obtained from www.business-research.net/information.pdf. If you have any questions regarding this project or if you would like a copy of the findings of this research project please contact the researcher on akayan03@postoffice.csu.edu.au. Please click this link to participate in the survey at www.business-research.net and have the chance to win four Myer’s $100 vouchers.

Thanks for your support

Asad Kayani
Charles Sturt University
School of Marketing and Management
Appendix 5
Scenarios Used in Study 3

Vignettes

This study describes a dining experience at a restaurant. Please read the scenario carefully and try to imagine yourself as the customer in a restaurant. Take your time to read the scenario before completing the questionnaire. There is no right or wrong answer; I am only interested in your thoughts and feelings about the service situation. You can always come back to read the scenario again.

SCENARIO 1

(GA high, DI given, Cause given)

Imagine the following situation as if you are a customer

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You plan to attend the last performance of your favourite artist in the city. You and your partner have been waiting for this performance for the last 12 months and don’t want to miss a second of this performance. The performance is expected to start at 9:00 PM.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After some time, the waiter comes to your table and tells you that there will be a 30 minutes delay in serving the meal. The waiter tells you that the restaurant is busier today due to the music concert.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the effect of the delay on your night plans...
SCENARIO 2
(GA high, DI given, Cause not given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You plan to attend the last musical performance of your favourite artist in the city. You and your partner have been waiting for this performance for the last 12 months and do not want to miss a second of this performance. The performance is expected to start at 9:00 PM.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After some time, the waiter comes to your table and tells you that there will be a 30 minutes delay in serving the meal. You ask the waiter but he does not know the reason for the delay.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the effect of the delay on your night plans...
SCENARIO 3
(GA high, DI not given, Cause given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You plan to attend the last musical performance of your favourite artist in the city. You and your partner have been waiting for this performance for the last 12 months and do not want to miss a second of this performance. The performance is expected to start at 9:00 PM.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After 20 minutes, the waiter comes to your table and tells you that there will be a delay in serving. The waiter does not inform you about how long it will take to serve the meal.

The waiter tells you that the restaurant is busier today due to the music concert.

After 40 minutes, you are still waiting and wondering when the main course will be served.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the effect of the delay on your night plans...
SCENARIO 4
(GA high, DI not given, Cause not given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You plan to attend the last musical performance of your favourite artist in the city. You and your partner have been waiting for this performance for the last 12 months and do not want to miss a second of this performance. The performance is expected to start at 9:00 PM.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After some time, the waiter comes to your table and tells you that there will be a delay in serving. The waiter does not inform you about how long it will take to serve the meal.

After 40 minutes, you are still waiting and wondering when the main course will be served. You asked the waiter but he does not know the reason for the delay.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the effect of the delay on your night plans...
SCENARIO 5
(GA low, DI given, Cause given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You have planned to go out after dinner to listen to a musical performance in a theatre close by. You are not sure which artists are performing. You do not mind if you miss some part of this live event.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After some time, the waiter comes to your table and tells you that there will be a 30 minutes delay in serving the meal. The waiter tells you that the restaurant is busier today due to the music concert.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the effect of the delay on your night plans...
SCENARIO 6
(GA low, DI given, Cause not given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You have planned to go out after dinner to listen to a musical performance in a theatre close by. You are not sure which artists are performing. You do not mind if you miss some part of this live event.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After some time, the waiter comes to your table and tells you that there will be a 30 minutes delay in serving the meal. You ask the waiter but he does not know the reason for the delay.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the effect of the delay on your night plans...
SCENARIO 7
(GA low, DI not given, Cause given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You have planned to go out after dinner to listen to some live musical performance in theatre close by. You are not sure which artists are performing. You do not mind if you miss some part of this live event.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After 20 minutes, the waiter comes to your table and tells you that there will be a delay in serving. The waiter does not inform you about how long it will take to serve the meal.

The waiter tells you that the restaurant is busier today due to the music concert.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the effect of the delay on your night plans...
SCENARIO 8  
(GA low, DI not given, Cause not given)

Imagine the following situation as if you are a customer.

You book dinner for two at a famous family restaurant in the city. You have not been to the restaurant before but you have heard it is very good. You have planned to go out after dinner to listen to a musical performance in a musical theatre close by. You are not sure which artists are performing. You do not mind if you miss some part of this live event.

On arrival at the restaurant at 8:00 PM, you are greeted by a friendly waiter. The restaurant is very busy at this time. The waiter leads you to a table and gives you a menu. You order drinks and a main course each. You expect the main course to be served in the next 20 minutes.

After some time, the waiter comes to your table and tells you that there will be a delay in serving. The waiter does not inform you about how long it will take to serve the meal.

After 40 minutes, you are still waiting and wondering when the main course will be served. You asked the waiter but he does not know the reason for the delay.

The meal is served after 50 minutes. The meal looks inviting. While eating your meal, you think about the effect of the delay on your night plans...
Appendix 6
Questionnaire for Study 3

SECTION A: YOUR THOUGHTS ABOUT THIS SCENARIO

These questions seek information about how you felt about the scenario as the customer. Please rate your level of agreement or disagreement with each statement by circling one number on each row using the scale shown.

1 = Strongly disagree  2 = Disagree  3 = Slightly disagree  4 = Neutral  5 = Slightly agree  6 = Agree  7 = Strongly agree

I felt that the situation was under my control.

I felt it would be difficult to get my own way in this situation.

I felt that I could have influenced the way things went.

I felt that I knew what to do in this situation.

I think that the time taken to serve the meal was acceptable.

I think that the waiter took too long to tell me about the delay.

I think that the waiter treated me honestly.

I think the delay was acceptable.

Given the circumstances, the delay was acceptable.

Staff treated me in a way that made me feel important.

Staff took an interest in me.

I felt as though I was well regarded by this restaurant.
The restaurant staff treated me with respect.

I felt valued as a customer in the restaurant.

I felt irritated with the waiting for the meal.

I felt angry with the time it took to serve the meal.

I felt frustrated with the length of wait in this restaurant.

I felt uncertain due to waiting in this restaurant.

I felt anxious due to length of wait in this restaurant.

I felt uneasy during this dining experience.

I felt unsettle about the time the time it took to serve the meal.

I was provided information on the expected length of time to serve the meal.

Information on the expected wait length for meal was adequate.

I knew that staff would take that long to serve the meal.

I was provided with the reason for the delay.

The waiter told me the reason for the delay.

The reason for the delay seemed to be genuine.

I had a strong desire to listen to the music after dinner.

Attending the music performance after dinner was very important for me.

I had been looking forward to attending a live music session.
I cannot afford to miss the music concert / performance.

I think service problems like this scenario do occur in real life.

The scenario about a restaurant experience is believable.

I felt that I could identify with the customer in the scenario.

**SECTION B: WHAT WOULD YOU DO IN THIS SITUATION?**

These questions seek information about the actions you will take after the waiting experience in a restaurant. Please rate your level of agreement or disagreement with each statement by circling one number on each row using the scale shown.

I am unlikely to wait for dessert.  

I would leave without waiting for the meal to arrive.  

I am unlikely to order another drink after dinner.  

I would likely to refuse to pay for the food I could not eat.  

I am unlikely to tip the waiter.  

I may refuse to pay for the food.  

I would likely complain to the waiter for the delay.  

I would likely complain to the manager.
I would likely ask to see the manager. 1 2 3 4 5 6 7
I would expect compensation for the service delay I experienced. 1 2 3 4 5 6 7

**SECTION C: HOW DO YOU RATE YOUR SATISFACTION/DISSATISFACTION WITH THE DINNING EXPERIENCE?**

These questions seek information about how much you are satisfied or dissatisfied with the dining experience. Please rate your level of agreement or disagreement with each statement by circling one number on each row using the scale shown.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, I am satisfied with the way the delay was handled by staff of this restaurant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, I am pleased with the service I experienced in this restaurant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, I am satisfied with my decision to visit the restaurant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I really enjoyed my visit to this restaurant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was happy that I visited this restaurant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, my visit to the restaurant was satisfying.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, the quality of the meal was good.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The meal was inviting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think that I will revisit the restaurant again.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I think that the probability of revisiting this restaurant is high.  

1 2 3 4 5 6 7

I am looking forward to having dinner at this restaurant again.  

1 2 3 4 5 6 7

I will recommend this restaurant to others.  

1 2 3 4 5 6 7

I will tell others about my bad experience  

1 2 3 4 5 6 7

**SECTION D: IMPORTANT INFORMATION ABOUT YOU**

Finally, we need some information about you. This information is confidential and used for analysis purposes only.

Q48. Gender:  
- Female
- Male

Q49. Age:  
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

Q50. Formal qualifications:  
(tick highest)  
- High school
- University degree
- Trade qualification
- Post graduate degree
- College Certificate/Diploma
- Other (please specify): ____________

Q51. Occupation  
- Business/ Self employed
- Unemployed
- Job
- Student

Q52. How frequently do you dine out in restaurants (tick closest category)  
- Less than once a month
- Once a month
- Once a fortnight
- 1-2 times a week
- More than twice a week
Appendix 7

Changes Study 3

The following changes were made in study 3 to the scenarios and the questionnaire which was used in study 2.

Changes to Scenarios

(1) The statement “After 20 minutes, the waiter comes to your table” was changed to “After some time, the waiter comes to your table”

(2) The statement “You think about the night ahead” was changed to “You think about the effect of the delay on your night plans”

One additional statement was added for scenarios in which duration was not provided “The waiter does not inform you about how long it will take to serve the meal”

Changes to Questionnaire

One statement “I will recommend my friends and relatives about this restaurant” was removed from purchase intentions measurement.

Following items were added to different measurements:

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of control</td>
<td>I felt it would be difficult to get my own way in this situation.</td>
</tr>
<tr>
<td>Acceptability to wait</td>
<td>I think that the waiter took too long to tell me about the delay.</td>
</tr>
<tr>
<td>Acceptability to wait</td>
<td>I knew staff would take that long to serve the meal.</td>
</tr>
<tr>
<td>Affect</td>
<td>I felt anxious due to length of wait in this restaurant.</td>
</tr>
<tr>
<td>Goal attractiveness</td>
<td>I had a strong desire to listen to the music after dinner.</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>Actions</td>
<td>I would likely to refuse to pay for the food I could not eat.</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Overall, I am satisfied with the way the delay was handled by staff of this restaurant. Overall, I am satisfied with the decision to visit the restaurant.</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>I was happy that I visited this restaurant.</td>
</tr>
<tr>
<td>Quality</td>
<td>Overall, the quality of the meal was good.</td>
</tr>
<tr>
<td>Formal Education</td>
<td>“Trade qualification” was replaced by “profession qualification” in the formal education question.</td>
</tr>
<tr>
<td>Occupation</td>
<td>One question relating to occupation was added.</td>
</tr>
</tbody>
</table>
| Dining frequency    | Question “how frequently do you dine out in restaurants” was rephrased with the following options:  
  - Less than one a month  
  - Once a month  
  - Once a fortnight  
  - 1-2 times a week  
  - More than twice a week |
Appendix 8

Interview script (preliminary interviews)

All participants will be informed on key objectives of research.

Q1 In your business, please tell us how service delays are causing problems for you?
Q2 How do customers react to delays?
Q3 What type of customer reacts strongly to delays?
Q4 What customers say when they are angry?
Q5 What customers do when they are angry?
Q6 Can you please recall any unpleasant incident caused a delay?
Q7 What types of delay you normally have to confront?
Q8 What are you doing to avoid such delays?
Q9 What are you doing to manage such delays?
Q10 What type of information about delays do you provide?
Q11 Do you apologize to customers for the delay?
Q12 What others employees do to help customers facing a delay?
Q13 How delays are costing your business?