

Midocean University

College of Administration

Department / Major: Healthcare

Administration



Alaa Oussama Itani

ID# 253002025

**The Impact of Waiting Time on Patient Satisfaction
in Outpatient Clinics in a Private Hospital in
Riyadh, Saudi Arabia**

Supervisors

Dr Fayez Ali Jrad

Dr AlFaisal Abdulhameed

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Copyright Statement

I, **Alaa Oussama Itani**, declare that the copyright of this research project entitled: **“The Impact of Waiting Time on Patient Satisfaction in Outpatient Clinics in a Private Hospital in Riyadh, Saudi Arabia”** belongs to **Midocean University**.

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Abstract

This study aimed to evaluate **the impact of waiting time on patient satisfaction in outpatient clinics in a private hospital in Riyadh, Saudi Arabia**. The research problem focused on the effect of prolonged waiting times on patients’ experiences and their overall satisfaction with the quality of healthcare services provided. Therefore, examining the

relationship between waiting time and patient satisfaction is essential for improving healthcare service efficiency and patient experience.

A quantitative descriptive analytical approach was adopted in this study. An electronic questionnaire was used as the main data collection tool among patients who visited outpatient clinics in a private hospital in Riyadh. The study population consisted of outpatient clinic patients, and a sample size of **300 patients** was included in the research.

The questionnaire included five statements assessing patients' perceptions of waiting time, including registration waiting time, being seen by the physician within a reasonable time, appointment scheduling, communication regarding delays, and overall waiting-time expectations. It also included seven statements measuring patient satisfaction with outpatient healthcare services, including satisfaction with outpatient services, staff professionalism and respect, healthcare service quality, willingness to recommend the hospital, overall experience, satisfaction with the outpatient clinic experience, and willingness to choose the hospital again for outpatient services. It also measured patient satisfaction dimensions, including healthcare service quality and overall satisfaction. The collected data were analysed using appropriate statistical methods through **SPSS software**, including descriptive statistics, reliability testing using Cronbach's Alpha, correlation analysis, and regression analysis to examine the relationship between the study variables.

The findings revealed a statistically significant moderate negative relationship between the reverse-coded waiting-time score and patient satisfaction ($r = -0.487$, $p < .001$). Poorer perceived waiting-time experiences were associated with lower patient satisfaction scores. Simple Linear Regression analysis also showed that waiting time was a statistically significant predictor of patient satisfaction, with the model explaining 23.7% of the variation in satisfaction ($R^2 = 0.237$). No statistically significant differences in patient satisfaction were found according to gender, age group, or number of previous outpatient visits. Overall, the findings indicate that perceived waiting time is significantly associated with patient satisfaction in the outpatient setting examined.

Keywords:

Waiting Time, Patient Satisfaction, Outpatient Clinics, Healthcare Service Quality, Healthcare Management.

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List of Terminology (English – Arabic)

English Term	Arabic Term	Definition
Waiting Time	وقت الانتظار	The period a patient spends waiting before receiving healthcare services in outpatient clinics.

English Term	Arabic Term	Definition
Patient Satisfaction	رضا المرضى	The level of patients' satisfaction based on their expectations and experiences with healthcare services.
Outpatient Clinics (OPD)	العيادات الخارجية	Healthcare departments that provide medical consultation and services without hospital admission.
Healthcare Quality	جودة الرعاية الصحية	The degree to which healthcare services meet patient needs and improve health outcomes.
Patient Experience	تجربة المريض	The overall perception of patients regarding their interactions throughout the healthcare journey.
Operational Efficiency	الكفاءة التشغيلية	The ability of healthcare organizations to provide effective services while optimizing time and resources.
Service Quality	جودة الخدمة	The evaluation of healthcare services based on reliability, responsiveness, communication, and patient needs.
Patient Flow	تدفق المرضى	The movement of patients through different stages of care within the healthcare facility.
Appointment Waiting Time	وقت انتظار الموعد	The time between scheduling an appointment and receiving the healthcare service.
Registration Waiting Time	وقت انتظار التسجيل	The time required to complete patient registration procedures before receiving care.
Consultation Waiting Time	وقت انتظار مقابلة الطبيب	The period patients wait before being seen by the healthcare provider.

English Term	Arabic Term	Definition
Independent Variable	المتغير المستقل	The factor that may influence or affect another variable; in this study, waiting time is the independent variable.
Dependent Variable	المتغير التابع	The outcome variable affected by another factor; in this study, patient satisfaction is the dependent variable.
Quantitative Research	البحث الكمي	A research approach that collects and analyzes numerical data to examine relationships between variables.
Questionnaire	الاستبانة	A structured tool used to collect participants' responses for research purposes.
Sample Size	حجم العينة	The number of participants included in the research study.
Statistical Analysis	التحليل الإحصائي	The process of analyzing collected data using statistical methods.
SPSS (Statistical Package for Social Sciences)	برنامج الحزمة الإحصائية للعلوم الاجتماعية	Software used for managing and analyzing research data.
Cronbach's Alpha	معامل كرونباخ ألفا	A statistical measure used to assess the reliability and internal consistency of questionnaire items.
Correlation Analysis	تحليل الارتباط	A statistical method used to examine the relationship between two variables.
Regression Analysis	تحليل الانحدار	A statistical technique used to determine the effect of one variable on another.

List of Abbreviations

Abbreviation	Full Term (English)	Arabic Meaning
OPD	Outpatient Department	قسم العيادات الخارجية
KSA	Kingdom of Saudi Arabia	المملكة العربية السعودية
MOH	Ministry of Health	وزارة الصحة
WHO	World Health Organization	منظمة الصحة العالمية

Abbreviation	Full Term (English)	Arabic Meaning
HCA	Healthcare Administration	إدارة الرعاية الصحية
HQ	Healthcare Quality	جودة الرعاية الصحية
PS	Patient Satisfaction	رضا المرضى
WT	Waiting Time	وقت الانتظار
PX	Patient Experience	تجربة المريض
QI	Quality Improvement	تحسين الجودة
KPI	Key Performance Indicator	مؤشر الأداء الرئيسي
TQM	Total Quality Management	إدارة الجودة الشاملة
SERVQUAL	Service Quality Model	نموذج قياس جودة الخدمة
SPSS	Statistical Package for Social Sciences	الحزمة الإحصائية للعلوم الاجتماعية
SD	Standard Deviation	الانحراف المعياري
M	Mean	المتوسط الحسابي
N	Number of Participants	عدد المشاركين
CI	Confidence Interval	فترة الثقة
Sig.	Significance Level	مستوى الدلالة الإحصائية
P-value	Probability Value	القيمة الاحتمالية
ANOVA	Analysis of Variance	تحليل التباين
IRB	Institutional Review Board	لجنة المراجعة الأخلاقية للبحوث
HER	Electronic Health Record	السجل الصحي الإلكتروني

Chapter One:

Introduction

General Framework of the Research

1.1 Introduction

Healthcare services are evaluated not only by the clinical care provided but also by patients' experiences during their visits. In outpatient clinics, patients interact with different services from the time they arrive until their consultation is completed. Waiting is one part of this experience and can occur during registration, before consultation, or at other stages of the visit. For this reason, understanding patients' waiting experiences is relevant when examining their overall satisfaction with outpatient services.

Waiting time continues to be an important issue in outpatient healthcare because delays can influence how patients evaluate their overall experience. Patients generally expect healthcare services to be organized and delivered within a reasonable period, particularly when attending scheduled outpatient appointments. When delays occur, they may affect patients' perceptions of service efficiency and the organization of care. In Saudi Arabia, improving healthcare services and patient experience has received increasing attention as part of the ongoing development of the healthcare sector. Within this context, examining waiting time in outpatient clinics can provide useful information about patients' experiences and their satisfaction with the services provided.

Previous research has examined the relationship between waiting time and patient satisfaction in outpatient healthcare. The findings generally suggest that longer or less acceptable waiting experiences are associated with lower levels of patient satisfaction (Bleustein et al., 2014; Al-Harajin et al., 2019). However, findings may differ according to the healthcare setting and the way outpatient services are organized. Examining this relationship within a private hospital in Riyadh can therefore provide a better understanding of patients' experiences in this specific setting.

Therefore, this study aims to investigate the impact of waiting time on patient satisfaction in outpatient clinics within a private hospital in Riyadh. The study adopted a quantitative cross-sectional design using a structured bilingual questionnaire (English and Arabic) developed through Microsoft Forms to collect data from patients attending outpatient clinics in a private hospital in Riyadh. The questionnaire assessed patients' perceptions of waiting time and patient satisfaction using five-point Likert-scale statements, in addition to demographic information, overall satisfaction questions, and open-ended responses. The findings may provide useful information for healthcare administrators when considering ways to improve outpatient service organization and patient experience.

1.2 Problem Statement

Waiting time is an important issue in outpatient clinics because it forms part of the patient's overall service experience. When patients experience delays that are longer than expected, their evaluation of the services they receive may become less positive. This issue is relevant to the present study because outpatient services involve several activities, including registration, appointment management, consultation, and communication about delays. Understanding patients' waiting experiences can therefore provide useful information about their satisfaction with outpatient services in the selected private hospital.

This study seeks to address the following research questions:

What is the relationship between waiting time and patient satisfaction in outpatient clinics?

To what extent does waiting time influence patients' perceptions of service quality in a private hospital in Riyadh?

The problem addressed in this study concerns patients' waiting experiences in outpatient clinics and how these experiences are related to their satisfaction with the services provided. Delays may occur at different points during an outpatient visit, including registration, appointment management, and the period before consultation. These experiences may affect how patients evaluate the organization and efficiency of the services they receive. Therefore, examining the relationship between waiting time and patient satisfaction within the selected private hospital in Riyadh can provide a clearer understanding of this issue in the study setting.

1.3 Study Importance – Scientific & Theoretical

1.3.1 Scientific Importance:

- This study contributes to the understanding of the relationship between waiting time and patient satisfaction in outpatient healthcare services.
- It examines this relationship within the specific context of a private hospital in Riyadh, Saudi Arabia, providing evidence from the selected study setting.
- The study applies relevant theoretical perspectives to explain the relationship between patients' waiting experiences and their satisfaction with outpatient services.

1.3.2 Practical Importance:

- The findings can provide healthcare administrators with information about patients' perceptions of waiting time and satisfaction in outpatient clinics.
- The results may help identify aspects of waiting-time management that could be considered

when planning improvements in outpatient services.

- The study may support hospital management in using patient experience information when reviewing service organization and quality-improvement activities.

1.4 Study Objectives

General:

To examine and analyze the impact of waiting time on patient satisfaction in outpatient clinics in a private hospital in Riyadh, Saudi Arabia, with the aim of improving service quality and patient experience.

Specific:

- To assess patients' perceptions of waiting time during outpatient clinic services.
- To assess the overall level of patient satisfaction with outpatient healthcare services.
- To analyze the relationship between waiting time and various dimensions of patient satisfaction, including service quality, communication, and overall experience.
- To evaluate patients' perceptions of acceptable waiting time and their expectations regarding timely service delivery.
- To examine whether demographic factors (such as age, gender, and visit frequency) influence satisfaction levels related to waiting time.
- To provide practical recommendations for healthcare administrators to reduce waiting time and enhance patient satisfaction in private hospital settings.

1.5 Research Questions

- What is the average waiting time experienced by patients in outpatient clinics in a private hospital in Riyadh?
- What is the level of patient satisfaction with outpatient healthcare services?
- Is there a significant relationship between waiting time and patient satisfaction in outpatient clinics?
- How does waiting time affect different dimensions of patient satisfaction (such as service quality, communication, and overall experience)?

- How do patients perceive the overall waiting time experienced during outpatient services?
- Do demographic factors (such as age, gender, and frequency of visits) influence patient satisfaction related to waiting time?

1.6 Research Hypotheses

H01 (Null Hypothesis):

There is no statistically significant relationship between waiting time and patient satisfaction in outpatient clinics in a private hospital in Riyadh.

H11 (Alternative Hypothesis):

There is a statistically significant relationship between waiting time and patient satisfaction in outpatient clinics in a private hospital in Riyadh.

H02 (Null Hypothesis):

Waiting time has no statistically significant effect on patient satisfaction in outpatient clinics in a private hospital in Riyadh.

H12 (Alternative Hypothesis):

Waiting time has a statistically significant effect on patient satisfaction in outpatient clinics in a private hospital in Riyadh.

H03 (Null Hypothesis):

There are no statistically significant differences in patient satisfaction related to waiting time based on demographic factors (age, gender, and frequency of visits).

H13 (Alternative Hypothesis):

There are statistically significant differences in patient satisfaction related to waiting time based on demographic factors (age, gender, and frequency of visits).

1.7 Theoretical Framework

1.7.1 Introduction

This section presents the main concepts and theoretical perspectives related to the variables examined in the study. It focuses on waiting time and patient satisfaction and explains how these variables can be understood within the outpatient healthcare setting. The section also introduces the theoretical models used to support the study and provide a basis for understanding the relationship between the two variables.

1.7.2 Healthcare Service Quality

Healthcare service quality includes different aspects of how care is provided and experienced by patients. It involves providing services that are safe, effective, timely, efficient, equitable, and focused on patients' needs (World Health Organization [WHO], 2021). In addition to clinical care, patients may evaluate the way services are organized and delivered. For the present study, waiting time is relevant because it represents one part of the outpatient service experience that patients can directly observe.

1.7.3 Waiting Time

Waiting time in outpatient clinics refers to the time patients spend waiting for services during their visit. Waiting may occur at different points, such as registration, before seeing the physician, or before completing other required services. In the present study, waiting time is examined from the patient's perspective, with attention to the acceptability of registration waiting, timely access to the physician, appointment scheduling, communication about delays, and whether the overall waiting experience meets patients' expectations.

1.7.3.1 Types of Waiting Time

Waiting time may occur during several stages of the patient's journey, including:

- Registration waiting time.
- Being seen by the physician within a reasonable time.
- Effectiveness of appointment scheduling.
- Communication regarding delays.
- Overall waiting-time experience.

These aspects represent the different parts of the waiting experience considered in the present study.

1.7.3.2 Factors Affecting Waiting Time

Waiting time in outpatient clinics can be affected by the way services are organized and managed during the patient visit. Factors related to appointment scheduling, registration procedures, patient flow, and communication about delays may contribute to the waiting experience. In the present study, the focus is not on measuring these operational factors separately, but on examining patients' perceptions of their waiting experience and its relationship with satisfaction.

1.7.4 Patient Satisfaction

Patient satisfaction is the dependent variable in the present study and refers to patients' evaluation of the healthcare services and experiences they receive. It can reflect whether different aspects of the service meet patients' needs and expectations (Batbaatar et al., 2017). In this study, satisfaction is examined in relation to patients' outpatient clinic experience, including their views of service quality, staff professionalism, and their overall evaluation of the services received.

1.7.4.1 Dimensions of Patient Satisfaction

In the present study, patient satisfaction is assessed through different aspects of the outpatient experience. These include satisfaction with outpatient services, professional and respectful treatment by staff, whether healthcare services meet patients' expectations, willingness to recommend the hospital, overall satisfaction with the experience, satisfaction with the outpatient clinic visit, and willingness to choose the hospital again for future outpatient services. Together, these aspects are used to represent the overall level of patient satisfaction among the study participants.

1.7.5 Relationship Between Waiting Time and Patient Satisfaction

Waiting time can influence how patients evaluate their experience with outpatient healthcare services. Previous research has reported that longer waiting times are associated with lower levels of patient satisfaction (Bleustein et al., 2014; Al-Harajin et al., 2019). However, patients

may evaluate waiting differently depending on their expectations and the way services are organized.

In the present study, the relationship is examined among patients attending outpatient clinics in a private hospital in Riyadh, Saudi Arabia. Waiting time is treated as the independent variable and patient satisfaction as the dependent variable. The study examines whether differences in patients' waiting experiences are associated with differences in their satisfaction with outpatient services.

1.7.6 Theories Supporting the Study

1.7.6.1 SERVQUAL Model

The SERVQUAL Model identifies five dimensions of service quality: reliability, responsiveness, assurance, empathy, and tangibles (Parasuraman et al., 1988). For the present study, responsiveness is the most relevant dimension because it relates to the timely delivery of services. The model therefore provides a useful perspective for understanding waiting time as part of the outpatient service experience.

1.7.6.2 Expectation–Disconfirmation Theory (EDT)

Expectation–Disconfirmation Theory explains satisfaction through the comparison between expectations and actual experience (Oliver, 1980). In relation to this study, patients may compare their expected waiting experience with what they actually experience during their outpatient visit. The theory therefore helps explain why patients' perceptions of waiting time may be related to their overall satisfaction.

1.7.6.3 Donabedian Model of Healthcare Quality

The Donabedian Model explains healthcare quality through three components: structure, process, and outcome (Donabedian, 1988). In the present study, waiting time is considered part of the outpatient service process, while patient satisfaction represents an outcome from the patient's perspective. This model helps connect the organization and delivery of outpatient services with patients' evaluation of their experience.

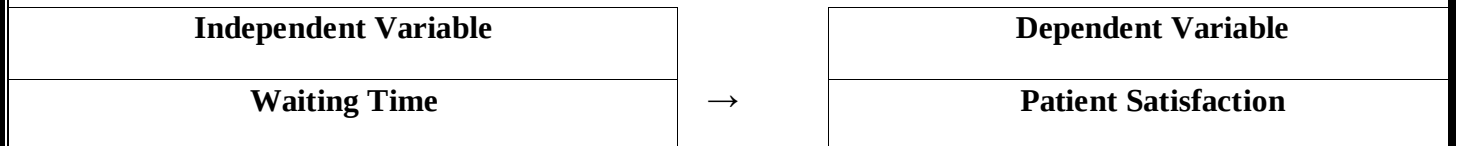
1.7.6.4 Summary of the Theoretical Framework

Together, the three theoretical perspectives provide a basis for examining the relationship between waiting time and patient satisfaction. SERVQUAL considers the responsiveness of service delivery, Expectation–Disconfirmation Theory focuses on patients' expectations and

experiences, and the Donabedian Model considers the relationship between healthcare processes and outcomes. These perspectives support the conceptual framework used in the present study.

Figure 1.1 Conceptual Framework of the Study

Figure 1.1 Conceptual Framework of the Study



Interpretation: Figure 1.1 illustrates the conceptual framework of the present study. Waiting time represents the independent variable, while patient satisfaction represents the dependent variable. The framework proposes that patients' perceptions of waiting time are related to their overall satisfaction with outpatient healthcare services.

Chapter 2:

Literature Review

2.1 Introduction

This chapter reviews the literature related to the two main variables of the study: waiting time and patient satisfaction. It presents the main concepts related to each variable, reviews previous studies conducted in different healthcare settings, and compares their findings and methods. The chapter also identifies the research gap addressed by the present study and presents the theoretical framework used to understand the relationship between waiting time and patient satisfaction.

2.2 Independent Variable: Waiting Time

2.2.1 Definition of Waiting Time

In outpatient clinics, waiting time refers to the period patients spend waiting to receive services during their visit. Waiting can occur at different stages, including registration, before consultation with the physician, and while completing other required services. In this study, waiting time is considered from the patient's perspective rather than only as the actual number of minutes spent waiting. This allows the study to examine how patients evaluate their waiting experience during outpatient services.

2.2.2 Importance of Waiting Time

Waiting time is relevant to outpatient services because it is a part of the healthcare experience that patients can directly observe. The time spent waiting may affect how patients view the organization and delivery of the services they receive. Examining waiting time can therefore provide useful information about patients' experiences during outpatient visits. In the present study, its importance is considered mainly in relation to patient satisfaction.

2.2.3 Factors Contributing to Waiting Time

Waiting time can be affected by different aspects of outpatient service organization. These may include patient volume, availability of healthcare staff, appointment scheduling, registration procedures, available resources, and coordination between services. The effect of these factors can vary between healthcare settings. In the present study, these factors are considered as part of the general context of waiting time, while the main focus is on patients' perceptions of their waiting experience.

2.2.4 Types of Waiting Time

Waiting can occur at different stages of an outpatient visit. In the present study, the waiting experience is considered through five main aspects: registration waiting time, being seen by the physician within a reasonable time, effectiveness of appointment scheduling, communication regarding delays, and the overall waiting-time experience. These aspects reflect the areas of waiting assessed through the study questionnaire.

2.2.5 Measurement of Waiting Time

In the present study, waiting time was measured through patients' perceptions of their outpatient waiting experience using a structured questionnaire. Five statements were used to

assess the acceptability of registration waiting time, whether the patient was seen by the physician within a reasonable time, the effectiveness of appointment scheduling, communication regarding delays, and whether the overall waiting time met the patient's expectations. Responses were recorded using a five-point Likert scale. For the correlation and regression analyses, the waiting-time items were reverse-coded so that higher composite scores represented poorer or less acceptable waiting-time experiences.

2.3 Dependent Variable: Patient Satisfaction

2.3.1 Definition of Patient Satisfaction

Patient satisfaction refers to patients' evaluation of their experience with the healthcare services they receive. In the present study, it represents the dependent variable and reflects how participants evaluate different aspects of their outpatient clinic experience. These aspects include satisfaction with outpatient services, staff professionalism and respect, healthcare service quality, overall experience, willingness to recommend the hospital, and willingness to choose the hospital again for future outpatient services.

2.3.2 Importance of Patient Satisfaction

Patient satisfaction provides information about how patients evaluate the services they receive and their overall healthcare experience. Examining satisfaction can help identify which aspects of the service are viewed positively and which may require further attention. In the present study, patient satisfaction is important because it allows the waiting experience to be examined in relation to patients' evaluation of outpatient services.

2.3.3 Factors Affecting Patient Satisfaction

Patients may consider different aspects of their outpatient experience when evaluating the services they receive. These can include communication with healthcare staff, professional and respectful treatment, service organization, and the waiting experience. In the present study, the main factor examined in relation to patient satisfaction is waiting time. Other aspects of the outpatient experience are considered through the satisfaction statements included in the questionnaire.

2.3.4 Dimensions of Patient Satisfaction

In the present study, patient satisfaction is examined through several aspects of the outpatient experience. These include satisfaction with outpatient clinic services, professional and respectful treatment by staff, whether the quality of healthcare services met patients' expectations, willingness to recommend the hospital to others, overall satisfaction with the experience, satisfaction with the outpatient clinic experience, and willingness to choose the hospital again for future outpatient services. Together, these aspects are used to represent patients' overall satisfaction with outpatient services.

2.3.5 Measurement of Patient Satisfaction

In the present study, patient satisfaction was measured using seven statements included in the structured questionnaire. Participants responded to each statement using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The statements assessed different aspects of the outpatient experience, including overall satisfaction, staff professionalism, service quality, willingness to recommend the hospital, and willingness to choose the hospital again. A composite satisfaction score was calculated from the responses, with higher scores representing higher levels of patient satisfaction.

2.4 Previous Studies

Several studies have examined waiting time and its relationship with patient satisfaction in outpatient healthcare services. Although these studies were conducted in different countries and healthcare settings, most reported that patients who experienced longer waiting periods tended to be less satisfied with the services they received. The following studies were reviewed to understand the available evidence and identify areas that require further investigation.

2.4.1 Study 1: Bleustein et al. (2014)

Bleustein et al. (2014) examined the relationship between waiting time and patient satisfaction among 5,030 patients receiving outpatient care in the United States. The study used a cross-sectional approach and collected information about patients' experiences through satisfaction questionnaires. The results showed that longer waiting periods were associated with lower levels of patient satisfaction. The study also indicated that patients' perceptions of how long they waited were important in shaping their overall evaluation of the healthcare service. However, because the study mainly depended on patients' perceptions of waiting rather than objective time measurements, the findings may have been influenced by individual differences in how patients experienced and reported waiting.

2.4.2 Study 2: Al-Harajin et al. (2019)

Al-Harajin et al. (2019) investigated factors related to patient satisfaction in outpatient clinics in Saudi Arabia, with waiting time included as an important part of the patient experience. The study used a cross-sectional survey and included 420 patients attending outpatient clinics in public hospitals. The findings showed that patients who experienced shorter waiting periods generally reported higher satisfaction and more positive views of the healthcare services they received. This study is particularly relevant because it provides evidence from the Saudi healthcare setting. However, it was conducted in public hospitals, where service conditions and patient expectations may differ from those in private hospitals. This limits the extent to which its findings can be directly applied to the setting examined in the present study.

2.4.3 Study 3: Sumaedi et al. (2020)

Sumaedi et al. (2020) examined the relationship between waiting time, service quality, and patient satisfaction among 367 patients receiving outpatient healthcare services in Indonesia. The researchers used a quantitative approach and Structural Equation Modeling (SEM) to analyze the relationships between the study variables. Their findings showed that longer waiting times were associated with poorer perceptions of service quality and lower patient satisfaction. This supports the importance of managing waiting time as part of improving the outpatient experience. However, waiting time was examined as one overall measure rather than considering the different stages at which patients may experience delays. As a result, the study provides less information about which specific parts of the outpatient process may contribute most to patients' waiting experiences.

2.4.4 Study 4: Almutairi et al

Almutairi et al. examined the relationship between waiting time and patient satisfaction among 250 patients attending outpatient clinics. The study followed a quantitative cross-sectional design and collected data using structured questionnaires. The results showed a statistically significant negative relationship between the two variables, with longer waiting periods associated with lower patient satisfaction. These findings provide further support for the relationship examined in the present study. However, the relatively small sample and the use of only one healthcare setting may limit the extent to which the findings can be applied to other hospitals or patient populations.

2.4.5 Study 5: Alqahtani and Alsharif

Alqahtani and Alsharif examined patient satisfaction in outpatient clinics in Riyadh, with waiting time included among the factors related to service quality. Using a cross-sectional survey, the researchers evaluated patients' perceptions of different aspects of their healthcare experience. The findings showed that waiting time was significantly related to patient satisfaction. At the same time, other factors, particularly communication and staff behavior, were also associated with how patients evaluated the services they received. This study is relevant to the present research because it was conducted in Riyadh. However, because several service-related factors were examined together, it is difficult to determine the specific contribution of waiting time to patient satisfaction.

2.4.6 Study 6: Bahammam (2023)

Bahammam (2023) examined patient satisfaction with waiting time among 241 patients attending ENT outpatient departments in Ministry of Health hospitals in Jeddah, Saudi Arabia. The study used a cross-sectional questionnaire to assess patients' experiences with waiting time, appointment procedures, and healthcare services. The findings showed that most participants were satisfied with the waiting time and appointment process, while shorter waiting periods and better appointment management were associated with a more positive patient experience. Differences in satisfaction were also reported according to some demographic characteristics. Although this study provides useful evidence from the Saudi healthcare setting, it focused only on ENT clinics in public hospitals in Jeddah. Therefore, its findings may not fully represent patients attending different specialties or private hospitals. In addition, its cross-sectional design does not allow conclusions about cause and effect.

2.4.7 Summary of Previous Studies

The studies reviewed in this section generally show that waiting time is related to patient satisfaction in outpatient healthcare settings. Despite differences in countries, sample sizes, and methods, longer or less acceptable waiting experiences were commonly associated with lower levels of satisfaction. The studies also suggest that patients' perceptions of waiting, appointment management, communication, and the organization of services can influence their overall healthcare experience.

However, the reviewed studies were conducted in different healthcare settings, and several focused on public hospitals or specific outpatient specialties. Most also used cross-sectional designs and relied on patients' self-reported experiences. These differences should be considered when applying their findings to other healthcare environments. The evidence reviewed provides a useful basis for the present study, while the main differences and limitations of the previous research are examined further in the following sections.

2.5 Comparative Analysis of Previous Studies

The studies reviewed in the previous section generally reported a relationship between waiting time and patient satisfaction, but they differed in several important ways. These differences are useful when considering how the previous findings relate to the present study.

One difference concerns how waiting time was measured. Some studies focused mainly on patients' perceptions of waiting, while others considered the duration of the waiting period or different stages of the outpatient visit. This is important because two patients may experience a similar waiting period but evaluate it differently depending on their expectations and the way the delay is managed.

The healthcare settings also varied between studies. Several of the reviewed studies were conducted in public hospitals, while others examined particular outpatient services or healthcare systems outside Saudi Arabia. These settings may differ in terms of patient volume, available resources, appointment procedures, and patient expectations. Therefore, findings from one setting may not always apply in the same way to another.

There were also differences in research methods and sample sizes. Most of the studies used cross-sectional surveys and collected information directly from patients, while Sumaedi et al. (2020) used Structural Equation Modeling to examine relationships between the variables. Although these approaches provide useful information about associations, cross-sectional studies have limitations when determining cause-and-effect relationships.

Another difference is the way waiting time was defined. Some studies considered waiting time as one overall experience, while others examined particular parts of the outpatient process. Looking at different aspects of waiting can provide a better understanding of where patients experience difficulties and how these experiences are related to satisfaction.

Overall, the comparison shows that previous studies provide useful evidence about waiting time and patient satisfaction, but differences in setting, measurement, and methodology should be considered when interpreting their findings. Figure 2.1 summarizes the main characteristics of the reviewed studies and compares them with the present study.

Figure 2.1 Comparative Analysis of Previous Studies

Author (Year)	Country	Sample	Research Design	Main Findings	Limitation
Bleustein et al. (2014)	USA	5,030 patients	Cross- sectional	Longer waiting time significantly reduced patient satisfaction	Measured perceived waiting time only
Al-Harajin et al. (2019)	Saudi Arabia	420 patients	Cross- sectional survey	Waiting time significantly affected patient satisfaction	Focused on public hospitals only
Sumaedi et al. (2020)	Indonesia	367 patients	Structural Equation Modeling	Waiting time negatively affected service quality and satisfaction	Waiting time measured as a single variable
Almutairi et al.	Saudi Arabia	250 patients	Cross- sectional	Significant negative relationship between waiting time and satisfaction	Small sample size and single healthcare setting
Alqahtani & Alsharif	Saudi Arabia	Various outpatient clinics	Cross- sectional	Waiting time was a major determinant of patient satisfaction	Examined several variables simultaneously
Current Study	Saudi Arabia	300 patients	Cross- sectional	Examines multiple stages of waiting time and their impact on patient	Addresses the identified research gap

Author (Year)	Country	Sample	Research Design	Main Findings	Limitation
				satisfaction in a private hospital	

Source: Developed by the researcher based on the study objectives and planned statistical analyses.

The comparison presented in Figure 2.1 shows that the reviewed studies provide relevant evidence for understanding the relationship between waiting time and patient satisfaction. At the same time, differences in healthcare setting, sample characteristics, and measurement approaches indicate the need to examine this relationship within the specific context of the present study. These differences are considered further in the research gap presented in the following section.

2.6 Research Gap

The previous studies provide useful evidence about the relationship between waiting time and patient satisfaction, but some areas still require further investigation. One important difference is the healthcare setting. Several of the reviewed studies were conducted in public hospitals, specific clinical departments, or healthcare systems outside Saudi Arabia. This makes it useful to examine the relationship within a private outpatient setting in Riyadh.

Another difference relates to the measurement of waiting time. Some of the reviewed studies considered waiting as an overall experience, while others focused on particular aspects of the outpatient visit. In the present study, patients' waiting experiences are assessed through several aspects, including registration, being seen by the physician within a reasonable time, appointment scheduling, communication about delays, and overall waiting-time expectations.

The reviewed studies also used different samples and methods, which may partly explain differences in their findings. Most used cross-sectional questionnaires and relied on patients' reported experiences. Although these methods are useful for examining relationships between variables, the findings need to be understood within the setting and population in which each study was conducted.

Based on these observations, further examination of waiting time and patient satisfaction in private outpatient healthcare in Riyadh is relevant. The present study addresses this area by

examining the relationship between patients' perceptions of waiting time and their satisfaction with outpatient services in a private hospital in Riyadh, Saudi Arabia.

2.7 Summary and Discussion of the Literature Review

The literature reviewed in this chapter shows that waiting time is an important part of the outpatient healthcare experience and is related to patient satisfaction. Across the studies reviewed, longer or less acceptable waiting experiences were generally associated with lower satisfaction. However, the findings also show that satisfaction is influenced by other aspects of healthcare delivery, including communication, staff behavior, appointment management, and patients' expectations.

The review also identified differences between previous studies in terms of healthcare setting, sample size, methods, and the way waiting time was measured. These differences are important because findings from one healthcare environment may not fully reflect the experiences of patients in another setting. In particular, the reviewed evidence shows the value of examining waiting time and patient satisfaction within the context of private outpatient healthcare in Riyadh.

Based on the reviewed literature, the present study focuses on patients' perceptions of waiting time and examines their relationship with satisfaction among outpatient clinic patients in a private hospital in Riyadh, Saudi Arabia. The literature therefore provides the background for the study variables and supports the need to examine their relationship within the selected healthcare setting.

2.8 Theoretical Framework of the Study

The theoretical framework helps explain why waiting time may be related to patient satisfaction in outpatient healthcare services. For the present study, three theories are particularly relevant: the SERVQUAL Model, Expectation–Disconfirmation Theory (EDT), and the Donabedian Model of Healthcare Quality. Each theory explains the relationship from a different perspective and helps connect the study variables with patients' experiences of outpatient services.

SERVQUAL focuses on the responsiveness of service delivery, Expectation–Disconfirmation Theory considers whether patients' experiences meet their expectations, and the Donabedian Model explains how healthcare processes can be related to patient outcomes. Together, these

theories provide the theoretical background used to understand the relationship between waiting time and patient satisfaction in the present study.

2.8.1 The SERVQUAL Model

The SERVQUAL Model developed by Parasuraman et al. (1988) explains service quality through five dimensions: reliability, responsiveness, assurance, empathy, and tangibles. Responsiveness is the dimension most closely related to the present study because it concerns how promptly services are provided and how willing service providers are to respond to customers' needs.

In outpatient healthcare, waiting time can be considered in relation to responsiveness because delays may influence how patients evaluate the efficiency of the service they receive. When patients experience long or poorly managed waiting periods, their perception of the service may become less positive. In the present study, SERVQUAL therefore helps explain the connection between patients' waiting experiences and their satisfaction with outpatient services.

2.8.2 Expectation–Disconfirmation Theory (EDT)

Expectation–Disconfirmation Theory, introduced by Oliver (1980), explains satisfaction through the comparison between what a person expects and what is actually experienced. When the experience meets or exceeds expectations, satisfaction is more likely to occur. In contrast, when the actual experience is below what was expected, dissatisfaction may result.

This theory is relevant to waiting time because patients may arrive at outpatient clinics with expectations about how long they will wait and how efficiently the service will be provided. If the waiting experience is less acceptable than expected, their evaluation of the service may become less positive. If the waiting experience meets their expectations, they may be more satisfied with the overall service. In the present study, this theory helps explain how patients' expectations about waiting may be connected with their satisfaction with outpatient clinic services.

2.8.3 Donabedian Model of Healthcare Quality

The Donabedian Model (1988) provides a framework for understanding healthcare quality through three main components: structure, process, and outcome. Structure includes the resources available for providing healthcare, such as staff, facilities, and equipment. Process

refers to how healthcare services are delivered, while outcome represents the results of the care and services provided.

This model is relevant to the present study because waiting time is related to the process of outpatient service delivery, while patient satisfaction represents an outcome from the patient's perspective. Activities such as appointment scheduling, registration, communication about delays, and the organization of clinic services can shape patients' waiting experiences. The Donabedian Model therefore helps explain how the way outpatient services are organized and delivered may be related to patients' overall satisfaction.

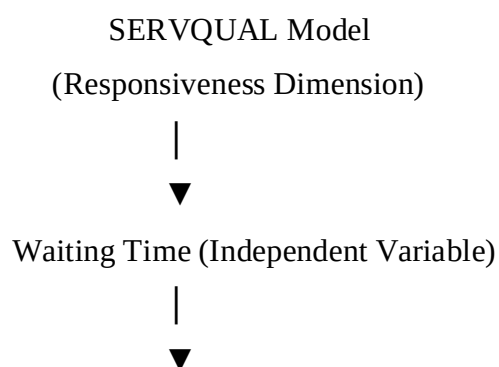
2.8.4 Application of the Theoretical Framework to the Current Study

The three theoretical models provide different but related perspectives for understanding the variables examined in this study. SERVQUAL connects waiting time with responsiveness in service delivery, while Expectation–Disconfirmation Theory explains how patients may evaluate their waiting experience in relation to what they expected before receiving the service. The Donabedian Model provides a healthcare quality perspective by considering waiting time as part of the service process and patient satisfaction as an outcome of the healthcare experience.

Together, these perspectives support the examination of the relationship between waiting time and patient satisfaction in outpatient clinics. In the present study, waiting time is treated as the independent variable and patient satisfaction as the dependent variable. The theoretical framework therefore provides a basis for understanding and interpreting the relationship between these variables within the selected private hospital setting in Riyadh, Saudi Arabia.

Figure 2.2 Theoretical Framework of the Study

Theoretical Framework of the Study



Expectation–Disconfirmation Theory

(Patients compare expected waiting
time with actual waiting experience)



Donabedian Quality Framework

Structure → Process → Outcome



Waiting Time = Process



Patient Satisfaction (Dependent Variable)

Source: Adapted from Parasuraman et al. (1988); Oliver (1980); Donabedian (1988).

Chapter 3:

Research Methodology

3.1 Introduction

This chapter describes the research methodology used to examine the relationship between waiting time and patient satisfaction in outpatient clinics at a private hospital in Riyadh, Saudi Arabia. It presents the research design, study setting, target population, sampling technique, sample size, data collection instrument, data collection procedures, and methods of data analysis. The chapter also explains the validity and reliability procedures, ethical considerations, and statistical techniques applied in the study.

A quantitative research approach was used to examine the relationship between the independent variable, waiting time, and the dependent variable, patient satisfaction. Data were collected from outpatient clinic patients using a structured questionnaire and analyzed using appropriate statistical methods.

The methodology described in this chapter provides the procedures followed to collect, organize, and analyze the study data in accordance with the research objectives and hypotheses.

3.2 Research Methodology and Methods

The present study adopted a quantitative, descriptive, and analytical approach to examine the relationship between waiting time and patient satisfaction among outpatient clinic patients. A cross-sectional design was used because the data were collected from participants during a specific study period without manipulating the study variables.

Data were collected using an electronic self-administered questionnaire from patients attending outpatient clinics at the selected private hospital in Riyadh, Saudi Arabia. The questionnaire was designed to collect information about participants' characteristics, their perceptions of waiting time, and their level of satisfaction with outpatient services.

The collected responses were reviewed, coded, and entered into SPSS Version 30 for statistical analysis. Descriptive and inferential statistical methods were then used to summarize the data, examine the relationship between the study variables, and test the research hypotheses.

3.3 Research Design

This study used a quantitative, descriptive cross-sectional research design to examine the relationship between waiting time and patient satisfaction among outpatient clinic patients. The quantitative approach allowed the study variables to be measured numerically and analyzed using statistical methods.

The descriptive component was used to summarize participants' characteristics and their perceptions of waiting time and patient satisfaction. The cross-sectional design involved collecting data from participants during a specific study period without manipulating the study variables. This design was appropriate for examining the association between waiting time and patient satisfaction within the selected outpatient setting.

3.4 Population and Sample

The target population of this study consisted of adult patients aged 18 years and above who attended the outpatient clinics at Dr. Soliman Fakeeh Hospital in Riyadh, Saudi Arabia, during the data collection period.

A convenience sampling technique was used to recruit eligible participants who met the study inclusion criteria and were available and willing to participate. A total of 320 questionnaires were distributed to eligible patients. Of these, 306 questionnaires were returned. After reviewing the returned questionnaires for completeness and consistency, six questionnaires were excluded because of incomplete responses. Therefore, 300 completed questionnaires were included in the final statistical analysis.

3.4.1 Inclusion and Exclusion Criteria

Inclusion Criteria

- Adults aged 18 years and above.
- Patients attending the outpatient clinics at Dr. Soliman Fakeeh Hospital during the study period.
- Patients who were able to understand either the English or Arabic version of the questionnaire.
- Patients who voluntarily agreed to participate and provided informed consent.

Exclusion Criteria

- Patients younger than 18 years of age.
- Patients attending the emergency department rather than the outpatient clinics.
- Patients who were unable to complete the questionnaire because of cognitive or communication difficulties.
- Patients who declined to participate.
- Participants who returned incomplete questionnaires.

3.4.2 Response Rate

A total of 320 questionnaires were distributed to eligible participants, and 306 were returned, resulting in a response rate of 95.6%. After screening the returned questionnaires for completeness and consistency, six were excluded because of incomplete responses. Consequently, 300 questionnaires were included in the final statistical analysis, representing 93.8% of the questionnaires originally distributed.

3.5 Sample Characteristics

The final study sample consisted of 300 adult patients who attended the outpatient clinics at Dr. Soliman Fakeeh Hospital in Riyadh, Saudi Arabia. Participant characteristics collected through the questionnaire included gender, age group, educational level, number of previous outpatient visits, and type of outpatient clinic attended. These characteristics were collected to describe the study sample and to examine whether patient satisfaction differed according to selected participant characteristics. Detailed descriptive findings are presented in Chapter Four.

3.6 Research Instrument

Data were collected using a structured, self-administered bilingual questionnaire developed in English and Arabic. The questionnaire was administered electronically and was designed to collect information related to participants' demographic characteristics, waiting-time experiences, patient satisfaction, and overall outpatient experience.

The final questionnaire consisted of five sections. Section A included five questions related to participants' demographic characteristics. Section B contained five statements assessing patients' perceptions of waiting time. Section C included seven statements measuring patient satisfaction. Section D contained two questions related to overall satisfaction and willingness to use the hospital again for outpatient services. Section E included two open-ended questions allowing participants to provide suggestions and additional comments about their outpatient experience.

The waiting-time and patient-satisfaction statements were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). These 12 Likert-scale items formed the two main study constructs used in the statistical analyses: five items for waiting time and seven items for patient satisfaction.

For descriptive analysis, the waiting-time items retained their original coding, with higher scores representing more favorable waiting-time experiences. For Pearson correlation and Simple Linear Regression analyses, the composite waiting-time score was reverse-coded so that higher values represented poorer perceived waiting-time experiences. The patient-satisfaction items retained their original coding, with higher scores representing greater satisfaction.

3.6.1 Distribution Method

The questionnaire was reviewed by the research supervisor before the main data collection to assess the relevance, clarity, and appropriateness of the items in relation to the study objectives. The wording and organization of the questionnaire were reviewed to ensure that the items were understandable and suitable for measuring the main study variables.

A pilot study was also conducted with a small group of participants before the main data collection. Feedback from the pilot participants was used to identify any issues related to the clarity and comprehensibility of the questionnaire. Minor modifications were made where necessary before the final questionnaire was administered. Data obtained from the pilot study were not included in the final statistical analysis.

3.6.2 Validity and Reliability

The internal consistency of the research instrument was assessed using Cronbach's Alpha coefficient. Reliability was evaluated separately for the two main study constructs and for the overall questionnaire.

The waiting-time scale, consisting of five items, achieved a Cronbach's Alpha coefficient of 0.907. The patient-satisfaction scale, consisting of seven items, achieved a Cronbach's Alpha coefficient of 0.912. The overall 12-item questionnaire achieved a Cronbach's Alpha coefficient of 0.941. These results indicate excellent internal consistency for both study constructs and for the overall research instrument.

The reliability findings therefore showed that the questionnaire items demonstrated a high level of internal consistency for measuring waiting time and patient satisfaction in the study sample.

3.6.3 Content Validity

The waiting-time and patient-satisfaction items were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Mean scores were interpreted using three levels: low (1.00–2.33), moderate (2.34–3.67), and high (3.68–5.00).

For the descriptive analysis, the waiting-time items were analysed using their original coding. Therefore, higher scores represented more favourable perceptions of waiting-time management. The overall waiting-time score was calculated by averaging the responses to the five waiting-time items.

For the inferential analyses, including Pearson's Product-Moment Correlation and Simple Linear Regression, the composite waiting-time score was reverse-coded so that higher values represented poorer perceived waiting-time experiences. This coding direction allowed the relationship between poorer waiting-time experiences and patient satisfaction to be interpreted consistently.

The patient-satisfaction scale retained its original coding throughout the analyses, with higher scores representing greater patient satisfaction. The overall patient-satisfaction score was calculated by averaging the responses to the seven patient-satisfaction items.

Table 3.1 Operational Definition Table

Variable	Operational Definition	Measurement Scale
Waiting Time	Patients' perception of waiting time during outpatient clinic services	Five-point Likert Scale
Patient Satisfaction	Patients' overall evaluation of outpatient healthcare services received	Five-point Likert Scale

Source: Developed by the researcher based on the study objectives and planned statistical analyses.

Table 3.2 Questionnaire Structure

Section	Variable	Number of Items	Measurement Scale
A	Demographic Characteristics (Gender, Age, Educational Level, Number of Previous Outpatient Visits, Clinic Type)	5	Nominal / Categorical
B	Waiting Time Assessment	5	Five-point Likert Scale (1 = Strongly Disagree to 5 = Strongly Agree)
C	Patient Satisfaction Assessment	7	Five-point Likert Scale (1 = Strongly Disagree to 5 = Strongly Agree)
D	Overall Satisfaction	2	Dichotomous (Yes / No)
E	Open-ended Questions	2	Open-ended Responses
Total	Questionnaire Items	21	—

Source: Developed by the researcher based on the study objectives and planned statistical analyses.

As shown in Table 3.2, the questionnaire consisted of 21 items divided into five sections. Section A included five demographic questions. Section B consisted of five statements assessing patients' perceptions of waiting time, while Section C contained seven statements evaluating patient satisfaction. Section D included two Yes/No questions measuring overall satisfaction and willingness to revisit the hospital. Finally, Section E consisted of two open-ended questions designed to obtain participants' suggestions and comments regarding their outpatient clinic experience. Responses to Sections B and C were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree)

3.7 Ethical Considerations

Ethical approval for this study was obtained from the Fakeeh Institutional Review Board (F-IRB), Kingdom of Saudi Arabia (IRB Approval No. FIRB-25-0220; Expedited Review), on 10 December 2025. Administrative approval was also obtained from the study site before data collection began.

Participation in the study was voluntary, and informed consent was obtained from all participants before completing the questionnaire. Participants were informed about the purpose of the study and were advised that they could decline to participate or withdraw without any consequences.

Participants were also assured that their responses would remain anonymous and confidential. No personal identifiers were collected through the questionnaire, and the collected data were used solely for academic research purposes. The research data were stored securely and were accessible only for purposes related to the study.

3.8 Pilot Study

Before the main data collection, a pilot study was conducted with a small group of participants to assess the clarity and comprehensibility of the questionnaire. The pilot study helped identify any difficulties in understanding the questionnaire items and provided an opportunity to review the wording and organization of the instrument before its final administration.

Based on the feedback received, minor modifications were made where necessary to improve the clarity of the questionnaire. Responses obtained during the pilot study were not included in the final statistical analysis.

3.9 Statistical Analysis Methods

The collected data were coded, entered, and analyzed using the Statistical Package for the Social Sciences (SPSS), Version 30. Before conducting the statistical analyses, the dataset was reviewed for completeness, accuracy, and consistency. Descriptive and inferential statistical methods were then applied to summarize the data, examine the relationship between waiting time and patient satisfaction, and test the research hypotheses.

3.9.1 Data Preparation

Before conducting the statistical analyses, the collected questionnaires were reviewed for completeness and consistency. Incomplete responses that did not meet the requirements for

inclusion in the final analysis were excluded. The valid responses were then coded and entered into SPSS Version 30. The dataset was reviewed for accuracy and prepared for the descriptive and inferential statistical analyses.

3.9.2 Descriptive Statistics

Descriptive statistics were used to summarize the characteristics of the study participants and describe their responses to the questionnaire. Frequencies and percentages were used to present categorical participant characteristics, while means and standard deviations were used to summarize the waiting-time and patient-satisfaction items.

For the descriptive analysis of waiting time, the original coding of the questionnaire items was retained, with higher scores representing more favourable perceptions of waiting-time management. Patient-satisfaction items were also analysed using their original coding, with higher scores representing greater patient satisfaction.

The descriptive results were presented in tables and figures to provide a clear summary of the study sample and the main study variables.

3.9.3 Reliability Analysis

The internal consistency of the questionnaire was assessed using Cronbach's Alpha coefficient. A Cronbach's Alpha value of 0.70 or higher was considered acceptable for demonstrating satisfactory reliability. Reliability was assessed separately for the waiting-time and patient-satisfaction constructs, as well as for the overall questionnaire. The reliability results are presented and discussed in Chapter Four.

Table 3.3 Statistical Analysis Plan

Research Objective	Study Variable(s)	Statistical Analysis	Purpose of the Analysis
Describe the demographic characteristics of the participants	Gender, Age, Nationality, Educational Level, Employment Status, Frequency of Outpatient Visits	Frequencies and Percentages	To summarize the characteristics of the study sample.

Research Objective	Study Variable(s)	Statistical Analysis	Purpose of the Analysis
Assess patients' perceptions of waiting time	Waiting Time	Mean and Standard Deviation	To determine the average level of agreement regarding waiting time among participants.
Assess the level of patient satisfaction	Patient Satisfaction	Mean and Standard Deviation	To measure the overall level of patient satisfaction with outpatient healthcare services.
Evaluate the reliability of the research instrument	Waiting Time Scale and Patient Satisfaction Scale	Cronbach's Alpha Coefficient	To assess the internal consistency and reliability of the questionnaire.
Examine the relationship between waiting time and patient satisfaction	Waiting Time and Patient Satisfaction	Pearson Correlation Coefficient (r)	To determine the strength and direction of the relationship between the study variables.
Determine the effect of waiting time on patient satisfaction	Waiting Time → Patient Satisfaction	Simple Linear Regression Analysis	To assess whether waiting time significantly predicts patient satisfaction.
Examine differences in patient satisfaction according to demographic characteristics	Gender, Age, Educational Level, Employment Status, Frequency of Visits	Independent Samples t-test and One-way ANOVA	To identify whether patient satisfaction differs across demographic groups.

Source: Developed by the researcher based on the study objectives and planned statistical analyses.

Table 3.3 presents the statistical analyses employed to achieve each research objective. Both descriptive and inferential statistical techniques were selected according to the nature of the study variables and the research hypotheses. Descriptive statistics were used to summarize the characteristics of the study sample and describe the main study variables, whereas inferential statistics were applied to examine relationships, determine predictive effects, and compare patient satisfaction across different demographic groups. All statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS), Version 30, with the level of statistical significance set at $p < 0.05$.

Prior to inferential analysis, the dataset was screened for accuracy, completeness, and consistency. Composite scores for the waiting-time and patient satisfaction constructs were calculated by averaging the responses to their respective questionnaire items.

3.9.4 Inferential Statistics

The five waiting-time items were positively worded, meaning that higher scores on the original scale represented more favourable perceptions of waiting-time management. This original coding was retained for the descriptive analysis.

For the inferential analyses, the composite waiting-time score was reverse-coded so that higher values represented poorer perceived waiting-time experiences. The reverse-coded composite score was used in Pearson's Product-Moment Correlation and Simple Linear Regression analyses.

This coding direction was used to examine the relationship between poorer waiting-time experiences and patient satisfaction. Accordingly, a negative correlation indicates that poorer perceived waiting-time experiences were associated with lower patient satisfaction scores. The patient-satisfaction scale was not reverse-coded, and higher scores continued to represent greater patient satisfaction.

3.9.4.1 Pearson Correlation Analysis

Pearson's correlation coefficient (r) was calculated to determine the strength and direction of the relationship between the independent variable (waiting time) and the dependent variable (patient satisfaction).

3.9.4.2 Simple Linear Regression Analysis

Simple linear regression analysis was conducted to examine the effect of waiting time on patient satisfaction and to determine whether waiting time significantly predicted patient satisfaction among outpatient clinic patients.

3.9.4.3 Group Comparison Tests

Independent samples **t-tests** and **one-way Analysis of Variance (ANOVA)** were conducted, where applicable, to examine differences in patient satisfaction according to selected demographic characteristics such as gender, age group, educational level, and frequency of outpatient visits.

An Independent-Samples t-test was used to examine whether patient satisfaction differed significantly according to gender. The mean patient-satisfaction scores of male and female participants were compared, and statistical significance was evaluated at $p < 0.05$.

One-Way Analysis of Variance (ANOVA) was used to examine whether patient satisfaction differed significantly according to age group and number of previous outpatient visits. ANOVA was used because these variables consisted of more than two categories. Statistical significance was evaluated at $p < 0.05$.

These analyses were conducted to examine differences in patient satisfaction according to the selected participant characteristics.

3.9.5 Level of Statistical Significance

A significance level of $p < 0.05$ was used for all inferential statistical analyses in this study. Results with p-values below 0.05 were considered statistically significant, while results with p-values equal to or greater than 0.05 were considered not statistically significant. This criterion was applied when evaluating the study hypotheses and interpreting the results of the correlation, regression, Independent-Samples t-test, and One-Way ANOVA analyses.

3.9.6 Presentation of Results

The results of the statistical analyses are presented in Chapter Four using tables and figures where appropriate. Descriptive statistics are presented using frequencies, percentages, means, and standard deviations. Inferential statistical results are presented using the relevant statistical values, including correlation coefficients, regression coefficients, R^2 values, t-values, F-values, and p-values.

Each table is accompanied by a brief interpretation explaining the main findings in relation to the study objectives and hypotheses. The results are presented separately from the methodology to provide a clear and organized description of the findings obtained from the statistical analyses.

3.10 Scope and Limitations of the Study

This study focused on the relationship between waiting time and patient satisfaction among adult patients attending outpatient clinics at Dr. Soliman Fakeeh Hospital in Riyadh, Saudi Arabia. The study examined patients' perceptions of waiting time and their level of satisfaction with outpatient services using data collected through a structured self-administered questionnaire.

Several limitations should be considered when interpreting the findings. First, the study was conducted in the outpatient clinics of one private hospital in Riyadh. Therefore, the findings may not be generalizable to patients attending other private hospitals, public hospitals, or healthcare facilities in other regions of Saudi Arabia.

Second, convenience sampling was used to recruit participants. Although this method allowed eligible outpatient patients to be included during the data collection period, it may limit the representativeness of the study sample.

Third, the study used a cross-sectional design, with data collected during a specific study period. Therefore, the findings identify associations between the study variables but do not establish a causal relationship between waiting time and patient satisfaction.

Fourth, the study relied on participants' self-reported responses. The findings therefore reflect patients' perceptions and experiences and may be affected by individual differences in expectations and interpretation of the questionnaire items.

Fifth, waiting time was assessed through patients' perceptions rather than through objective measurements of the actual number of minutes spent waiting. Consequently, the findings represent perceived waiting-time experiences rather than objectively recorded waiting durations.

Finally, the study focused specifically on waiting time in relation to patient satisfaction. Other aspects of outpatient healthcare services, such as healthcare costs, clinical outcomes, physician competence, and hospital infrastructure, were outside the scope of the present study and were not included as variables in the statistical analysis.

3.10.1 Scope of the Study

3.10.1.1 Subject Scope

The present study focused on examining the relationship between waiting time as the independent variable and patient satisfaction as the dependent variable among patients attending outpatient clinics. Specifically, the study examined patients' perceptions of waiting time and their association with overall satisfaction with outpatient healthcare services. Other aspects of healthcare services, including healthcare costs, physicians' clinical competence, treatment outcomes, hospital infrastructure, availability of medical equipment, and organizational policies, were outside the scope of the present study.

3.10.1.2 Human Scope

The study included **adult patients (18 years of age and above)** attending the outpatient clinics at **Dr. Soliman Fakeeh Hospital** in Riyadh, Saudi Arabia, who met the inclusion criteria and voluntarily agreed to participate in the research.

3.10.1.3 Spatial Scope

The study was conducted in the outpatient clinics of **Dr. Soliman Fakeeh Hospital**, a private healthcare institution located in **Riyadh, Saudi Arabia**.

3.10.1.4 Temporal Scope

The study was conducted during the **2026 academic year**, and data were collected within the designated research period.

3.10.2 Limitations of the Study

Despite careful planning and implementation, several limitations should be considered when interpreting the findings of the present study.

3.10.2.1 Human Limitations

The study used a convenience sampling technique and included a final sample of 300 participants. Since participants were recruited based on their availability and willingness to participate, the sample may not fully represent all patients attending outpatient clinics. In addition, the study relied on self-reported responses, which reflect participants' individual perceptions and experiences and may therefore be subject to response bias.

3.10.2.2 Spatial Limitations

The study was limited to the outpatient clinics of **Dr. Soliman Fakeeh Hospital** in Riyadh, Saudi Arabia. Consequently, the findings may not be generalizable to public hospitals, other private hospitals, or healthcare institutions located in different regions of the Kingdom of Saudi Arabia or in other countries where healthcare systems, organizational structures, and service delivery processes may differ.

3.10.2.3 Temporal Limitations

The findings reflect patients' perceptions and experiences during the period in which the data were collected. Future changes in hospital policies, patient volume, staffing levels, healthcare procedures, or service delivery practices may influence waiting times and patient satisfaction, thereby affecting the applicability of the findings over time.

Chapter 4:

Practical Study

4.1 Introduction

This chapter presents the statistical analysis and interpretation of the data collected to examine the relationship between waiting time and patient satisfaction among patients attending outpatient clinics at a private hospital in Riyadh, Saudi Arabia. Data were collected from 300 patients using a structured self-administered questionnaire that included demographic characteristics, outpatient visit information, waiting-time items, and patient-satisfaction items.

The collected data were entered, coded, and analyzed using the Statistical Package for the Social Sciences (SPSS), Version 30. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize participant characteristics and questionnaire responses. Cronbach's Alpha coefficient was used to assess the internal consistency of the research instrument.

Before conducting the inferential statistical analyses, composite scores were calculated for the waiting-time and patient-satisfaction constructs. For descriptive analysis, the waiting-time items retained their original coding. For inferential analysis, the waiting-time composite score was reverse-coded so that higher scores represented poorer perceived waiting-time experiences, while higher patient-satisfaction scores represented greater satisfaction.

Inferential statistical analyses included Pearson's correlation coefficient to examine the relationship between waiting time and patient satisfaction and Simple Linear Regression to examine the association between waiting time and patient satisfaction and determine the proportion of variance in patient satisfaction explained by waiting time. An Independent-Samples t-test was used to compare patient satisfaction according to gender, while One-Way Analysis of Variance (ANOVA) was used to compare patient satisfaction according to age group and number of previous outpatient visits.

A significance level of $p < 0.05$ was adopted for all inferential statistical analyses. Results with p-values below 0.05 were considered statistically significant.

4.2 Results

4.2.1 Response Rate

A total of 320 questionnaires were distributed to eligible patients attending the outpatient clinics of the selected private hospital. Of these, 306 questionnaires were returned, resulting in a response rate of 95.6%. Following data screening for completeness, consistency, and eligibility, 300 questionnaires were retained for statistical analysis, while six questionnaires

were excluded because they contained incomplete responses.

Table 4.1 Questionnaire Response Rate

Questionnaire Status	Frequency	Percentage
Questionnaires distributed	320	100.0%
Returned questionnaires	306	95.6%
Valid questionnaires analyzed	300	93.8%
Excluded questionnaires	6	1.9%

Interpretation:

Of the 320 questionnaires distributed, 306 were returned, resulting in a response rate of 95.6%. Following data screening, six questionnaires were excluded because of incomplete responses. Therefore, 300 valid questionnaires, representing 93.8% of the questionnaires originally distributed, were included in the final statistical analysis.

4.2.2 Demographic Characteristics of Participants

Table 4.2 Distribution of Participants According to Gender

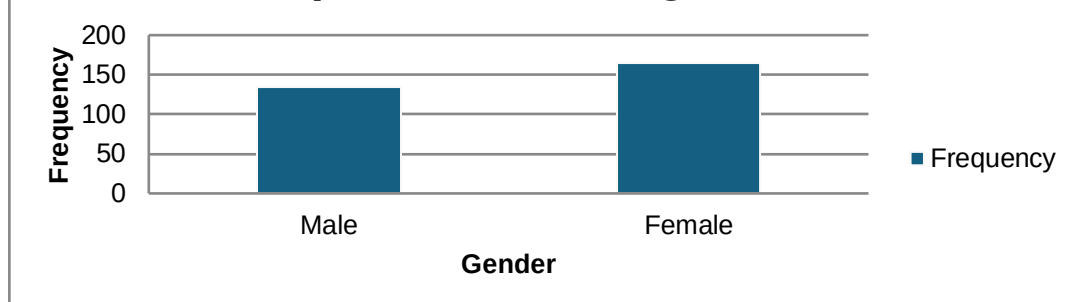
Gender	Frequency	Percentage
Male	135	45.0%
Female	165	55.0%
Total	300	100.0%

Interpretation:

Female participants represented 55.0% of the study sample, while male participants represented 45.0%. Therefore, female participants constituted a slightly larger proportion of the final sample.

Figure 4.1 Distribution of Participants According to Gender

Figure 4.1 Distribution of Participants According to Gender



Gender	Frequency
Male	135
Female	165

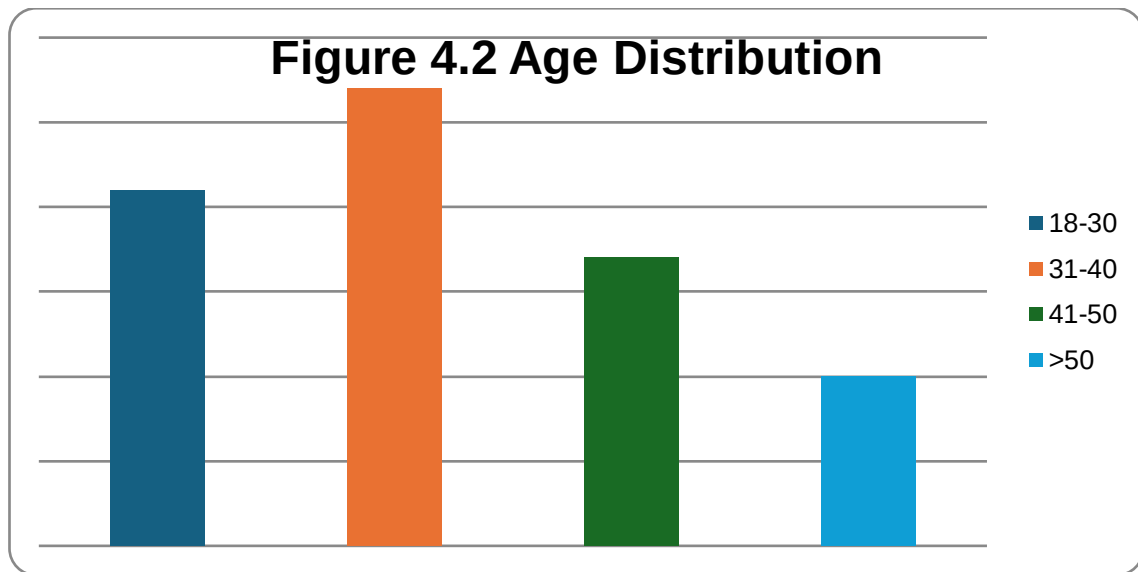
Table 4.3 Distribution According to Age Group

Age Group	Frequency	Percentage
18–30 years	84	28.0%
31–40 years	108	36.0%
41–50 years	68	22.7%
Above 50 years	40	13.3%
Total	300	100.0%

Interpretation:

The largest proportion of respondents belonged to the 31–40 years age category (36.0%), followed by participants aged 18–30 years (28.0%). Respondents aged above 50 years represented the smallest proportion (13.3%).

Figure 4.2 Age Distribution



Educational Level

Table 4.4 Distribution According to Educational Level

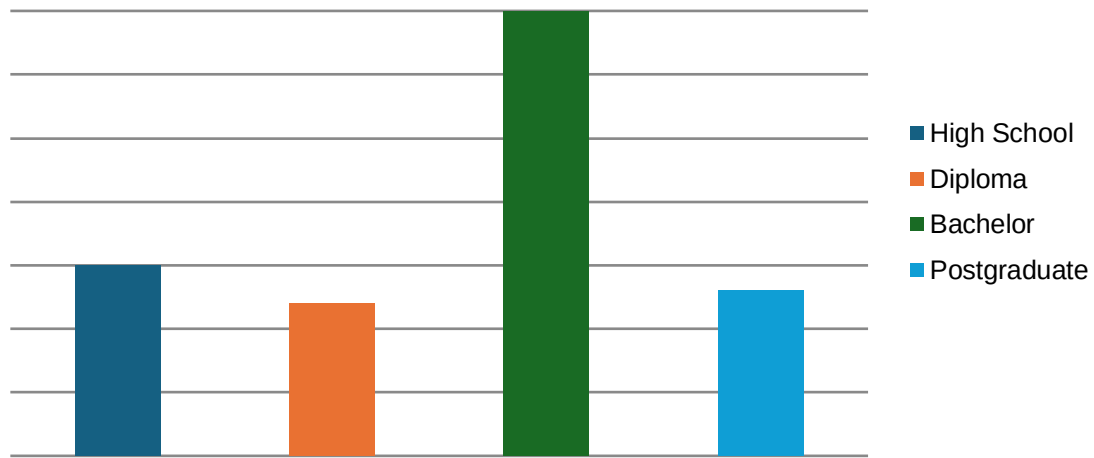
Educational Level	Frequency	Percentage
High school or below	60	20.0%
Diploma	48	16.0%
Bachelor's degree	140	46.7%
Postgraduate degree	52	17.3%
Total	300	100.0%

Interpretation:

Participants with a Bachelor's degree constituted the largest educational category, representing 46.7% of the sample. Participants with a high school education or below accounted for 20.0%, followed by those with a postgraduate degree at 17.3% and those with a diploma at 16.0%.

Figure 4.3 Education

Figure 4.3 Education



4.2.3 Outpatient Visit Characteristics

Table 4.5 Distribution According to Number of Previous Visits

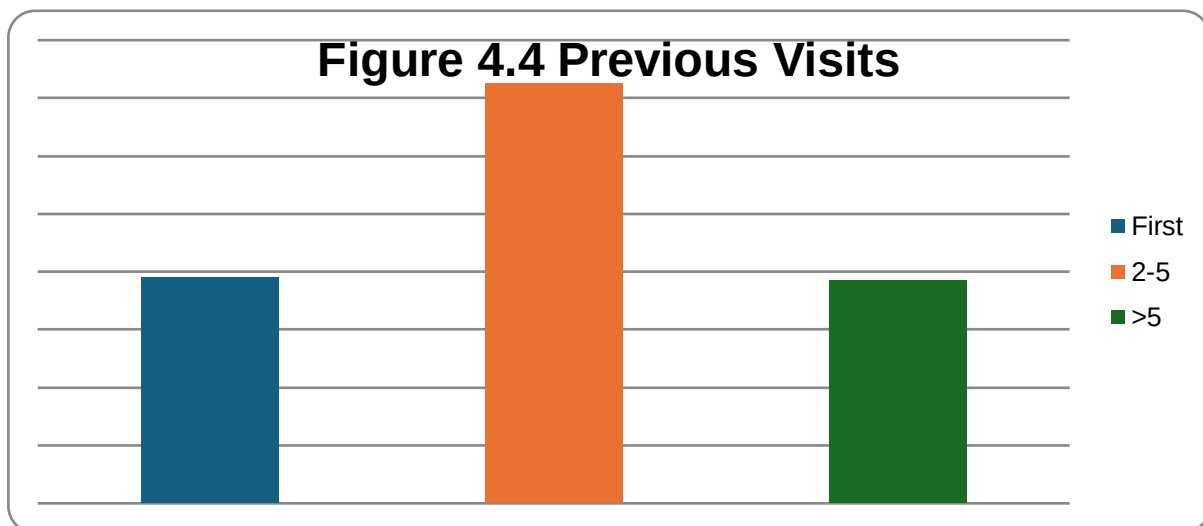
Number of Visits	Frequency	Percentage
First visit	78	26.0%
2–5 visits	145	48.3%
More than 5 visits	77	25.7%

Number of Visits	Frequency	Percentage
Total	300	100.0%

Interpretation:

Participants who had attended the outpatient clinics two to five times represented the largest group, accounting for 48.3% of the sample. First-time visitors represented 26.0%, while 25.7% had attended the outpatient clinics more than five times. Overall, 74.0% of participants reported at least one previous outpatient visit, indicating that the majority of the sample had prior experience with the hospital's outpatient services.

Figure 4.4 Previous Visits



Clinic Type

Table 4.6 Distribution According to Clinic Type

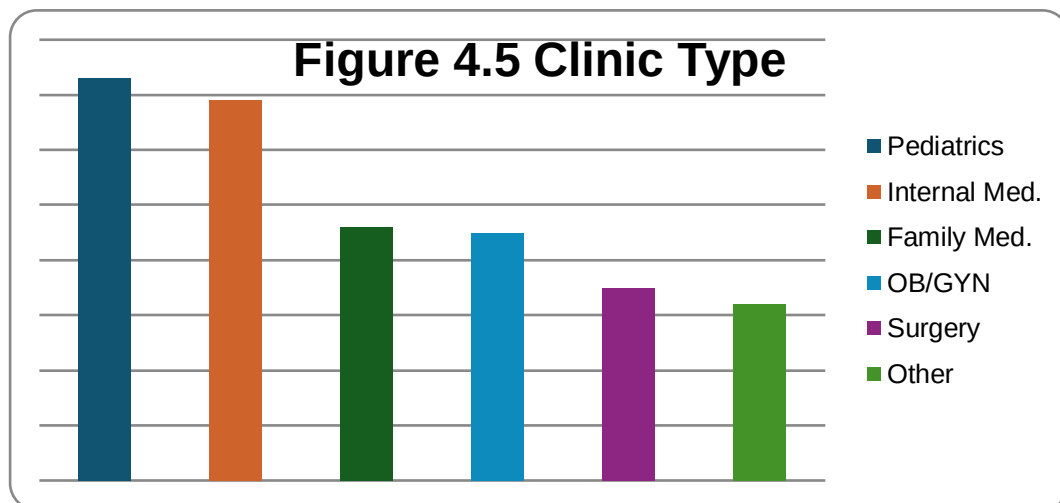
Clinic	Frequency	Percentage
Pediatrics	73	24.3%
Internal Medicine	69	23.0%
Family Medicine	46	15.3%
Obstetrics & Gynecology	45	15.0%

Clinic	Frequency	Percentage
Surgery	35	11.7%
Other Clinics	32	10.7%
Total	300	100.0%

Interpretation:

The Pediatrics Clinic represented the largest proportion of participants, accounting for 24.3% of the sample, followed by Internal Medicine at 23.0%. Family Medicine represented 15.3%, Obstetrics and Gynecology 15.0%, and Surgery 11.7%. Other Clinics represented the smallest proportion of participants at 10.7%.

Figure 4.5 Clinic Type



4.2.4 Reliability Analysis

Cronbach's Alpha coefficient was used to assess the internal consistency of the questionnaire scales. A value of 0.70 or higher was considered acceptable.

Table 4.7 Reliability Statistics

Scale	Number of Items	Cronbach's Alpha	Interpretation
Waiting Time	5	0.907	Excellent
Patient Satisfaction	7	0.912	Excellent
Overall Questionnaire	12	0.941	Excellent

Interpretation:

The Cronbach's Alpha coefficients were 0.907 for the waiting-time scale, 0.912 for the patient-satisfaction scale, and 0.941 for the overall questionnaire. These values indicate excellent internal consistency across the questionnaire scales and demonstrate that the instrument had a high level of reliability.

4.2.5 Descriptive Statistics of Waiting Time

The waiting-time construct consisted of five questionnaire statements measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Table 4.8 Descriptive Statistics of Waiting-Time Statements

Statement	Mean	SD	Rank	Interpretation
The registration waiting time was acceptable.	3.29	0.84	3	Moderate
I was seen by the doctor within a reasonable time.	3.38	0.87	2	Moderate
Appointment schedules are managed effectively.	3.42	0.78	1	High
The hospital provides updates about delays.	3.08	0.91	5	Moderate
The total waiting time meets my expectations.	3.39	0.76	4	Moderate
Overall Waiting-Time Score	3.30	0.80		Moderate

Interpretation:

The highest-rated waiting-time statement was “Appointment schedules are managed effectively” (Mean = 3.42, SD = 0.78), which received a high evaluation. This was followed by “The total waiting time meets my expectations” (Mean = 3.39, SD = 0.76) and “I was seen by the doctor within a reasonable time” (Mean = 3.38, SD = 0.87), both of which received moderate evaluations.

The lowest-rated statement was “The hospital provides updates about delays” (Mean = 3.08, SD = 0.91), which also received a moderate evaluation.

Overall, the waiting-time construct achieved a mean score of 3.30 (SD = 0.80), indicating a moderate evaluation of the waiting-time experience among the study participants. Among the individual statements, appointment scheduling received the highest evaluation, while communication regarding delays received the lowest.

4.2.6 Descriptive Statistics of Patient Satisfaction

The patient satisfaction construct consisted of seven questionnaire statements measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Higher scores indicated higher levels of patient satisfaction.

Table 4.9 Descriptive Statistics of Patient Satisfaction Statements

Statement	Mean	SD	Rank	Interpretation
I am satisfied with outpatient clinic services.	3.34	0.76	4	Moderate
The staff treated me professionally and respectfully.	3.46	0.72	1	High
The quality of healthcare services met my expectations.	3.39	0.74	2	Moderate
I would recommend this hospital to others.	3.24	0.82	7	Moderate
Overall, I am satisfied with my experience.	3.31	0.77	5	Moderate
I am satisfied with my outpatient clinic experience.	3.36	0.75	3	Moderate
I would choose this hospital again for outpatient services.	3.29	0.80	6	Moderate
Overall Patient Satisfaction Composite Score	3.34	0.77		Moderate

Interpretation:

The highest-rated patient-satisfaction statement was “The staff treated me professionally and respectfully” (Mean = 3.46, SD = 0.72), which received a high evaluation. This was followed by “The quality of healthcare services met my expectations” (Mean = 3.39, SD = 0.74) and “I am satisfied with my outpatient clinic experience” (Mean = 3.36, SD = 0.75), both of which received moderate evaluations.

The lowest-rated statement was “I would recommend this hospital to others” (Mean = 3.24, SD = 0.82), which received a moderate evaluation.

Overall, the patient-satisfaction construct achieved a mean score of 3.34 (SD = 0.77), indicating a moderate level of patient satisfaction among the study participants. Among the individual statements, staff professionalism and respectful treatment received the highest evaluation, while willingness to recommend the hospital to others received the lowest.

4.2.7 Relationship Between Waiting Time and Patient Satisfaction

To examine the relationship between waiting time and patient satisfaction, Pearson's Product-Moment Correlation Coefficient (r) was calculated. The analysis assessed the association between the reverse-coded waiting-time composite score, in which higher scores represented poorer perceived waiting-time experiences, and the overall patient satisfaction composite score.

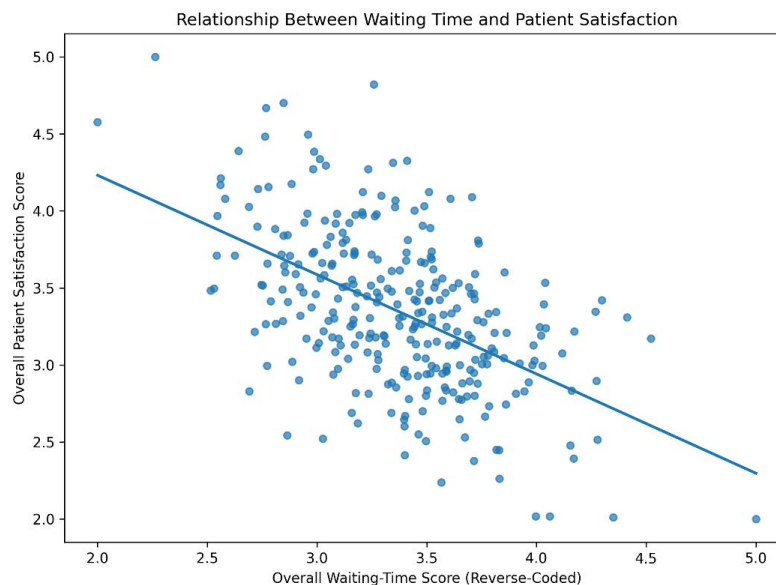
Table 4.10 Pearson Correlation Between Waiting Time and Patient Satisfaction

Variables	Waiting Time	Patient Satisfaction
Waiting Time	1	-0.487
Sig. (2-tailed)	—	<0.001
Patient Satisfaction	-0.487	1
Sig. (2-tailed)	<0.001	—
N	300	300

Note. Correlation is significant at the 0.01 level (2-tailed).

Interpretation: Pearson's Product-Moment Correlation analysis revealed a statistically significant moderate negative relationship between the reverse-coded waiting-time score and patient satisfaction ($r = -0.487$, $p < .001$). This indicates that poorer perceived waiting-time experiences were associated with lower levels of patient satisfaction. Conversely, more favorable perceptions of the waiting-time experience were associated with higher levels of patient satisfaction. Since the p-value was below the significance level of 0.05, the relationship was statistically significant. Therefore, the null hypothesis (H_{01}) was rejected, and the alternative hypothesis (H_{11}) was supported.

Figure 4.6 Scatter Plot of the Relationship Between Waiting Time and Patient Satisfaction



Interpretation: Figure 4.6 illustrates the negative linear relationship between the reverse-coded waiting-time score and patient satisfaction. As the reverse-coded waiting-time score increased, representing poorer perceived waiting-time experiences, patient satisfaction scores tended to decrease. The downward pattern shown in the scatter plot is consistent with the Pearson correlation result presented in Table 4.10 ($r = -0.487$, $p < .001$).

4.2.8 Simple Linear Regression Analysis

Simple Linear Regression analysis was conducted to examine the association between waiting time and patient satisfaction and to determine the proportion of variance in patient satisfaction explained by waiting time. The reverse-coded waiting-time composite score was entered as the independent variable, while the patient-satisfaction composite score was entered as the dependent variable.

Table 4.11 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.487	0.237	0.235	0.676

Interpretation: The regression analysis produced an R value of 0.487. The model explained

23.7% of the variance in patient satisfaction ($R^2 = 0.237$), while the adjusted R^2 was 0.235. This indicates that the reverse-coded waiting-time score accounted for 23.7% of the variation in patient-satisfaction scores among the study participants.

Table 4.12 ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	35.65	1	35.65	92.65	<0.001
Residual	114.72	298	0.385		
Total	150.37	299			

Interpretation: The regression model was statistically significant, $F(1, 298) = 92.65$, $p < .001$. This indicates that the reverse-coded waiting-time score was significantly associated with patient satisfaction within the regression model.

Table 4.13 Regression Coefficients

Predictor	B	Std. Error	Beta (β)	t	Sig.
Constant	4.89	0.15		32.60	<0.001
Waiting Time	-0.524	0.054	-0.487	-9.63	<0.001

Interpretation: The regression coefficient for waiting time was negative and statistically significant ($B = -0.524$, $\beta = -0.487$, $t = -9.63$, $p < .001$). For every one-unit increase in the reverse-coded waiting-time score, representing a poorer perceived waiting-time experience, the predicted patient-satisfaction score decreased by approximately 0.524 units. The negative coefficient therefore indicates that poorer perceived waiting-time experiences were associated with lower patient-satisfaction scores.

The regression equation can be expressed as:

$$\text{Patient Satisfaction} = 4.89 - 0.524 (\text{Waiting Time})$$

Overall, the regression analysis showed a statistically significant negative association between the reverse-coded waiting-time score and patient satisfaction. Therefore, the null hypothesis related to the regression analysis was rejected.

4.2.9 Differences in Patient Satisfaction According to Gender

An Independent-Samples t-test was conducted to examine whether patient satisfaction differed significantly between male and female participants.

Table 4.14 Independent Samples t-Test

Gender	N	Mean	SD	t	df	p
Male	135	3.254	0.69	-1.854	298	0.065
Female	165	3.405	0.72			

Interpretation:

Female participants reported a slightly higher mean patient-satisfaction score ($M = 3.405$, $SD = 0.72$) than male participants ($M = 3.254$, $SD = 0.69$). However, the difference was not statistically significant, $t(298) = -1.854$, $p = 0.065$. Since the p-value was greater than the significance level of 0.05, there was no statistically significant difference in patient satisfaction according to gender. Therefore, the null hypothesis regarding differences in patient satisfaction according to gender was not rejected.

4.2.10 Differences in Patient Satisfaction According to Age Group

A One-Way Analysis of Variance (ANOVA) was conducted to examine whether patient satisfaction differed significantly among the different age groups.

Table 4.15 One-Way ANOVA (Patient Satisfaction According to Age Group)

Source	SS	df	MS	F	p
Between Groups	2.234	3	0.745	1.118	0.342
Within Groups	197.315	296	0.667		

Source	SS	df	MS	F	p
Total	199.549	299			

Interpretation: The results of the One-Way ANOVA indicated that there was no statistically significant difference in patient satisfaction among the different age groups, $F(3, 296) = 1.118$, $p = 0.342$. Since the p-value was greater than the significance level of 0.05, patient satisfaction did not differ significantly according to age group. Therefore, the null hypothesis regarding differences in patient satisfaction according to age group was not rejected.

4.2.11 Differences in Patient Satisfaction According to Number of Previous Visits

A One-Way Analysis of Variance (ANOVA) was conducted to examine whether patient satisfaction differed significantly according to the number of previous outpatient visits.

Table 4.16 One-Way ANOVA (Patient Satisfaction According to Number of Previous Visits)

Source	SS	df	MS	F	p
Between Groups	3.557	2	1.779	1.711	0.182
Within Groups	308.730	297	1.040		
Total	312.287	299			

Interpretation:

The results of the One-Way ANOVA indicated that there was no statistically significant difference in patient satisfaction according to the number of previous outpatient visits, $F(2, 297) = 1.711$, $p = 0.182$. Since the p-value was greater than the significance level of 0.05, patient satisfaction did not differ significantly among the visit-frequency groups. Therefore, the null hypothesis regarding differences in patient satisfaction according to the number of previous outpatient visits was not rejected.

4.2.12 Summary of Hypothesis Testing

Table 4.17 Summary of Research Hypotheses

Hypothesis	Statistical Test	Result	Decision
H01: There is no significant relationship between waiting time and patient satisfaction.	Pearson's Product-Moment Correlation	$r = -0.487$, $p < .001$	Rejected
H02: There is no statistically significant association between waiting time and patient satisfaction in the regression model.	Simple Linear Regression	$\beta = -0.487$, $F(1, 298) = 92.65$, $p < .001$	Rejected
H03: Patient satisfaction does not differ according to demographic characteristics (gender, age group, and number of previous outpatient visits).	Independent-Samples t-test & One-Way ANOVA	All $p > 0.05$	Not Rejected

First Hypothesis

Pearson's Product-Moment Correlation analysis revealed a statistically significant moderate negative relationship between the reverse-coded waiting-time score and patient satisfaction ($r = -0.487$, $p < .001$). Since the p-value was below 0.05, the first null hypothesis (H01) was rejected. Therefore, poorer perceived waiting-time experiences were significantly associated with lower levels of patient satisfaction.

Second Hypothesis

Simple Linear Regression analysis showed a statistically significant negative association between the reverse-coded waiting-time score and patient satisfaction ($\beta = -0.487$, $F(1, 298) = 92.65$, $p < .001$). The model explained 23.7% of the variance in patient satisfaction ($R^2 = 0.237$). Therefore, the second null hypothesis (H02) was rejected. The negative regression coefficient indicates that poorer perceived waiting-time experiences were associated with lower patient-satisfaction scores.

Third Hypothesis

The Independent-Samples t-test and One-Way ANOVA showed no statistically significant differences in patient satisfaction according to gender ($p = 0.065$), age group ($p = 0.342$), or number of previous outpatient visits ($p = 0.182$). Since all p-values were greater than 0.05, the third null hypothesis (H03) was not rejected. Therefore, patient satisfaction did not differ significantly according to the demographic and visit characteristics examined in this study.

4.3 Results Discussion

4.3.1 Discussion of Waiting-Time Experience

The findings of the present study showed that participants reported a moderate evaluation of their waiting-time experience in the outpatient clinics, with an overall mean score of 3.30 (SD = 0.80). This result indicates that patients' perceptions of the waiting process were neither highly positive nor highly negative, suggesting that some aspects of waiting-time management were evaluated more favorably than others.

Among the waiting-time statements, "Appointment schedules are managed effectively" received the highest mean score ($M = 3.42$, $SD = 0.78$). This finding suggests that appointment scheduling was one of the more positively evaluated aspects of the outpatient waiting experience. Effective scheduling can contribute to a more organized patient flow and may help patients perceive the service process more positively.

In contrast, "The hospital provides updates about delays" received the lowest mean score ($M = 3.08$, $SD = 0.91$). This result indicates that communication regarding delays was the least positively evaluated aspect of the waiting-time experience. Providing patients with clear and timely information when delays occur may help them better understand and manage their expectations during the waiting process.

Overall, the findings indicate that patients' perceptions of waiting time involve more than one aspect of the outpatient service process. Appointment organization, communication regarding delays, and patients' expectations regarding the waiting experience may all contribute to how the waiting process is perceived. Therefore, improving the management of the waiting experience may require attention not only to service efficiency but also to communication with patients during periods of delay.

These findings are consistent with the Responsiveness dimension of the SERVQUAL Model, which emphasizes the importance of timely service and responsiveness to patients' needs. In the context of the present study, effective appointment scheduling and communication

regarding delays represent important aspects of responsiveness within outpatient service delivery.

4.3.2 Discussion of Patient Satisfaction

The findings of the present study showed a moderate overall level of patient satisfaction with outpatient services, with a mean score of 3.34 (SD = 0.77). This result indicates that participants generally evaluated their outpatient experience at a moderate level, with some aspects of the service receiving more favourable evaluations than others.

Among the patient-satisfaction statements, “The staff treated me professionally and respectfully” received the highest mean score (M = 3.46, SD = 0.72). This finding indicates that staff professionalism and respectful treatment were among the most positively evaluated aspects of the outpatient experience. The result highlights the importance of interactions between healthcare staff and patients as part of the overall service experience.

In contrast, “I would recommend this hospital to others” received the lowest mean score (M = 3.24, SD = 0.82). Although this score remained within the moderate evaluation range, participants were less positive about recommending the hospital than they were about the other aspects of patient satisfaction measured in the questionnaire.

Overall, the findings show that patient satisfaction was moderate rather than high. The results also indicate variation across the individual satisfaction statements, with staff professionalism and respectful treatment receiving the strongest evaluation and willingness to recommend the hospital receiving the lowest. These findings provide a clearer understanding of how participants evaluated different aspects of their outpatient experience.

4.3.3 Relationship Between Waiting Time and Patient Satisfaction

One of the primary objectives of the present study was to examine the relationship between waiting time and patient satisfaction among outpatient clinic patients. Pearson's Product-Moment Correlation analysis revealed a statistically significant moderate negative relationship between the reverse-coded waiting-time composite score and patient satisfaction ($r = -0.487$, $p < .001$).

The negative correlation indicates that poorer perceived waiting-time experiences were associated with lower levels of patient satisfaction. Conversely, more favorable perceptions of the waiting-time experience were associated with higher levels of patient satisfaction. The moderate strength of the relationship suggests that waiting time was meaningfully associated

with participants' evaluations of their outpatient experience, although patient satisfaction was not entirely explained by waiting time alone.

Since the relationship was statistically significant, the first null hypothesis (H01), which stated that there is no significant relationship between waiting time and patient satisfaction, was rejected. Overall, the findings demonstrate a clear association between patients' perceptions of the waiting-time experience and their level of satisfaction with outpatient services.

4.3.4 Discussion of Regression Results

Simple Linear Regression analysis was conducted to further examine the association between the reverse-coded waiting-time score and patient satisfaction. The regression model was statistically significant, $F(1, 298) = 92.65$, $p < .001$, with an R^2 value of 0.237. This indicates that waiting time accounted for 23.7% of the variance in patient-satisfaction scores among the study participants.

The regression coefficient was negative and statistically significant ($B = -0.524$, $\beta = -0.487$, $p < .001$). Specifically, every one-unit increase in the reverse-coded waiting-time composite score, representing a poorer perceived waiting-time experience, was associated with an estimated decrease of 0.524 units in the patient-satisfaction score. This finding is consistent with the negative relationship identified through the Pearson correlation analysis.

Although waiting time accounted for 23.7% of the variance in patient satisfaction, 76.3% of the variance remained unexplained by the regression model used in this study. Therefore, waiting time alone did not account for all variation in patient-satisfaction scores. Since additional variables were not included in the regression model, the present analysis cannot determine which other factors accounted for the remaining variance.

Overall, the regression findings provide further evidence of a statistically significant negative association between poorer perceived waiting-time experiences and patient satisfaction. These results support the rejection of the second null hypothesis (H02).

4.3.5 Comparison with Previous Studies

The findings of the present study are generally consistent with previous research examining the relationship between waiting time and patient satisfaction. In the present study, a statistically significant moderate negative relationship was identified between the reverse-coded waiting-time score and patient satisfaction ($r = -0.487$, $p < .001$), indicating that poorer perceived waiting-time experiences were associated with lower levels of patient satisfaction.

Bleustein et al. (2014) examined waiting time and patient satisfaction in outpatient care and reported that longer perceived waiting periods were associated with lower levels of patient satisfaction. The findings of the present study are consistent with this observation, as participants who reported poorer perceptions of their waiting-time experience also tended to report lower levels of satisfaction.

Similar findings have been reported within the Saudi healthcare context. Al-Harajin et al. (2019) examined waiting time and patient satisfaction in outpatient clinics in Saudi Arabia and found an association between the two variables. The findings of the present study are consistent with their results and provide additional evidence of an association between waiting-time experience and patient satisfaction in outpatient healthcare services in Saudi Arabia.

Alrasheedi et al. (2019) also examined the association between waiting time and patient satisfaction in primary healthcare settings in Saudi Arabia. Their work further demonstrates the relevance of waiting time when evaluating patients' experiences with healthcare services. Although the healthcare setting differs from the private outpatient hospital setting examined in the present study, both studies recognize waiting time as an important component of the patient experience.

International research has also examined this relationship. Anderson et al. (2007) investigated patient waiting time and satisfaction in primary care, while Xie and Or (2017) examined associations between waiting times, service times, and patient satisfaction in outpatient clinics. These studies provide further support for examining waiting time as an important aspect of patients' evaluations of healthcare services.

The findings of the present study are also consistent with Bahammam (2023), who examined patient satisfaction with clinical waiting time in outpatient departments in Saudi Arabia. Together with the findings of the present study, this evidence suggests that the relationship between waiting experience and patient satisfaction remains relevant across different outpatient healthcare settings.

Patient satisfaction, however, should not be understood only in relation to waiting time. Batbaatar et al. (2017), in a systematic review of the determinants of patient satisfaction, described patient satisfaction as a multidimensional concept associated with different aspects of healthcare delivery. Similarly, Al-Abri and Al-Balushi (2014) highlighted the value of patient-satisfaction assessment as a source of information for healthcare quality improvement. These perspectives are relevant to the present study because waiting time explained 23.7% of

the variance in patient-satisfaction scores, indicating that a substantial proportion of the variance remained unexplained by the regression model.

Differences between the findings of the present study and those reported in previous research may be related to variations in healthcare settings, sample characteristics, methods of measuring waiting time, and questionnaire design. The present study was conducted in a private hospital and measured patients' perceptions of their waiting-time experience through a structured questionnaire rather than objectively measuring waiting duration. These methodological characteristics should be considered when comparing the present findings with those of previous studies.

Overall, the findings of the present study are consistent with previous evidence supporting an association between waiting-time experience and patient satisfaction. Although the strength of this relationship may vary according to the healthcare setting and research methodology, the available evidence supports the importance of considering patients' waiting experiences when evaluating outpatient healthcare services.

4.3.6 Relationship with SERVQUAL Theory

The findings of the present study can be interpreted in relation to the SERVQUAL Model, particularly the Responsiveness dimension. Responsiveness refers to the timely delivery of services and the willingness of service providers to respond to customers' needs (Parasuraman et al., 1988). In the context of outpatient healthcare, this dimension provides a useful perspective for understanding patients' perceptions of the waiting-time experience.

The present study identified a statistically significant moderate negative relationship between the reverse-coded waiting-time score and patient satisfaction ($r = -0.487$, $p < .001$). Poorer perceived waiting-time experiences were associated with lower levels of patient satisfaction. This finding is consistent with the concept of responsiveness because patients' perceptions of how efficiently services were provided were associated with their overall satisfaction with the outpatient experience.

In addition, appointment scheduling received the highest evaluation among the waiting-time statements, while communication regarding delays received the lowest. These findings suggest that responsiveness within the outpatient setting may involve both the organization of the service process and communication with patients when delays occur. Overall, the findings of the present study are consistent with the Responsiveness dimension of the SERVQUAL Model.

4.3.7 Relationship with Expectation-Disconfirmation Theory

The findings of the present study can also be interpreted in relation to Expectation–Disconfirmation Theory (EDT). According to this theory, satisfaction develops through the comparison between an individual's expectations and the actual service experience. When the experience meets or exceeds expectations, satisfaction is more likely to occur, whereas an experience that falls below expectations may result in lower satisfaction (Oliver, 1980).

In the present study, one of the waiting-time statements specifically assessed whether the total waiting time met patients' expectations. The results also showed that poorer perceived waiting-time experiences were significantly associated with lower levels of patient satisfaction. These findings are consistent with the general perspective of EDT, as participants' evaluations of their waiting-time experience were associated with their overall satisfaction with outpatient services.

However, the present study did not independently measure patients' expectations before they received outpatient services. Therefore, the findings should be interpreted as being consistent with the theoretical perspective of Expectation–Disconfirmation Theory rather than as a direct test of the theory.

4.3.8 Relationship with Donabedian's Quality Framework

The findings of the present study can also be interpreted in relation to Donabedian's Structure–Process–Outcome Framework. This framework describes healthcare quality through three related components: structure, process, and outcome. Structure refers to the resources and organizational conditions in which healthcare is delivered, process refers to the way healthcare services are provided, and outcome refers to the results associated with the healthcare experience (Donabedian, 1988).

In the context of the present study, waiting time can be considered mainly as an aspect of the outpatient service process, while patient satisfaction represents an outcome evaluated by the participants. The statistically significant negative relationship between the reverse-coded waiting-time score and patient satisfaction indicates that poorer perceived waiting-time experiences were associated with lower levels of patient satisfaction.

These findings are consistent with the process–outcome relationship represented within Donabedian's framework, as patients' perceptions of the service process were associated with their evaluation of the outpatient experience. However, the present study did not examine all structural, process, and outcome components included in the framework. Therefore, the

findings should be interpreted specifically in relation to the waiting-time experience and patient satisfaction rather than as a complete evaluation of healthcare quality.

4.3.9 Discussion of Demographic Differences

The present study found no statistically significant differences in patient satisfaction according to gender, age group, or the number of previous outpatient visits. The Independent-Samples t-test showed that female participants reported a slightly higher mean satisfaction score than male participants; however, the difference was not statistically significant ($p = 0.065$).

Similarly, the One-Way Analysis of Variance (ANOVA) showed no statistically significant differences in patient satisfaction among the different age groups ($p = 0.342$). No statistically significant differences were also identified according to the number of previous outpatient visits ($p = 0.182$).

These findings indicate that patient-satisfaction scores were relatively similar across the demographic and visit characteristics examined in the present study. Although some variation in mean scores was observed, the differences were not statistically significant. Therefore, the results did not provide sufficient evidence to conclude that patient satisfaction differed according to gender, age group, or number of previous outpatient visits within the study sample.

Based on these findings, the third null hypothesis (H03), which stated that patient satisfaction does not differ significantly according to the selected demographic and visit characteristics, was not rejected. However, these findings should be interpreted within the context of the present study sample and setting.

4.3.10 Overall Discussion

Overall, the findings of the present study showed a statistically significant association between perceived waiting-time experience and patient satisfaction among outpatient clinic patients. Participants reported moderate evaluations of both the waiting-time experience (Mean = 3.30, SD = 0.80) and patient satisfaction (Mean = 3.34, SD = 0.77).

Pearson's Product-Moment Correlation analysis revealed a statistically significant moderate negative relationship between the reverse-coded waiting-time score and patient satisfaction ($r = -0.487$, $p < .001$). In addition, Simple Linear Regression analysis showed a statistically significant negative association between the reverse-coded waiting-time score and patient satisfaction ($\beta = -0.487$, $p < .001$), with the model explaining 23.7% of the variance in patient-

satisfaction scores. These findings indicate that poorer perceived waiting-time experiences were associated with lower levels of patient satisfaction.

The descriptive findings also showed variation across the individual waiting-time statements. Appointment scheduling received the highest evaluation, while communication regarding delays received the lowest. Similarly, staff professionalism and respectful treatment received the highest evaluation among the patient-satisfaction statements, while willingness to recommend the hospital to others received the lowest.

No statistically significant differences in patient satisfaction were identified according to gender, age group, or number of previous outpatient visits. This indicates that patient-satisfaction scores were relatively similar across the demographic and visit characteristics examined in the present study.

Overall, the findings addressed the main objectives of the study and demonstrated a significant association between perceived waiting-time experience and patient satisfaction within the outpatient setting examined. However, because the study used a cross-sectional design and convenience sampling, the findings should be interpreted as evidence of an association rather than proof of a causal relationship.

4.4 Conclusions

The present study examined the relationship between perceived waiting-time experience and patient satisfaction among patients attending outpatient clinics at a private hospital in Riyadh, Saudi Arabia. Based on the statistical analyses and findings of the study, several conclusions were reached.

First, participants reported a moderate evaluation of their waiting-time experience, with an overall mean score of 3.30 (SD = 0.80). Among the waiting-time statements, appointment scheduling received the highest evaluation, while communication regarding delays received the lowest evaluation. This indicates that participants evaluated different aspects of the waiting experience differently.

Second, the overall level of patient satisfaction was moderate, with a mean score of 3.34 (SD = 0.77). Staff professionalism and respectful treatment received the highest evaluation among the patient-satisfaction statements, while willingness to recommend the hospital to others received the lowest evaluation.

Third, the results showed a statistically significant moderate negative relationship between the reverse-coded waiting-time score and patient satisfaction ($r = -0.487$, $p < .001$). Poorer perceived waiting-time experiences were associated with lower levels of patient satisfaction, while more favorable waiting-time experiences were associated with higher levels of satisfaction.

Fourth, the Simple Linear Regression analysis showed a statistically significant negative association between the reverse-coded waiting-time score and patient satisfaction. The regression model explained 23.7% of the variance in patient-satisfaction scores ($R^2 = 0.237$). This indicates that waiting time accounted for a meaningful proportion of the variation in patient satisfaction, although a substantial proportion remained unexplained by the model.

Fifth, no statistically significant differences in patient satisfaction were identified according to gender ($p = 0.065$), age group ($p = 0.342$), or number of previous outpatient visits ($p = 0.182$). Therefore, the results did not provide sufficient evidence to conclude that patient satisfaction differed according to these demographic and visit characteristics within the study sample.

Finally, the findings can be interpreted in relation to the theoretical framework adopted in the study. The observed association between perceived waiting-time experience and patient satisfaction is consistent with the general perspectives of the SERVQUAL Model, Expectation–Disconfirmation Theory, and Donabedian's Structure–Process–Outcome Framework. However, these theoretical perspectives were used to support the interpretation of the findings and were not directly tested in their entirety in the present study.

4.4.1 Importance of the Findings

The findings of the present study provide practical and academic information regarding perceived waiting-time experience and patient satisfaction within the outpatient clinics examined. The moderate evaluations reported for both waiting-time experience and patient satisfaction provide an indication of how participants perceived these aspects of outpatient service delivery.

From a practical perspective, the statistically significant association identified between perceived waiting-time experience and patient satisfaction highlights the relevance of waiting-time management within the outpatient service process. In particular, communication regarding delays received the lowest evaluation among the waiting-time statements, while appointment

scheduling received the highest evaluation. These findings help identify specific aspects of the waiting experience that may be considered when reviewing outpatient service delivery.

From a managerial perspective, the findings provide hospital administrators with information that may support the evaluation of outpatient processes. Understanding how patients perceive appointment scheduling, communication regarding delays, and the overall waiting experience may assist management in identifying areas for future quality-improvement activities.

From an academic perspective, the study contributes evidence from a private hospital setting in Riyadh regarding the association between perceived waiting-time experience and patient satisfaction. The findings may also provide a basis for future research examining waiting-time experiences and other variables associated with patient satisfaction in outpatient healthcare settings.

4.5 Recommendations

Based on the findings of the present study, several recommendations are proposed to improve patients' waiting experiences and support patient satisfaction in outpatient clinics. The recommendations focus on the main areas identified through the study findings, particularly waiting-time management, appointment scheduling, communication regarding delays, and the overall outpatient service process.

4.5.1 Recommendations for Hospital Management

- Hospital management should regularly monitor patients' perceptions of waiting time and satisfaction within outpatient clinics.
- Waiting-time performance should be reviewed periodically to identify areas of the outpatient process that may require improvement.
- Particular attention should be given to communication with patients when delays occur, as communication regarding delays received the lowest evaluation among the waiting-time statements.
- Appointment scheduling practices should continue to be monitored and reviewed, as appointment scheduling received the highest evaluation among the waiting-time statements.
- Patient feedback regarding waiting-time experiences and satisfaction should be reviewed regularly to support future quality-improvement activities.

4.5.2 Recommendations for Appointment Scheduling

- The hospital should continue to monitor and review outpatient appointment scheduling to maintain the positive evaluation reported by participants.
- Appointment schedules should be reviewed periodically to identify scheduling-related factors that may contribute to delays and to support an organized patient flow.
- Appointment scheduling practices should consider patients' reported waiting experiences and feedback when evaluating the organization of outpatient appointments.
- Patients should be informed promptly when significant delays or changes may affect their scheduled appointment time.
- Patient feedback regarding appointment scheduling should be considered when reviewing and improving outpatient scheduling practices.

4.5.3 Recommendations for Registration Services

- Patients' perceptions of registration waiting time should be monitored regularly as part of the overall outpatient waiting experience.
- Registration procedures should be reviewed periodically to identify opportunities to improve the efficiency and organization of the patient registration process.
- Patient feedback regarding registration waiting time should be considered when evaluating outpatient registration services.
- Any changes introduced to the registration process should be evaluated to determine whether they contribute to a more positive waiting experience for patients.

4.5.4 Recommendations for Outpatient Clinics

- Outpatient clinics should regularly monitor patients' perceptions of their waiting experience to identify areas that may require improvement.
- Waiting-time management practices should be reviewed periodically to support an organized and patient-centered outpatient service process.
- Outpatient clinics should consider patient feedback when reviewing the organization and flow of services within the clinic.
- Patients experiencing delays should receive clear and timely information regarding their waiting status.

- Patient feedback regarding waiting time and satisfaction should be considered when planning future quality-improvement activities within outpatient clinics.

4.5.5 Recommendations for Communication

- Healthcare staff should provide patients with clear and timely information when delays occur.
- Patients should be informed, whenever possible, about changes that may affect their expected waiting time.
- Communication regarding delays should be considered an important component of the outpatient waiting experience.
- Hospital management should regularly review patient feedback regarding communication about delays to identify opportunities for improvement.
- Outpatient clinics should promote consistent communication practices to ensure that patients receive appropriate information during periods of delay.

4.5.6 Recommendations for Patient Experience

- Patient feedback regarding perceived waiting-time experience and satisfaction should be collected regularly to support the evaluation of outpatient services.
- Particular attention should be given to aspects of the waiting experience that receive lower evaluations from patients.
- Patient comments and complaints related to waiting experiences should be reviewed to identify common concerns and areas that may require improvement.
- Changes introduced to waiting-time management practices should be evaluated through follow-up patient-satisfaction assessments.
- Patients' perceptions and feedback should continue to be considered when reviewing and improving outpatient service processes.

4.5.7 Recommendations for Future Research

- Future studies should examine both patients' perceived waiting-time experiences and objectively measured waiting duration to allow comparison between subjective and objective measures of waiting time.

- Similar studies should be conducted across both public and private hospitals to compare findings among different healthcare settings.
- Future research should include multiple healthcare institutions and larger probability-based samples to improve the generalizability of the findings.
- Additional variables associated with patient satisfaction should be examined, as the regression model in the present study explained 23.7% of the variance in patient-satisfaction scores, leaving a substantial proportion unexplained.
- Longitudinal research may be conducted to examine changes in patients' waiting experiences and satisfaction over time and following changes in waiting-time management practices.
- Qualitative or mixed-methods research may also be used to obtain a deeper understanding of patients' experiences, expectations, and concerns related to waiting in outpatient clinics.

4.6 Chapter Summary

This chapter presented the statistical analysis of data collected from 300 patients attending outpatient clinics at a private hospital in Riyadh, Saudi Arabia. The descriptive results showed moderate evaluations of both the perceived waiting-time experience and overall patient satisfaction among the study participants.

The reliability analysis demonstrated excellent internal consistency of the research instrument. Pearson's Product-Moment Correlation analysis revealed a statistically significant moderate negative relationship between the reverse-coded waiting-time score and patient satisfaction ($r = -0.487$, $p < .001$). Simple Linear Regression analysis also demonstrated a statistically significant negative association between the reverse-coded waiting-time score and patient satisfaction, with the model explaining 23.7% of the variance in patient-satisfaction scores ($R^2 = 0.237$).

The Independent-Samples t-test and One-Way Analysis of Variance (ANOVA) showed no statistically significant differences in patient satisfaction according to gender, age group, or number of previous outpatient visits.

Overall, the findings showed that poorer perceived waiting-time experiences were associated with lower levels of patient satisfaction. The descriptive results also showed that communication regarding delays received the lowest evaluation among the waiting-time statements, while appointment scheduling received the highest evaluation. Based on these

findings, recommendations were proposed to support the improvement of waiting-time management and the overall outpatient patient experience.

The chapter addressed the study objectives and hypotheses and provided evidence of a statistically significant association between perceived waiting-time experience and patient satisfaction within the outpatient setting examined.

4.7 References

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APPENDIX

Research Questionnaire

Patient Waiting Experience & Satisfaction Survey

استبيان تجربة انتظار المرضى ومستوى رضاهم

Participant Information / معلومات المشارك

Dear Participant,

I am a Master's student in Healthcare Administration at Midocean University. This questionnaire takes approximately 3–5 minutes and is part of the study 'The Impact of Waiting Time on Patient Satisfaction in Outpatient Clinics in a Private Hospital in Riyadh, Saudi Arabia.' Participation is voluntary and confidential.

3-5 تستغرق تعبئة هذه الاستبانة من .عزيزي المشارك، أنا طالبة ماجستير في إدارة الرعاية الصحية بجامعة ميدأوشن مشاركتكم طوعية وجميع المعلومات سرية وتستخدم لأغراض البحث العلمي فقط.دقائق

Section A: Demographic Characteristics / البيانات الديموغرافية :القسم الأول

Please answer the following demographic questions..يرجى الإجابة عن الأسئلة الديموغرافية التالية..

Gender / الجنس

☐ Male / ذكر ☐ Female / أنثى

Age / العمر

☐ 18–30 ☐ 31–40 ☐ 41–50 ☐ 51+

Educational Level / المستوى التعليمي

☐ Secondary or less ☐ Diploma ☐ Bachelor's ☐ Postgraduate

☐ دراسات عليا ☐ بكالوريوس ☐ دبلوم ☐ ثانوي أو أقل

Number of outpatient visits / عدد زيارات العيادات الخارجية

☐ First ☐ 2–5 ☐ More than 5

☐ 5 أكثر من ☐ زيارات 2–5 ☐ الزيارة الأولى

Clinic Type / نوع العيادة

☐ Internal Medicine ☐ Family Medicine ☐ Surgery ☐ Obstetrics & Gynecology ☐ Pediatrics

☐ Other

☐ أخرى ☐ الأطفال ☐ النساء والولادة ☐ الجراحة ☐ طب الأسرة ☐ الباطنية

Section B: Waiting Time Assessment / تقييم وقت الانتظار :القسم الثاني

Please indicate your level of agreement with each of the following statements.

يرجى تحديد درجة موافقتك على كل عبارة من العبارات التالية

Statement / العبارة	1- Strongly Disagree غير موافق بشدة	2- Disagree غير موافق	3- Neutral محايد	4- Agree موافق	5- Strongly Agree موافق بشدة
The registration waiting time was acceptable. كان وقت الانتظار في التسجيل مقبولا	☐	☐	☐	☐	☐
I was seen by the doctor within a reasonable time. تمت معاينتي من الطبيب خلال وقت مناسب.	☐	☐	☐	☐	☐
Appointment schedules are managed effectively. تتم إدارة مواعيد المرضى بشكل فعال	☐	☐	☐	☐	☐
The hospital provides updates about delays. يقوم المستشفى بإبلاغ المرضى عند وجود تأخير.	☐	☐	☐	☐	☐

The total waiting time meets my expectations. وقت الانتظار الكلي يناسب توقعاتي.	☐	☐	☐	☐	☐
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Section C: Patient Satisfaction / رضا المرضى: القسم الثالث

Statement / العبارة	1- Strongly Disagree غير موافق بشدة	2- Disagree غير موافق	3- Neutral محايد	4- Agree موافق	5- Strongly Agree موافق بشدة
I am satisfied with outpatient clinic services. أنا راضٍ عن خدمات العيادات الخارجية.	☐	☐	☐	☐	☐
The staff treat patients professionally. يتعامل الموظفون مع المرضى بطريقة مهنية.	☐	☐	☐	☐	☐
The quality of healthcare service meets my expectations. جودة الخدمة الصحية تلبي توقعاتي.	☐	☐	☐	☐	☐
I would recommend this hospital to	☐	☐	☐	☐	☐

others. أنصح الآخرين بزيارة هذا المستشفى.					
Overall, I am satisfied with my experience. بشكل عام، أنا راضٍ عن تجربتي.	☐	☐	☐	☐	☐

Section D: Overall Satisfaction / الرضا العام: القسم الرابع

8. Overall, I am satisfied with my outpatient clinic experience.

بشكل عام، أنا راضٍ عن تجربتي في العيادات الخارجية

☐ Yes / نعم ☐ No / لا

9. I would choose this hospital again for outpatient services.

سأختار هذا المستشفى مرة أخرى لخدمات العيادات الخارجية

☐ Yes / نعم ☐ No / لا

Section E: Open-Ended Questions / أسئلة مفتوحة: القسم الخامس

10. What suggestions do you have to reduce waiting time?

ما هي اقتراحاتك لتقليل وقت الانتظار؟

11. Please provide any additional comments about your outpatient experience.

يرجى كتابة أي ملاحظات إضافية حول تجربتك في العيادات الخارجية

Scientific Research

آلاء أسامة عيتاني

الرقم الجامعي: 253002025

أثر وقت الانتظار على رضا المرضى في العيادات الخارجية في مستشفى خاص بمدينة الرياض، المملكة العربية السعودية

إشراف

د. الفیصل عبد الحمید

د. فايز علي جراد

العام الأكاديمي: 2026

الملخص

هدفت هذه الدراسة إلى تقييم أثر وقت الانتظار على رضا المرضى في العيادات الخارجية في مستشفى خاص بمدينة الرياض، المملكة العربية السعودية. تمثلت مشكلة الدراسة في أن طول أوقات الانتظار في العيادات الخارجية قد يؤثر بشكل سلبي على تجربة المرضى ومستوى رضاهم عن جودة الخدمات الصحية المقدمة، مما يبرز أهمية دراسة العلاقة بين وقت الانتظار ورضا المرضى لتحسين كفاءة تقديم الخدمات الصحية.

اعتمدت الدراسة على المنهج الكمي الوصفي التحليلي، حيث تم استخدام استبانة إلكترونية كأداة رئيسية لجمع البيانات من المرضى الذين قاموا بزيارة العيادات الخارجية في مستشفى خاص بمدينة الرياض. تكون مجتمع الدراسة من مرضى العيادات الخارجية، وتم اختيار عينة مكونة من ٣٠٠ مريض للمشاركة في الدراسة.

تضمنت الاستبانة خمسة محاور لقياس تقييم وقت الانتظار، وهي: قبول وقت الانتظار في التسجيل، وإمكانية مقابلة الطبيب خلال وقت مناسب، وفعالية إدارة مواعيد العيادات، وإبلاغ المرضى عند حدوث تأخير، ومدى توافق وقت الانتظار الكلي مع توقعات المرضى. كما تضمنت خمسة محاور لقياس رضا المرضى عن خدمات العيادات الخارجية وجودة الخدمة المقدمة.

تم تحليل البيانات باستخدام الأساليب الإحصائية المناسبة من خلال برنامج SPSS حيث شملت التحليلات الإحصائية الوصفية، واختبار الثبات باستخدام معامل كرونباخ ألفا، بالإضافة إلى تحليل الارتباط والانحدار لدراسة العلاقة بين متغيرات الدراسة.

أظهرت نتائج الدراسة وجود علاقة ذات دلالة إحصائية بين وقت الانتظار ورضا المرضى، حيث تبين أن تحسين إدارة وتقليل أوقات الانتظار يساهم بشكل إيجابي في رفع مستوى رضا المرضى وتحسين تجربتهم في العيادات الخارجية. كما أوضحت النتائج أهمية كفاءة العمليات الإدارية والتواصل الفعال مع المرضى في تعزيز جودة الخدمات الصحية

الشكر والتقدير

بدايةً، أتقدم بخالص الشكر والحمد لله عز وجل الذي منحني القوة والصبر والعزيمة لإتمام هذه الرحلة العلمية وإنجاز هذا البحث.

أُتقدم بجزيل الشكر والتقدير إلى **جامعة ميدأوشن** وكلية الإدارة وجميع أعضاء الهيئة التعليمية الذين ساهموا في تطوير معرفتي ومهاراتي خلال مرحلة الماجستير في إدارة الرعاية الصحية.

كما أُتقدم بخالص الشكر والامتنان إلى مشرفي **الدكتور فايز علي جراد** على توجيهاته القيّمة، ودعمه المستمر، ونصائحه العلمية التي كان لها دور كبير في إنجاز هذا البحث. كما أتوجه بالشكر إلى أعضاء لجنة الحكم والمقيمين على وقتهم وجهودهم وملاحظاتهم البناءة.

إلى والديّ العزيزين، أعبر عن عميق امتناني وحيي لما قدموه لي من حب ودعاء ودعم لا محدود. فقد كان تشجيعهم وتضحياتهم مصدر قوتي وإصراري للوصول إلى هذه المرحلة وتحقيق أهدافي.

وإلى زوجي العزيز، أُتقدم بأسمى معاني الشكر والحب لوقوفه بجانبني طوال هذه الرحلة، ولصبره وتفهمه وتشجيعه المستمر في جميع الأوقات. وإلى أطفالي الأحباء، شكراً لأنكم كنتم مصدر إلهامي ودافعي للاستمرار والسعي نحو النجاح.

وأُتقدم بالشكر والتقدير إلى جهة عملي وزملائي الذين ساهموا في دعمي وتطوير خبراتي المهنية، وكانوا جزءاً من رحلة النمو والتعلم المستمر في مجال الرعاية الصحية.

وفي الختام، أُتقدم بخالص الشكر لكل من دعمني وساعدني وساهم بأي شكل في إتمام هذا البحث.

آلاء أسامة عيتاني