SERVICE DELIVERY IN A PHYSICALLY RESTRICTED SERVICE ENVIRONMENT: THE CASE OF AIRLINE FLIGHT ATTENDANTS

by

Claudia Bernice van Blommestein

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Supervisor:

Prof Christo Boshoff

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To my Dad, thank you for all the cups of coffee that you brought to my room. To my Mom, thank you for being there for me – no matter the time of day or night. To my brother, sister-in-law, and niece, thank you for your love and encouragement. To my grandmother, thank you for keeping me in your prayers. And to all my other family members and friends, thank you all for your constant motivation and can-do attitudes that helped me to complete this study.

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ABSTRACT

International flight attendants' main responsibilities during a commercial flight are safety, security, and service delivery. This study focussed on the service delivery (which included the service-delivery performance and service-recovery performance) of international flight attendants who are or were formerly employed by four- and five-star full-service airlines. The point of departure was the notion that factors influencing international flight attendants' service-delivery and service-recovery performance are *unique* compared to the factors that influence other frontline employees' service-delivery and service-recovery performance, such as hotel front desk staff, frontline banking employees, nurses and/or receptionists. Against this background, two theoretical models are proposed illustrating the *unique* factors that might influence international flight attendants' service-delivery and service-recovery performance. The two theoretical models were empirically assessed by collecting data from 228 international flight attendants representing 46 countries and 16 four- and five-star full-service airlines. The data was collected using online surveys and the results indicated that customer service training and teamwork significantly influence the service-delivery and service-recovery performance of international flight attendants. In addition, the role of fatigue was particularly important in this study. Working conditions, (which included company service delivery expectations, limited physical space, and limited time/time pressure) and unreasonably demanding passengers increased the levels of fatigue among flight attendants, whereas job experience reduced their levels of fatigue. In conclusion, four- and five-star full-service airlines can improve the working environment of international flight attendants by providing adequate customer service training, promoting teamwork among the crew, decreasing flying hours, increasing resting times, facilitating support workshops, reducing certain in-flight services, and exerting their best efforts to retain experienced crew members. Finally, by enhancing the overall health and well-being of international flight attendants, airlines can not only increase the crew's performance but also increase the performance and profitability of the airline itself.

Key words: service-delivery performance, service-recovery performance, international flight attendant/crew

Please note that, for the purposes of this study, the terms 'flight attendant' and 'crew' are used interchangeably.

OPSOMMING

Internasionale lugwaardinne se hoof verantwoordelikhede tydens 'n kommersiële vlug is om om te sien na die veiligheid, sekuriteit, en dienslewering ten opsigte van die passasiers en die bemanning. Hierdie studie het die klem geplaas op die dienslewerings- en diensherstelprestasie van internasionale lugwaardinne wat werknemers is of was van vier- en vyfster-gegradeerde voldiens lugrederye. Die vertrekpunt was dat die faktore wat internasionale lugwaardinne se dienslewerings- en diensherstelprestasie beïnvloed, *uniek* is vergeleke met die faktore wat ander kontak- of frontliniepersoneel, soos byvoorbeeld hotelwerknemers, bankwerknemers, verpleegsters en/of ontvangsdames se dienslewerings- en diensherstelprestasie beïnvloed. Teen hierdie agtergrond is twee teoretiese modelle voorgestel wat die *unieke* faktore aandui wat internasionale lugwaardinne se dienslewerings- en diensherstelprestasie kan beïnvloed. Die modelle is empiries getoets deur data in te samel van 228 internasionale lugwaardinne wat 46 lande en 16 vier- en vyfster voldiens lugrederye verteenwoordig. Die data is ingesamel met behulp van aanlyn vraelyste en die bevindinge het aangetoon dat kliëntediensopleiding en spanwerk die dienslewerings- en diensherstelprestasie van internasionale lugwaardinne aansienlik verhoog. Daarbenewens was die rol van uitputting veral belangrik in hierdie studie. Daar is bevind dat die werksomstandighede (wat hoë diensleweringsverwagtinge van die lugrederye, beperkte fisiese werksruimte en beperkte tyd/tydsdruk insluit) asook onredelik veeleisende passasiers, die uitputtingsvlakke van lugwaardinne laat toeneem. Terselfdertyd is bevind dat dieselfde faktore die internasionale lugwaardinne met meer werkservaring se vlakke van uitputting verminder. Die studie beveel aan dat vier- en vyfster voldiens lugrederye die werksomstandighede van internasionale lugwaardinne kan verbeter deur voldoende kliëntediensopleiding te verskaf, spanwerk onder die bemanning te bevorder, vliegure te verminder, rustye te verleng, ondersteuningswerkswinkels te organiseer, sekere dienste aan boord in te kort, en dat die lugrederye alles in hulle vermoë doen om ervare bemanning te behou. Laastens, deur beter om te sien na die algehele gesondheid en welstand van internasionale lugwaardinne, kan lugrederye nie net hulle bemanning se prestasie verbeter nie, maar in die proses ook hulle eie winsgewendheid en prestasie opskerp.

Trefwoorde: diensleweringsprestasie, diensherstelprestasie, internasionale lugwaardin/bemanning

Nota: Vir die doeleindes van hierdie studie word die terme 'lugwaardin' en 'bemanning' afwisselend gebruik.

DECLARATION OF PLAGIARISM

By indicating my signature on this page, I agree to the following:

I know that using another person's ideas and pretending that they are one's own constitute plagiarism. I am aware of the potential penalties for this misdemeanour.

This project is my own work. I have not allowed and will not allow anyone to copy this work with the intention of passing it off as their own work.

December 2022

_____   _____
Signature   Date

DECLARATION OF LANGUAGE EDITING

36 Brandwacht Street

Stellenbosch, 7602

4 February 2022

Department of Business Management

University of Stellenbosch

Private Bag X1

Matieland

Stellenbosch

7602

Dear Sir/Madam,

Declaration of language editing

I, Michèle Boshoff, hereby declare that I have personally read through the treatise of Claudia Bernice van Blommestein and have highlighted language errors.

Yours sincerely

                                December 2022

_____   **_____**

Signature   Date

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF ABBREVIATIONS AND ACRONYMS

CS: Cabin senior

CSD: Cabin services director

CRM: Crew resource management

FLEs: Frontline employees

ICAO: International Civil Aviation Organisation

IFE: In-flight entertainment

ISDP: Interpersonal service-delivery performance

JD–R: Job demands–resources

POS: Perceived organisational support

SDP: Service-delivery performance

SRP: Service-recovery performance

WOM: Word-of-mouth

CHAPTER 1
INTRODUCTION AND OVERVIEW

1.1 INTRODUCTION

The world's first successful engine-powered aircraft was designed and built by two brothers, Wilbur and Orville Wright, from Ohio in the United States (Jakab, 2014). On 17 December 1903, the Wright brothers flew their aircraft known as the 'Flyer 1', making history as the world's first successful engine-powered aircraft (Figure 1.1).

Figure 1.1: Flyer 1
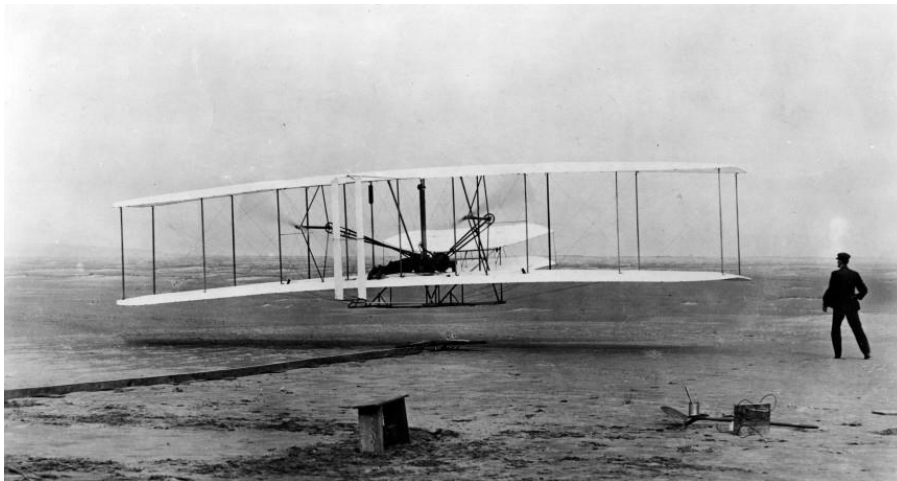
Source: Crouch (2018)

More than a century later, the airline industry has become one of the fastest-growing industries in the world (Haqqi, 2021), having carried more than 4.5 billion passengers in the year 2019 (Mazareanu, 2020). The growth of the airline industry has also affected related industries such as the larger travel industry, tourism, and aircraft manufacturing (Belobaba, Odoni & Barnhart, 2016; Mazareanu, 2020). Inadvertently, the airline industry has contributed to creating a global economy, or otherwise a globalised world, and, whether for business or pleasure, the airline industry has made international travel faster, more efficient, and easier than ever before by providing air transport services to passengers, the freight industry, and businesses alike.

An airline can be categorised as being international (major), national or regional (Bonsor, 2021). International airlines operate flights across the world, national airlines only operate flights within one country, and regional airlines operate flights only in selected regions within a certain country. In addition, airlines can also be classified as full-service, low-cost, or charter airlines (Hamill, 2016). A full-service airline is a commercial airline with scheduled routes that include a range of additional services such as baggage allowance and on-board meals or beverages in the ticket price. A low-cost airline is also a commercial airline with scheduled routes. However, with their low ticket prices, low-cost airlines have costs related to add-on services, for example, baggage fees and beverages or meals that are not included in the ticket price. Finally, a charter airline is an airline that leases aircraft to service firms or individuals and therefore does not have scheduled routes.

This study focussed on international full-service airlines with four- and five-star Skytrax ratings. According to Skytrax, an international air transport rating firm, some of the worlds' four-star airlines are Air Canada, Air France, Air New Zealand, Bangkok Airways, British Airways, China Airlines, China Southern Airlines, Emirates, Etihad Airways, Finnair, KLM Royal Dutch Airlines, Korean Air, Qantas, South African Airways, Thai Airways and Virgin Atlantic (4-Star Airlines, 2020). Again, according to Skytrax, some of the worlds' five-star airlines are ANA All Nippon Airways, Asiana Airlines, Cathay Pacific Airways, EVA Air, Garuda Indonesia, Hainan Airlines, Japan Airlines, Korean Air, Lufthansa, Qatar Airways and Singapore Airlines (The World's 5-Star Airlines, 2020).

These airlines provide customer services at airports such as check-in facilities and airport lounges, as well as customer services on board the aircraft such as in-flight entertainment (movies, music and e-books) and dining services that include beverages, light snacks and three-course meals. To offer these services, airlines employ frontline employees (FLEs) to interact directly with passengers (Grossmann, 2020). These employees include on-ground frontline employees such as check-in staff, gate control staff and airport lounge representatives and on-board frontline employees such as *flight attendants*. In this study, the working environment of international flight attendants including the factors that influence their service-delivery and service-recovery performance was investigated.

1.2 SERVICE DELIVERY IN CONTEXT

Business management involves the co-ordination and organisation of business activities and resources. According to Harold Koontz, business management is: "The art of getting things done through others and with formally organised groups" (Koontz, 1961:186). These formally organised groups can also be referred to as business units or departments in firms such as human resources (HR), accounting and finance, marketing and advertising, production, information technology (IT), operations, customer service, purchasing, legality, and business development and growth (Sharpe, 2018).

The marketing and advertising department is typically dedicated to driving sales. According to Peter Drucker, a leading management theorist, the purpose of marketing is "to know and understand the customer so well that the product or service fits him (or her) and sells itself" (Kotler & Keller, 2012:27). Marketing is therefore about identifying customer needs and meeting them profitably and, in this process, customer satisfaction is a key consideration (Kotler & Keller, 2012). According to the disconfirmation paradigm, customer satisfaction depends on the exchange between customers' service expectations and the service firm's performance (Cassidy-Smith, Baumann & Boudreaux, 2007). Moreover, the success of service firms and their performance again depends on frontline employees' performance (Wilson, Zeithaml, Bitner & Gremler, 2012), making them an integral part of the firm. In the context of the competitive airline industry, one way in which international airlines can maintain a competitive advantage is by delivering superior service quality (Ahn & Lee, 2011).

As stated earlier, airlines employ both on-ground and on-board frontline employees to provide services to passengers. These services are intangible, heterogeneous, inseparable, and perishable (Mudie & Pirrie, 2006) compared to physical products that are tangible and separable items which can be returned or exchanged if found faulty or unsatisfactory. In addition, services are deeds, processes and performances offered by frontline employees (Wilson *et al.,* 2012) and therefore cannot be returned or exchanged like a faulty physical product.

However, service delivery can go wrong. When service delivery goes wrong and fails to meet customer expectations it is called a service failure (Shrestha, 2017) and when service failures occur, frontline employees typically have to redeem or correct the failure situation by doing what is known as service recovery. In this study, the service delivery of international flight attendants included (1) service-delivery performance (SDP) and (2) service-recovery performance (SRP) as displayed in Figure 1.2. The terms 'service-delivery performance' and 'service-recovery performance' were used to differentiate between what is seen as the *initial* services that international flight attendants provide and the *recovery* services that they provide (as a result of service failures).

Figure 1.2: Service delivery model
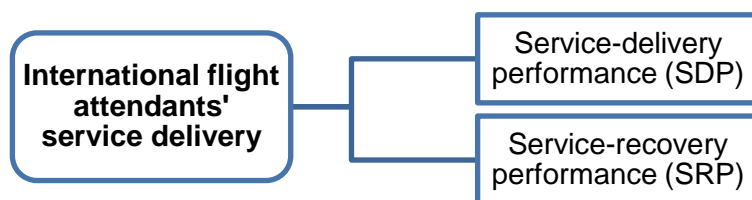
The working environment of international flight attendants consists of the physically restricted and confined environment of a commercial aircraft in which both space (the physical environment) and the means of service delivery and service recovery (a short menu, limited kitchen facilities, strict aviation rules, and limited physical resources) are restricted to what is available inside the aircraft cabin at the time. Moreover, Kim and Back (2012) suggest that flight attendants work in a 'special' environment where they have to serve difficult passengers, perform unique services, and always take into account possible safety concerns. However, not much consideration has been given to the duties and responsibilities of flight attendants and the factors that might influence their performance (Damos, Boyett & Gibbs, 2013). Moreover, the unique working environment may explain why flight attendants are an understudied occupational group (McNeely, Mordukhovich, Tideman, Gale & Coull, 2018). Against this background, this study addressed the gap in the services literature by proposing two theoretical models (refer to Chapter 3, Figures 3.6 and 3.7) to assess the working environment of international flight attendants and its influence on their service-delivery and service-recovery performance.

1.2.1 Service-delivery performance

The importance of frontline employees' service-delivery performance can be linked to the importance of the customer service experience or encounter. According to Wilson *et al.* (2012), the success of service firms depends on whether their frontline employees are both able and willing to deliver on the service promises made by the service firm. Therefore, frontline employees and their service-delivery performance is an essential part of a service firm's business success and industry survival.

Service-delivery performance can be defined as the actions and/or behaviours of frontline employees that ultimately increase efficiency and service quality (Chen & Kao, 2014). The service delivery of international flight attendants may include the following: welcoming passengers on board; distributing headsets, amenity kits and refreshing towels; serving beverages and meals; and selling duty-free items. In addition, international flight attendants are expected to handle passenger complaints, take care of unaccompanied minors, solve seating problems, and assist passengers with additional requests.

International flight attendants working for four- and five-star airlines receive extensive training to be able to offer high-quality services that meet passenger expectations. According to the disconfirmation paradigm, when customers' service expectations are not met, dissatisfaction is the result (Cassidy-Smith *et al.,* 2007). In other words, the disconfirmation paradigm refers to an assessment between expectations and performance. If a customer's expectation of a service is the same or lower than a service firm's performance, the customer will be satisfied. In contrast, if a customer's expectation of a service is higher than a service firm's performance, the customer will be dissatisfied. This means that service firms and frontline employees have to adjust their service delivery and service recovery levels according to customer expectations. In the context of this study, international flight attendants have to be mindful of airline passengers' expectations and potential dissatisfaction with service delivery. Nonetheless, excellent service delivery is crucial for creating and maintaining a competitive advantage in the service industry (Dominic, Goh, Wong & Chen, 2010). Therefore, the working environment factors that potentially influence international flight attendants' service-delivery performance are particularly important.

1.2.2 Service-recovery performance

Service-recovery performance can be measured by how frontline employees handle customer complaints in an attempt to return dissatisfied customers to a state of satisfaction (Gopalan, 2020; Liao, 2007). In other words, service-recovery performance refers to how frontline employees handle service failures that occur when service providers are unable to perform a promised service and therefore fail to meet customers' expectations (Shrestha, 2017). Examples of service failures in the context of this study include: delayed, overbooked or cancelled flights, problems with passenger seat reservations, poor cabin service delivery, and poor attitudes of flight attendants towards passengers (Etemad-Sajadi, 2020).

Occasional service failures are almost inevitable, because of human involvement in service delivery. Therefore, frontline employees need to be equipped by means of training and development to be able to offer an adequate service-recovery performance to customers. With regard to service-recovery performance, international flight attendants are expected to know the airlines' policies and procedures in terms of service recovery, be aware of the tangible rewards and/or benefits that they can offer to passengers as compensation during service recovery, handle passengers with respect, and be sensitive in making sure that passengers are treated fairly during the service recovery process (Migacz, Zou & Petrick, 2018).

When service-recovery performance fails to meet passengers' expectations, it is referred to as a 'double deviation' (Bitner, Booms & Tetreault, 1990). Evidently, a double deviation results in customer dissatisfaction (for a second time), which can lead to direct complaining, negative word-of-mouth (WOM), and switching behaviour (Mattila & Ro, 2008). In addition, in a highly competitive industry, customers no longer have to accept service dissatisfaction (Migacz *et al.,* 2018). Therefore, successful service recovery efforts are increasingly important in the airline industry. As pointed out by Yavas, Karatepe and Babakus (2010), in competitive service environments like the aviation industry considerable importance is placed on high-performing frontline employees to ensure the success of the firm. Therefore, the importance of international flight attendants' service-recovery performance and the factors that might influence their service-recovery performance should not be underestimated.

1.2.3 The theoretical basis of the study

The four theories that formed part of the theoretical basis of this study were: the job demands–resources (JD–R) model, Hochschild's emotional labour theory, Rawls' justice theory, and the environmental psychology theory. The first theory, the job demands–resources (JD–R) model, was first introduced by Demerouti, Bakker, Nachreiner and Schaufeli (2001). The JD–R model suggests that every job or occupation has certain working conditions called job demands and job resources. Job demands are job-related aspects that require constant effort or skills such as workload and time pressure. Job resources, on the other hand, are job-related aspects that are functional in realising work goals, reduce job demands and help employees to grow and learn, for example, by training and rewards (Bakker & Demerouti, 2007; Demerouti *et al.,* 2001; Van Vaerenbergh & Orsingher, 2016).

The second theory, Hochschild's emotional labour theory, was introduced by Arlie Russell Hochschild in 1983. According to Hochschild, emotional labour denotes "the management of feelings to create a publicly observable facial and bodily display" (Hochschild, 1983:7). Frontline employees typically perform emotional labour in order to display certain required emotions. Examples of emotional labour are debt collectors who are expected to manage their emotions to display more serious and not-too-friendly emotions to customers, or flight attendants and front desk hotel staff who are expected to manage their emotions to display positive, cheerful and friendly emotions to customers (Bailey & McCollough, 2000).

The third theory, Rawls' theory of justice, was introduced by John Rawls in 1971. Rawls' theory of justice is the most prevalent theory used in service recovery literature to examine or evaluate frontline employees' service recovery efforts (Migacz *et al.,* 2018). Rawls' theory of justice suggests that customers evaluate service-recovery performance in terms of their perceptions of procedural, distributive, and interactional justice (Migacz *et al.,* 2018; Rawls, 1971). In other words, customers evaluate whether and to what extent they feel a service recovery effort is 'fair' or 'just'. Since occasional service failures are almost inevitable, effective service recovery among frontline employees is particularly important.

The fourth theory, environmental psychology, was developed during the 1950s and 1960s by Roger Garlock Barker, in association with some of his colleagues (Bonnes & Bonaiuto, 2002; Stokols, 1978). In short, environmental psychology can be described as a theory that explains the relationship between individuals and their physical (built or natural) environment. However, in the context of this study, the *working environment* of international flight attendants and its influence on service-delivery and service-recovery performance was assessed.

1.3 PROBLEM STATEMENT

The working environment of international flight attendants can be described as *special* or *unique* compared to those of other frontline service employees since flight attendants work in the confined space of an aircraft cabin (Kim & Back, 2012). International flight attendants have limited physical and human resources to serve sometimes demanding passengers, within restricted time allocations while facing the potential effects of jet lag and regular time zone changes. Moreover, the duties and responsibilities of international flight attendants and the factors that influence their performance have not yet been fully investigated (Damos *et al.*, 2013). Against this background, this study assessed the working environment of international flight attendants and the influence of their working environment on their service-delivery and service-recovery performance.

1.4 RESEARCH QUESTIONS

The problem statement led to the following research questions:

- Which of the working environment factors in the proposed theoretical models significantly influence international flight attendants' (1) service-delivery performance and (2) service-recovery performance?
- Do fatigue and job experience play an intervening role in the relationships between the modelled factors and international flight attendants' (1) service-delivery performance and (2) service-recovery performance?
- Are the empirical results consistent with theories such as the job demands–resources (JD–R) model, Hochschild's emotional labour theory, Rawls' theory of justice and the environmental psychology theory?

8

1.5 RESEARCH OBJECTIVES

The research objectives of this study are discussed in the following section and include the primary objectives, secondary objectives, and the formulated hypotheses.

1.5.1 Primary objectives

The primary objective of this study was to empirically assess the validity of the proposed theoretical models (refer to Chapter 3, Figures 3.6 and 3.7). More specifically, the primary objective was to assess the influence of the working environment factors on the service-delivery performance (Model 1: SDP) and service-recovery performance (Model 2: SRP) of international flight attendants.

1.5.2 Secondary objectives

The secondary objectives of this study were:

- to assess the influence of company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources on international flight attendants' (1) service-delivery performance and (2) their service-recovery performance
- to assess the role of the intervening influence of fatigue and job experience on the relationships between company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources and international flight attendants' (1) service-delivery performance and (2) their service-recovery performance
- to assess the consistency between the empirical results of this study and the job demands–resources (JD–R) model, Hochschild's emotional labour theory, Rawls' theory of justice and the environmental psychology theory

1.5.3 Hypotheses

To address the objectives, the following hypotheses were assessed related to Model 1 (service-delivery performance):

H_1: There is a negative relationship between unrealistic company service delivery expectations and service-delivery performance (SDP)

H_2: There is a positive relationship between the level of customer service training and service-delivery performance (SDP)

H_3: There is a positive relationship between the level of supervisory support and service-delivery performance (SDP)

H_4: There is a positive relationship between the extent of teamwork and service-delivery performance (SDP)

H_5: There is a negative relationship between the perceptions of cultural differences among passengers and service-delivery performance (SDP)

H_6: There is a negative relationship between the perceptions of unreasonably demanding passengers and service-delivery performance (SDP)

H_7: There is a negative relationship between the perceptions of limited physical space and service-delivery performance (SDP)

H_8: There is a negative relationship between limited time/time pressure and service-delivery performance (SDP)

H_9: There is a negative relationship between limited physical resources and service-delivery performance (SDP)

Proposition 1: Fatigue has an intervening influence on the relationships between the independent variables (company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources) and service-delivery performance (SDP)

Proposition 2: Job experience has an intervening influence on the relationships between the independent variables (company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources) and service-delivery performance (SDP)

Although it was expected that fatigue and job experience would be intervening variables, this potential relationship was not statistically tested.

To address the objectives, the following hypotheses were assessed related to Model 2 (service-recovery performance):

H_{10}: There is a negative relationship between unrealistic company service delivery expectations and service-recovery performance (SRP)

H_{11}: There is a positive relationship between the level of customer service training and service-recovery performance (SRP)

H_{12}: There is a positive relationship between the level of supervisory support and service-recovery performance (SRP)

H_{13}: There is a positive relationship between the extent of teamwork and service-recovery performance (SRP)

H_{14}: There is a negative relationship between the perceptions of cultural differences among passengers and service-recovery performance (SRP)

H_{15}: There is a negative relationship between the perceptions of unreasonably demanding passengers and service-recovery performance (SRP)

11

H_{16}: There is a negative relationship between the perceptions of limited physical space and service-recovery performance (SRP)

H_{17}: There is a negative relationship between limited time/time pressure and service-recovery performance (SRP)

H_{18}: There is a negative relationship between limited physical resources and service-recovery performance (SRP)

Proposition 3: Fatigue has an intervening influence on the relationships between the independent variables (company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources) and service-recovery performance (SRP)

Proposition 4: Job experience has an intervening influence on the relationships between the independent variables (company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources) and service-recovery performance (SRP)

Again, although it was expected that fatigue and job experience would be intervening variables, this potential relationship was not statistically tested.

1.6 METHODOLOGY

Both primary and secondary research methods were used in this study. First, secondary research was conducted by analysing previous research papers. Secondly, exploratory research was conducted by means of informal discussions with international flight attendants. Finally, survey research was conducted by distributing online self-administered questionnaires to former and current international flight attendants.

1.6.1 Secondary research

The secondary research conducted in this study consisted of reviewing previous literature on the dependent variables, namely service-delivery performance (SDP) and service-recovery performance (SRP). Several published studies were reviewed reporting empirical results of the working environment factors that influence the SDP and SRP of several service industries' employing frontline employees such as hotel front desk staff, banking employees, receptionists, flight attendants, and nurses.

1.6.2 Primary research

Exploratory research was conducted by means of correspondence with one former and three current international flight attendants to refine the research objectives (refer to Appendix A for the informal discussion questions). Secondly, survey research was conducted using online self-administered questionnaires that were designed in Qualtrics and distributed via email and/or Whatsapp to former and current international flight attendants.

1.6.3 Sampling plan

There was no sampling frame (i.e., a list with information about a specific group of people) available for this study. Therefore, the sampling technique used for the study was by necessity non-probability sampling. Respondents had to be either former or current international flight attendants employed by, or formerly employed by, any international full-service airline with a four- or five-star Skytrax rating.

Purposive and snowball sampling were used to expand the sample list by obtaining information from 'initial' or 'first' respondents. The minimum sample size for this study was set at 200. All respondents had to be between the ages of 18 and 60 and the preference regarding gender distribution was 80 per cent female and 20 per cent male, given that most of the worlds' flight attendants are female (Ash, 2020; Industry News, 2020).

1.6.4 Data analysis

The statistical programs used in this study were SPSS 26.0 and LISREL 8.80. The raw data were first captured in Qualtrics and then exported to a Microsoft Excel spreadsheet. Thereafter the Excel spreadsheet was imported to the statistical programs. Descriptive analysis was conducted by calculating the means, modes, range, and standard deviation of the selected variables. In addition, the demographic profile of the realised sample was recorded according to the respondents' age, gender, nationality, job experience, and cabin class worked in.

The inferential analyses included the following statistical tests: the discriminant validity of the variables in the theoretical models was assessed in SPSS using exploratory factor analysis (EFA). First, however, the Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity were used to assess the sampling adequacy of the data. The estimation method used was principal axis factoring (assuming that the data would be more-or-less normally distributed) and the rotation method used was direct quartermin oblique rotation (assuming that the variables would at least to some extent be correlated). In order to make sure that the independent variables were not too correlated multicollinearity was assessed by inspecting the variance inflation factors (VIF) available in SPSS (< 5). In addition, the reliability of the variables in the empirical models was assessed using Cronbach's alpha. The six-stage process for structural equation modeling (SEM) was used to assess the two theoretical models proposed in this study (Hair, Black, Babin & Anderson, 2014). First, the model fit was assessed by reporting the normed chi-square values (χ^2 / df), the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the expected cross-validation index (ECVI). Thereafter, the relationships between the dependent and independent variables were assessed using path estimates.

1.7 ETHICAL CONSIDERATIONS

The ethical considerations for the online self-administered questionnaire used in this study included the following: Respondents participating in this study did so voluntarily. They had the right to stop completing the questionnaire at any given time should they feel uncomfortable.

In other words, once started, respondents were under no compulsion to complete the questionnaire. Respondents' personal information such as their occupation, gender, age, nationality, and years of experience as an international flight attendant were used merely for descriptive data analysis.

1.8 ORIENTATION OF THE STUDY

Chapter 1: Introduction and overview
This chapter included a broad overview of the entire study.

Chapter 2: The theoretical basis of the study
The four theories that form part of the theoretical basis of this study are discussed in this chapter, namely the job demands–resources (JD–R) model, Hochschild's emotional labour theory, Rawls' theory of justice, and the environmental psychology theory.

Chapter 3: The proposed theoretical models
Chapter 3 consists of a review of previous literature including the working environment factors that potentially influence the service-delivery and service-recovery performance of international flight attendants. The two theoretical models proposed for the study are introduced and discussed in this chapter.

Chapter 4: Research methodology
The research methodology explained in this chapter includes a discussion of the research methods used in this study including primary and secondary research.

Chapter 5: Data analysis and results
The data analysis and results are reported in Chapter 5. The software programs used in this study were SPSS 26.0 and LISREL 8.80.

Chapter 6: Conclusions and recommendations
In this final chapter, conclusions are stated and recommendations are made for future research. The limitations of this study are also reported in this section.

CHAPTER 2

THE THEORETICAL BASIS OF THE STUDY

2.1 INTRODUCTION

Theory serves as a critical guide in directing research efforts and understanding phenomena (Collins & Stockton, 2018). Lee and Lings (2008:12) define theory as "a set of interrelated ideas, which is an attempt at explaining some aspect of the real world". In addition, a theoretical framework, which is a selection of theories, is used to support and strengthen researchers' ideas and the way they plan to investigate a topic or subject matter (Grant & Osanloo, 2015).

This study's theoretical framework consisted of four theories, namely the job demands–resources (JD–R) model, Hochschild's emotional labour theory, Rawls' theory of justice and the environmental psychology theory. The JD–R model, introduced by Demerouti *et al.* (2001), suggests that each job or occupation has certain working conditions called job demands and job resources. In this study, the independent variables suggested to influence the service-delivery and service-recovery performance of international flight attendants could be categorised as either job demands or job resources. Theoretically, factors considered to be job demands should decrease flight attendants' service performance and the factors (or independent variables) that are described as job resources should enhance their service performance. These relationships were empirically assessed and are reported in Chapter 5 by utilising the two theoretical models proposed in this study.

Hochschild's emotional labour theory was developed by Arlie Russell Hochschild in 1983 and suggests that employees working in certain positions and for certain service firms are required to 'manage their feelings' to display certain emotions towards customers (Hochschild, 1983). Hochschild's theory was included in this study because of the importance of the emotional labour component of international flight attendants' job requirements. As part of international flight attendants' job requirements, they have to manage their emotions in order to display friendly, hospitable, and kind attitudes towards passengers, therefore performing emotional labour regularly.

Rawls' theory of justice, introduced by John Rawls in 1971, has been used extensively in the service recovery literature to explain how customers evaluate service-recovery performance. This theory involves the evaluation of procedural justice, interactional justice, and distributive justice. Based on these theories, it is argued that complaining customers evaluate a service recovery effort of a service firm. As service-recovery performance was one of the dependent variables in this study, Rawls' theory of justice formed part of the theoretical basis.

Finally, environmental psychology refers to the relationship between individuals and their physical environment and its effect on human behaviour (McCunn & Schultz, 2021). In this study, the working environment of international flight attendants was assessed by proposing two theoretical models, both illustrating the working environment factors of international flight attendants that potentially influence their service-delivery and service-recovery performance.

2.2 THE JOB DEMANDS–RESOURCES MODEL

The JD–R model suggests that every job or occupation has different working conditions related to motivation and stress that can be labelled as either job demands or job resources (Bakker & Demerouti, 2007; Demerouti *et al.,* 2001; Van Vaerenbergh & Orsingher, 2016). These working conditions, known as job demands and job resources, can influence employees' well-being, functionality, and their job performance, but can also relate to job burnout (Bakker & Demerouti, 2007; Crawford, LePine & Rich, 2010; Demerouti *et al.,* 2001).

Job demands refer to physical, social, organisational, and/or psychological aspects of a job that require constant physical and/or mental efforts and are therefore related to physiological and psychological costs, such as exhaustion (Bakker & Demerouti, 2007; Demerouti *et al.,* 2001; Van Vaerenbergh & Orsingher, 2016). Job demands include factors such as physical workload, time pressure, general work pressure, shift work, the physical environment, and emotionally draining interactions with clients (Bakker & Demerouti, 2007; Demerouti *et al.,* 2001). In addition, job demands may include role stressors, such as role ambiguity, role conflict, and role overload and, secondly, customer-related social stressors such as demanding and/or aggressive customers (Van Vaerenbergh & Orsingher, 2016).

Job resources can be defined as physical, social, organisational and/or psychological aspects of a job that are functional in realising work goals, reducing job demands and/or helping employees develop and grow (Bakker & Demerouti, 2007; Demerouti *et al.,* 2001). Job resources are factors such as empowerment, customer service training, rewards, feedback, job control, participation, job security, and supervisory support (Demerouti *et al.,* 2001; Van Vaerenbergh & Orsingher, 2016). In addition, Bakker and Demerouti (2007) classify job resources as follows: (1) resources at firm-level such as income, career opportunities, and job security; (2) resources at the interpersonal-level, such as supervisors, co-worker support, and team climate; (3) resources at arrangement-level including role clarity and participation in decision-making; and (4) resources at task-level including skill variety, task identity, task significance, autonomy, and performance feedback.

As stated earlier, the JD–R model is associated with employees' job performance and job burnout (Bakker & Demerouti, 2007; Crawford *et al.,* 2010; Demerouti *et al.,* 2001). Job performance can be described as employees' competency in their work including the way they handle tasks and their ability to achieve work objectives (Lee, An & Noh, 2015). According to Maslach and Jackson (1986), job burnout consists of three components, namely emotional exhaustion (feeling emotionally drained), depersonalisation or disengagement (displaying a detached attitude towards others or one's work), and diminished personal accomplishment (having a low sense of effectiveness at work).

The JD–R model of burnout (Figure 2.1) was adapted to illustrate some of the job demands and job resources that international flight attendants face owing to their working environment. Demerouti, Bakker, Nachreiner and Schaufeli (2000) assert that excessive job demands may increase employees' level of exhaustion (increasing job burnout) while job resources may decrease employees' level of disengagement (decreasing job burnout). Crawford *et al.* (2010) and Chen and Kao (2012a) concur with Demerouti *et al.* (2000) by reporting a positive relationship between job demands and job burnout and a negative relationship between job resources and job burnout. As displayed in Figure 2.1, job burnout, in turn, has a negative affect on employees' job performance, suggesting that frontline employees' job demands ultimately lead to a decrease in job performance whereas their job resources lead to enhanced job performance.

18

Figure 2.1: The job demands–resources model of burnout
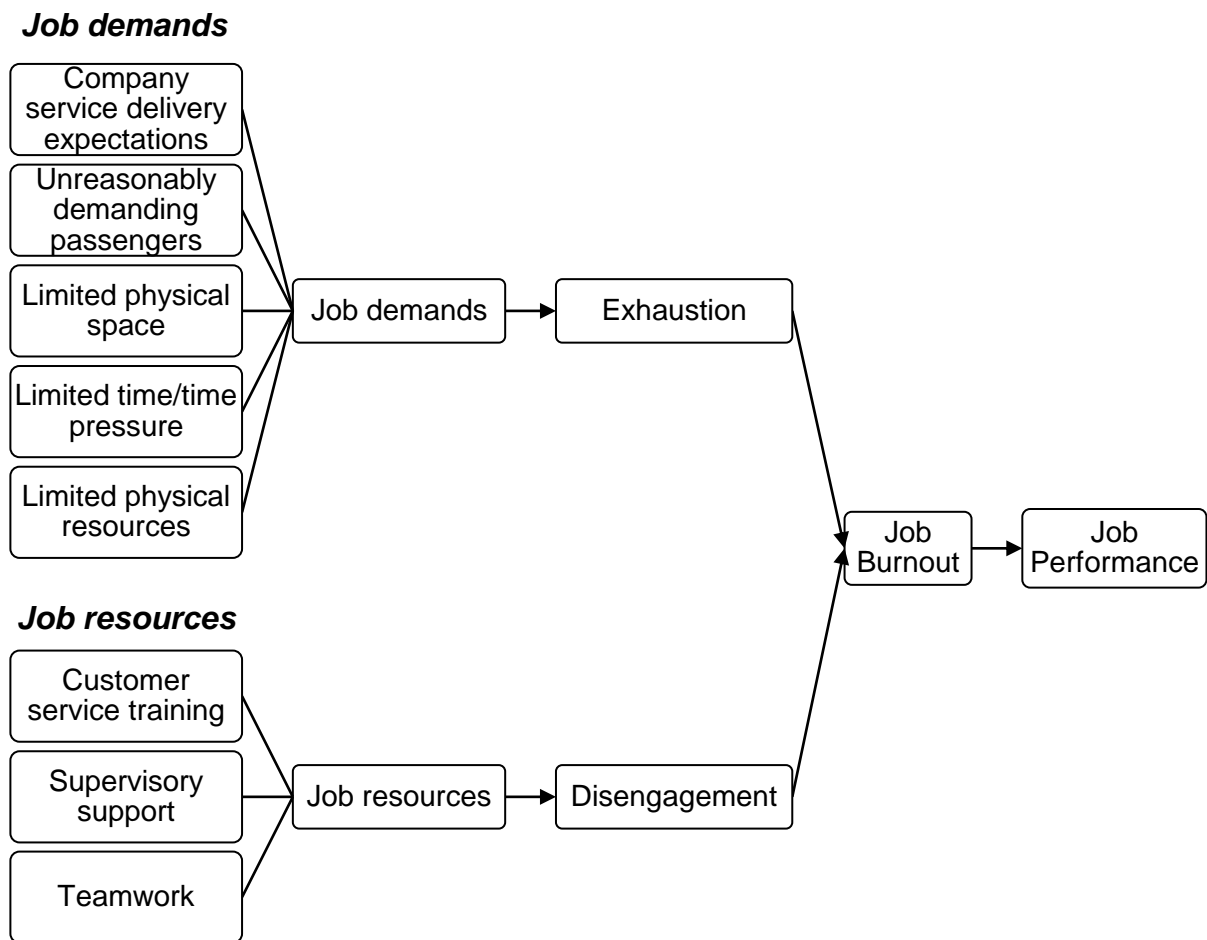
Source: Adapted from Demerouti *et al.* (2001:502)

In this study, company service delivery expectations (Chen & Chen, 2014; Van Vaerenbergh & Orsingher, 2016), unreasonably demanding passengers (Chen & Chen, 2014; Bakker & Demerouti, 2007; Van Vaerenbergh & Orsingher, 2016), limited physical space, limited time/time pressure and limited physical resources (Chen & Chen, 2014; Demerouti *et al.,* 2001) were classified as job demands related to the job of an international flight attendant. Customer service training (Van Vaerenbergh & Orsingher, 2016), supervisory support and teamwork (Bakker & Demerouti, 2007; Demerouti *et al.,* 2001) were classified as job resources specifically related to international flight attendants (see Figure 2.1).

Cultural differences among passengers was the only independent variable that could not be categorised as either a job demand or a job resource given that this variable has not been investigated before. However, the relationship between cultural differences and service-delivery and service-recovery performance was empirically assessed, whereas the relationships between service-delivery and service-recovery performance and the other independent variables were also evaluated.

2.3 HOCHSCHILD'S EMOTIONAL LABOUR THEORY

Hochschild's emotional labour theory was introduced by Arlie Russell Hochschild in the book, *The managed heart: Commercialization of human feeling* (Hochschild, 1983). In her study among American flight attendants, Hochschild wrote that besides physical labour (pushing meal carts and serving passengers) and mental labour (memorising emergency procedures and passenger requests), flight attendants also perform *emotional labour*. The term 'emotional labour' was therefore coined by Hochschild and she defined it as "the management of feelings to create a publicly observable facial and bodily display" (Hochschild, 1983:7).

Emotional labour can also be explained by means of *display rules.* Display rules refer to the 'appropriate' emotions that employees who work in certain positions or for certain service firms are expected to display (Grandey, 2000). For example, frontline employees such as international flight attendants and hotel front desk staff are expected to display positive, cheerful, and friendly emotions to customers, whereas debt collectors, police officers, and undertakers are expected to display more serious and not-too-friendly emotions to individuals or customers (Bailey & McCollough, 2000; Briner, 1999; Heuven & Bakker, 2003).

According to Hochschild (1983), occupations that require employees to perform emotional labour have the following three characteristics: (1) face-to-face or voice-to-voice interaction with the public, (2) the ability to produce a certain emotional state in another person such as gratitude or fear, and (3) employers having a certain degree of control over employees' emotions by means of training and strict supervision.

To perform emotional labour frontline employees can use one of two emotional labour strategies (Hochschild, 1983). The first strategy is called 'deep acting', which involves forcing oneself to actually feel or experience certain emotions. The second strategy is called 'surface acting', which involves the display of emotions that are not felt, in other words, faking a desired emotion or managing one's expression(s) to create a desirable publicly observable facial or bodily display (Lee *et al.,* 2015; Williams, 2003). Deep acting is therefore focussed on changing one's inner feelings whereas surface acting is focussed on outward cues such as facial expressions, tone of voice, and gestures (Mann, 1997).

According to Hochschild (1983) and Jeung, Kim and Chang (2018), performing emotional labour requires constant effort and therefore can result in stress and eventually in job burnout. However, Chen, Sun, Lam, Hu, Huo and Zhong (2012) report that the effect of emotional labour on job burnout depends on the emotional labour strategy that frontline employees use. Chen *et al.* (2012) suggest that surface acting enhances job burnout and decreases job performance (similar to job demands) whereas deep acting has the opposite effect of decreasing job burnout and enhancing job performance (similar to job resources). Lee *et al.* (2015) who conducted a study on emotional labour, specifically among airline flight attendants, concur with Chen *et al.* (2012) and recommend that airlines promote the use of deep acting among their flight attendants.

In addition to influencing frontline employees' performance, emotional labour has functional (beneficial) and dysfunctional (disadvantageous) effects on service firms' performance. To illustrate: a sales consultant performing emotional labour by being friendly and helpful may sell more products and handle customer complaints better, which can, of course, have beneficial outcomes for the service firm (Mann, 1997). However, if a customer perceives sales consultants' friendliness as fake and not genuine, it might have a negative influence on the service firms' performance. To conclude, international flight attendants perform emotional labour on a routine basis which may affect their job performance. Therefore, since this study investigated the service-delivery and service-recovery performance of international flight attendants, Hochschild's emotional labour theory was included in the theoretical framework.

2.4 RAWLS' THEORY OF JUSTICE

Several theories have been used to investigate firms' service recovery efforts (Migacz *et al.,* 2018). These theories include the attribution theory, the mental accounting theory, the equity theory, and the disconfirmation paradigm. However, the most utilised theory in service recovery research is Rawls' theory of justice, which suggests that customers evaluate service-recovery performance based on their perceptions of justice when service firms attempt to recover from a poor service delivery (Migacz *et al.,* 2018; Rawls, 1971; Siu, Zhang & Yau, 2013). By using a three-dimensional concept of justice that includes procedural justice, distributive justice and interactional justice, customers evaluate whether they perceive firms' service recovery efforts as 'just' or 'fair'.

Procedural justice refers to customers' evaluations of firms' service recovery policies, procedures, and decision-making performances (Migacz *et al.,* 2018). Procedural justice can be measured by the promptness, accessibility, and flexibility of frontline employees as well as the freedom given to customers to communicate their views during the service recovery process (Ding, Ho & Lii, 2015; Tax, Brown & Chandrashekaran, 1998; Wen & Chi, 2013). Moreover, distributive justice refers to customers' evaluations of the potential outcomes of the service recovery process (Migacz *et al.,* 2018; Siu *et al.,* 2013). In other words, whether and to what degree customers are satisfied with the tangible benefits or rewards they receive as compensation during service-recovery performance (Voorhees & Brady, 2005). Distributive justice can be measured by apologising to customers and offering them rewards and benefits, for example, giving them refunds, replacements, gifts, or discounts on future purchases (Ding *et al.,* 2015; Tax *et al.,* 1998; Wen & Chi, 2013).

Finally, interactional justice can be defined as the interpersonal communication between frontline employees and customers, and whether customers feel they are treated fairly at an interpersonal level (Chang & Chang, 2010). Interactional justice can be measured in terms of empathy, sensitivity, honesty, effort, and sincerity expressed by frontline employees in an attempt to recover a failure situation and return the customer back to a state of satisfaction (Migacz *et al.,* 2018; Nikbin & Hyun, 2015; Tax *et al.,* 1998; Wen & Chi, 2013).

According to Kim, Yoo and Lee (2012b), Rawls' theory of justice can be used as a powerful predictor of customers' satisfaction with service recovery, which can be referred to as *post-recovery satisfaction*. To illustrate: Chang and Chang (2010) conducted a study on the relationship between Rawls' theory of justice and post-recovery satisfaction among airline passengers. Their study reveals that procedural justice and interactional justice exert a positive influence on the post-recovery satisfaction of airline passengers, which, in turn, increase their loyalty. Nikbin, Marimuthu, Hyun and Ismail (2015) confirm the positive relationship between post-recovery satisfaction and passenger loyalty as reported by Chang and Chang (2010). In addition, McCollough, Berry and Yadav (2000) report that among the dimensions of justice, distributive justice and interactional justice specifically influence airline passengers' satisfaction with service recovery by suggesting that fair treatment of passengers and providing compensation increase post-recovery satisfaction. Moreover, several other studies report that all three dimensions of justice (procedural, distributive, and interactional justice) affect airline passengers' post-recovery satisfaction (Ding *et al.,* 2015; Migacz *et al.,* 2018; Nikbin *et al.,* 2015; Wen & Chi, 2013).

In the broader hospitality industry, the influence of procedural justice, interactional justice, and distributive justice has also been assessed (Kim, Kim & Kim, 2009; Ok, Back & Shanklin, 2005; Siu *et al.,* 2013). Whereas Kim *et al.* (2009) report a significant relationship between all three dimensions of justice and post-recovery satisfaction among hotel guests, Ok *et al.* (2005) and Siu *et al.* (2013) reveal a significant relationship between the dimensions of justice and the post-recovery satisfaction of restaurant patrons.

Therefore, service firms can use Rawls' theory of justice as a guideline to adjust and improve their service recovery strategies and increase customer loyalty. With regard to procedural justice, service firms can ensure that they have the correct policies and procedures in place to effectively resolve different types of service failure. In addition, service firms can ensure that their frontline employees are aware of the firms' service recovery policies and procedures. As far as distributive justice is concerned, service firms can implement strategies on the fair distribution of tangible benefits and rewards in order to prevent customers from feeling that they are treated unfairly in terms of compensation for the service failure.

Finally, with regard to interactional justice, service firms can ensure that their frontline employees receive sufficient service recovery, soft skills, and communication training to improve their interpersonal and problem-solving skills in dealing with service recovery scenarios. In this way, the principles of Rawls' theory of justice can be used to enhance the effectiveness of firms' service recovery strategies and ultimately increase their employees' service-recovery performance. To conclude, Rawls' theory of justice proposes that *customers* assess frontline employees' service-recovery performance by evaluating the dimensions of justice. However, the scale that was used to measure service-recovery performance in this study assess frontline employees' performance from their own perspective. Therefore, service-recovery performance was assessed from the perspective of the flight attendants themselves.

2.5 ENVIRONMENTAL PSYCHOLOGY

Environmental psychology is an interdisciplinary field that developed during the 1950s and 1960s when researchers wanted to gain a better understanding of the relationship between human behaviour and the physical environment (Bonnes & Bonaiuto, 2002). McCunn and Schultz (2021) describe the field of environmental psychology as "the scientific study of the transactions and interrelationships between people and their physical surroundings, including built and natural environments, the use and abuse of nature and natural resources, and sustainability-related behaviour".

According to Mehrabian and Russell (1974), environmental psychology involves the impact of physical stimuli in the environment on individuals' emotions and behaviour, for example, their job performance or social interactions. Mehrabian and Russell (1974) suggest that the environment includes sense modality variables such as colour and temperature, and information rate, which refers to the spatial organisation of people and objects (see Figure 2.2). The environment and characteristic emotions associated with personality influence primary emotional responses such as pleasure, arousal, and dominance. In turn, primary emotional responses affect behaviour such as physical approach, affiliation, communication, and performance. The framework presented here is consistent with Churchman's (2002) perspective who argues that environmental psychology includes the perception and cognition of feelings, beliefs, attitudes and personality and its relation to the physical environment.

Figure 2.2: Proposed framework of environmental psychology
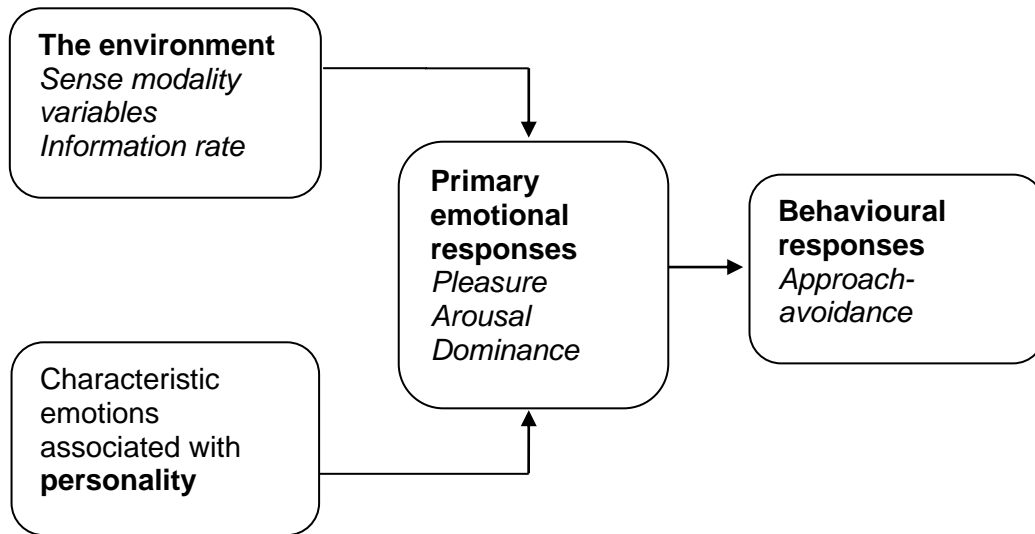
Source: Mehrabian and Russell (1974)

During the early development of studies in environmental psychology, two main directions emerged, namely the built physical environment and the natural physical environment (Craik, 1970; Wohlwill, 1970). The built physical environment refers to man-made environments involving architectural, technological, and engineering intervention, whereas the natural physical environment refers to spontaneous environments such as mountains, forests, oceans, desserts, and lakes (Bonnes & Bonaiuto, 2002). Whether built or natural, physical environments are subject to certain conditions known as environmental stressors (Stokols, 1978). These stressors include noise, extreme temperatures, air pollution and high-density spaces to name a few. In addition, environmental stressors can be controllable or uncontrollable, which can have a negative influence on employees' job performance and well-being (Lamb & Kwok, 2016).

One of the principles of environmental psychology suggests that human beings change their environment and in turn are changed by their environment (Gifford, Steg & Reser, 2011). For example, humans change their environment by building skyscraper buildings, aircraft, cruise liners, submarines, and the like. However, when they (humans) are placed in these man-made environments, their behaviour and experiences are affected.

In this study, the working environment of international flight attendants (which is a man-made environment, i.e., the inside of an aircraft cabin) and its influence on international flight attendants' service-delivery and service-recovery performance were assessed. Since the *working environment* of international flight attendants was investigated the term 'ergonomics' had to be reviewed.

2.5.1 Ergonomics

The study between individuals and their working environment can be referred to as ergonomics (Murrell, 2012). The term 'ergonomics' was first used by Polish scholar Wojciech Jastrzębowski in 1857 and originates from the Greek words 'ergon', meaning work and 'nomos', meaning natural laws (Davis & Tissington, 2007; Helander, 2005). The International Ergonomics Association (2000) define ergonomics as "the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data, and methods to design in order to optimise human well-being and overall system performance". Moreover, ergonomists agree that workplace productivity can be increased by improving the interaction or 'fit' between workers and their working environment (Bridger, 2008; Pandve, 2014).

Ergonomic stressors are conditions that increase employees' risk of developing work-related musculoskeletal disorders (MSDs). These stressors include repetition, force, extreme or static postures, quick motions, contact pressure, vibration, and exposure to cold temperatures (Occupational Safety and Health Administration, 2000). Employees working in industries where they are required to lift heavy items, bend, reach overhead, push and pull heavy loads, work in awkward body postures and perform the same or similar tasks repetitively can risk exposure to ergonomic stressors. According to Lee, Wilbur, Conrad and Miller (2006), musculoskeletal disorders related to ergonomic stressors are particularly common among flight attendants as their job involves closing overhead bins, lifting heavy containers, pushing and pulling service trolleys or carts, bending down to retrieve meal trays from the service trolleys, working in awkward positions and performing routine tasks.

Flight attendants also work in shifts. Although there are strict guidelines regarding the number of working hours and minimum resting times of international flight attendants (refer to the discussion on fatigue, Chapter 3, section 3.5.1), a lack of sleep and circadian rhythm disruptions is a common occurrence among this understudied occupational group because of their work schedule and working environment (MacDonald, Deddens, Grajewski, Whelan & Hurrell, 2003; McNeely, Gale, Tager, Kincl, Bradley, Coull & Hecker, 2014). Generally, shift work can be defined as work conducted before 07:00 in the morning and/or after 18:00 in the evening (Monk & Folkard, 1992). Crew members regularly serve passengers on flights during these times (referred to as night-time departures). Furthermore, in contrast to the 12 to 14-hour shifts that international flight attendants generally face, Helander (2005) suggests that night shifts should not exceed between six to eight hours for employees performing physical or complex work as shift work can be associated with circadian rhythm disruptions. Shift work may also lead to increased fatigue, health disorders, disruption of social life, decreased productivity, and work-related safety issues. As explained by Helander (2005), the human body is designed to function in a 24-hour rhythm due to body temperatures that peak at 16:00 in the afternoon and are at its lowest at 04:00 in the morning. Research indicates that it is nearly impossible for the body to completely adjust to working night shifts because of one's internal body clock or circadian rhythm. However, considering the nature of the aviation industry, international flight attendants often have to work during the night and the early morning.

2.5.1.1 The working environment

According to the Buffalo Organisation for Social and Technological Innovation (BOSTI), a non-profit firm based in the United States, the working environment of employees can be described as a collection of features such as physical enclosure, aesthetics, privacy, furniture, status, communication, temperate control, and lighting (McCoy, 2002). These features of the working environment have the potential to influence employees' job performance, job satisfaction, ease and quality of communication, and satisfaction with the environment. Consistent with McCoy (2002), this study investigated the working environment factors of international flight attendants and the potential influence of these factors on their service-delivery and service-recovery performance (refer to Chapter 3, Figures 3.6 and 3.7).

The working environment of employees has been assessed in several studies using various dimensions, which are shown in Table 2.1. According to Raziq and Maulabakhsh (2015), the working environment consists of working hours, job safety and security, relationships with co-workers, esteem needs, and the influence of top management. Moreover, Sukdeo (2017) argues that the working environment consists of working conditions, remuneration, training, career development, fairness of treatment, and job security and stability. Sukdeo (2017) furthermore reports that the working environment affects employee satisfaction and productivity among factory workers in South Africa.

Table 2.1: Dimensions of the working environment

Dimensions	Source
Physical enclosure, aesthetics, privacy, furniture, status, communication, temperate control, and lighting	McCoy (2002)
Working hours, job safety and security, relationships with co-workers, esteem needs, top management	Raziq and Maulabakhsh (2015)
Physical conditions and non-physical conditions	Sedarmayanti (2012)
Job safety and security, physical working environment, relationships with co-workers, supervisory support and working hours	Saidi, Michael, Sumilan, Lim, Jonathan, Hamidi and Ahmad (2019)
Working conditions, remuneration, training and career development, fairness of treatment, job security and stability	Sukdeo (2017)
Sound, lighting, air quality, thermal environment, and level of control	Roelofsen (2002)
Physical working environment, social working environment and mental working environment	Jain and Kaur (2014)
Space, physical layout, noise, tools, materials and co-workers' relationship	Tyssen (2005)
Lighting, air temperature, noise, decoration/layout, and employee relations	Nitisemito (2000)

Roelofsen (2002) also reports a significant relationship between the working environment and productivity among employees. The author assessed the working environment of office employees in the United States with regard to sound, lighting, air quality, thermal environment, and level of control and suggests that employees' performance levels can be increased by 5 to 15 per cent by improving the quality of indoor office buildings.

Riyanto, Sutrisno and Ali (2017) assessed the working environment by considering the physical and non-physical dimensions, as suggested by Sedarmayanti (2012). The authors found a significant relationship between the working environment and job performance among office employees in Indonesia. Similarly, Saidi *et al.* (2019) report a significant relationship between the working environment of office workers in Malaysia and their job performance. Saidi *et al.* (2019) argue that the working environment consists of job safety and security, the physical working environment, relationships among co-workers, supervisory support, and working hours. In a similar vein, Jain and Kaur (2014) report a significant relationship between the working environment and employee performance. However, these authors believe that the working environment consists of only three components, namely the physical working environment, the social working environment, and the mental working environment.

Furthermore, in a study conducted in Indonesia, a positive relationship is reported between the working environment and job satisfaction among workers in the production department (Badrianto & Ekhsan, 2020). The authors assessed the working environment according to the dimensions listed by Nitisemito (2000), namely lighting, air temperature, noise, decoration/layout, and employee relations.

Finally, Wertheim (1998) conducted a study on the influence of 'moving' working environments on employee job performance. According to Wertheim (1998), a 'moving environment' means to work, for example, in an aircraft, boat or vehicle, which can decrease employees' performance in cases because of the effect of the movement or motion on motivation, balance, and/or fatigue. In other words, an employee's performance can be influenced by decreased levels of motivation, impaired balance and increased fatigue caused by working in a moving environment.

The physical working environment not only affects employees' job performance and productivity, but it also influences customers' responses and behaviour intentions (Baker, Parasuraman, Grewal, & Voss, 2002; Brüggen, Foubert, & Gremler, 2011). According to Zeithaml and Bitner (2003), elements of the exterior and interior physical environment communicate the product or service quality to customers, setting expectations and creating service experiences, which ultimately affect customers' overall satisfaction with the service encounter (Bitner, 1992).

In the context of airlines, the physical environment includes the gate control area, the interior and exterior of an aircraft, airline tickets, in-flight meals and beverages, the uniforms of flight attendants and other frontline employees, and the airline's website. In other words, these factors (in the physical environment) may influence the responses and behaviour of passengers travelling with the airline. However, the challenge of service firms such as airlines is to design an optimal service environment that supports the needs of both employees and customers since customer perceptions of a high-quality service environment and employees' idea of an appropriate working environment may differ (Zeithaml & Bitner, 2003).

It is therefore clear that the working environment influences both employees and customers. However, the dimensions of the working environment differ from one study to the next. In the following section the physical working environment is reviewed which include decorative styles and office layout, outdoor office views, resources, and ambient properties (Jain & Kaur, 2014; Saidi *et al.,* 2019).

a. Decorative styles and office layout

Decorative or interior styles in working environments include signs, colours, and artwork. According to Becker and Steele (1995), decorative styles can lead to the development of an identity and purpose among employees. However, it is not necessarily the items (signs, colours, and artwork) that generate identity and purpose, but rather the way in which these items are used in a working environment.

Interior office designs may also influence employee performance as reported by El-Zeiny (2012), who conducted a study among office employees in Egypt. In addition, Lee (2010) argues that office layouts affect both the satisfaction and performance of employees by reporting that employees' working in an open-plan office are more satisfied and perform better than those working in the confined space of an enclosed office. However, according to Hedge (1982) and Haynes (2008), there is no evidence of increased performance among employees who work in an open-plan office compared to those who work in an enclosed office space. Therefore, the influence of office layouts on employee performance is undetermined and calls for more research on different office layouts and its influence on job performance.

The working environment of international flight attendants, assessed in this study, consists of the inside of an aircraft cabin, which, to some extent, is a sterile (functional, clean, and simple) environment. However, by using decorative styles commercial airlines strive to design and configure the inside of their aircraft cabins to reflect the corporate identity and purpose of the airline, which in turn might affect the identity and purpose of the airlines' employees.

b. Outdoor office views

Outdoor views can influence the morale and environmental satisfaction of employees (McCoy, 2002). According to Kaplan, Talbot and Kaplan (1988), employees with outdoor office views of concrete or man-made structures such as roads or buildings experience higher levels of job stress when compared to those with outdoor office views of natural elements such as trees or grass. In addition, employees with office views of natural elements may experience higher levels of job satisfaction than those with no outdoor views or views of roads or buildings.

In another study conducted among hospital patients in Pennsylvania, the results indicate that patients who stay in rooms with windows that face natural elements such as trees or grass recover quicker than those who stay in rooms with windows that face concrete structures (McCoy, 2002). Therefore, it can be argued that outdoor office views of natural settings may increase employees' overall health and well-being (Ulrich, 1984). However, international flight attendants hardly get to sit back, relax and enjoy their 'office' views which include blue skies, mountains and sunset clouds as their focus is on taking care of up to 550 passengers per flight.

In addition to outdoor office views, McCoy (2002) suggests that people place a high value on visual contact with the natural environment in observing daylight, weather, and seasonal changes. However, international flight attendants do not experience either of these elements as 'natural' since they spend most of their time in the confined space of a commercial aircraft where light is artificial and the weather and/or seasonal changes are dependent on different time zones. In other words, the working environment of international flight attendants does not always allow for visual contact with the natural environment which many others value highly.

c. Resources

In a study conducted among office employees, 52 per cent of the respondents highlighted the importance of having "access to the necessary resources, including facilities, equipment, information, funds, and people" (Amabile, 1988:147; 1993). The role of time and physical resources were assessed in this study as international flight attendants often do not have enough time to complete their duties (Damos *et al.,* 2013) and have limited physical resources such as food, beverages, condiments and even toiletry items available inside the aircraft cabin.

d. Ambient properties

With regard to the working environment, ambient properties such as thermal conditions, illumination, sound, and air quality should be considered. Thermal comfort, which refers to human satisfaction with the thermal environment, depends on the type of work that a person does, the layers of clothing a person is wearing, and the length of time spent in their working environment. According to McCoy (2002), there is a relationship between thermal conditions and job performance. For example, high office temperatures hinder performance among employees performing hard physical labour, whereas low office temperatures decrease performance among those performing fine motor skills.

Illumination or otherwise lighting can include natural daylight or electric lighting. Some studies suggest that natural light is superior to artificial light as it increases job performance (McCoy, 2002). However, these studies are scarce. In addition, improper lighting may cause glare that can lead to headaches and stress, whereas proper lighting can prevent accidents in the workplace (McCoy, 2002; Veitch, 2001). For example, in the context of aviation, poor visual discriminability due to an aircraft departing during the night and taking off in bad weather conditions have been related to accidents in aviation (Helander, 2005). It can be argued that the quality of lighting in a working environment influences the safety and well-being of the employees working in that environment. However, the use of artificial lighting in an aircraft is unavoidable, because of night-time departures.

Working environments have certain 'office sounds'. These sounds may be pleasing to one ear and at the same time irritating to another. Open-plan office sounds may include ringing telephones, printers and scanners, elevator doors opening and closing, and the sound of people typing on their keyboards. In addition, airport sounds may include passenger announcements, boarding calls, aircraft noise, in-store music (depending on the store inside the airport), and the sounds of people talking while waiting for their flights. Noise, however, can be referred to as unwanted sounds, and sounds classified as noise may be different for one person to the next. It is suggested that office noise may increase employees' dissatisfaction with their working environment (Sundstrom, Town, Rice, Osborn & Brill, 1994). Furthermore, office noise can influence employees' job performance (McCoy, 2002). The sounds on board of an aircraft that may affect international flight attendants and passengers include the landing gear being retracted or extended, the extension of the aircraft flaps and spoilers, and the noise related to friction and turbulence.

Finally, air quality is another important component in the physical working environment. Jones (1999) found a direct relationship between indoor air quality (IAQ) and individual health, arguing that diseases such as lung cancer, severe allergies, sick building syndrome (SBS), and respiratory infection can be related to poor IAQ. The air quality inside aircraft cabins can be regulated by on-board environmental control systems (ECS). However, according to Crump (2016), the relationship between indoor cabin air quality and passenger and crew health is an ongoing issue in the aviation industry. Crump's (2016) statement is confirmed by the European Aviation Safety Agency (EASA) as they reported the following: "The quality of the air that passengers and air crews are exposed to on-board commercial transport airplanes has been the basis of a continuing debate over the last 60 years, both from the health and safety points of view" (EASA, 2014). Therefore, IAQ remains a topic of interest in the context of assessing the physical working environment of commercial flight attendants and pilots.

2.5.1.2 Office types

Working environments can be classified as one of four office types, namely hives, cells, dens, and clubs (Duffy, 1997). A *hive* is a workspace where employees are given precise instructions on how to conduct tasks. Moreover, a hive office space provides little interaction and little autonomy (see Figure 2.3). A *cell* office space refers to a working environment where there is little interaction and high autonomy (again see Figure 2.3). In addition, a cell office space typically comprises an environment where there are individual workstations with high partitions or enclosed office spaces.

A *den* office space refers to an environment where people need to combine their skills and work together in order to be efficient. Dens generally offer high levels of interaction and little autonomy. Finally, a *club* office type is a working environment where employees are required to work both individually and collaboratively in order to reach complex goals. In a club environment, there are high levels of interaction and high levels of autonomy (Duffy, 1997). International flight attendants are required to work well in teams as well as individually. They are also expected to realise complex goals as international flight attendants have intricate duties and responsibilities (refer to company service delivery expectations, Chapter 3, section 3.4.1). In light of the aforementioned discussion, the working environment of international flight attendants can be seen as a *club* environment.

International flight attendants spend most of their time in the confined space of a commercial aircraft 36 000 feet above sea level. Therefore, it can be argued that the working environment of international flight attendants is unique compared to other working environments. Subsequently, the unique working environment factors of international flight attendants identified in this study were: company service delivery expectations, customer service training, teamwork, supervisory support, cultural differences, unreasonably demanding passengers, limited physical resources, limited time/time pressure, and limited physical space. These working environment factors were assessed in terms of their influence on the service-delivery and service-recovery performance of international flight attendants.

Figure 2.3: Office types
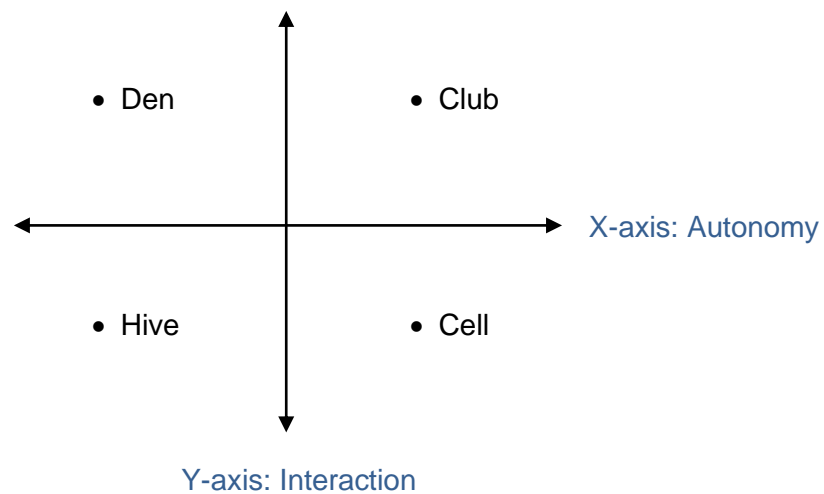
Source: Adapted from McCoy (2002)

2.6 SUMMARY

The theoretical basis of this study consisted of four theories that were introduced and discussed in this chapter. These are the JD–R model, Hochschild's emotional labour theory, Rawls' theory of justice, and the environmental psychology theory (including ergonomics).

The JD–R model was included in the study because the independent variables of this study could be categorised as job demands and job resources. Hochschild's emotional labour theory was included since emotional labour, as described by Hochschild, is a common occurrence among international flight attendants who are the main actors in this study. Rawls' theory of justice was included because service-recovery performance was one of the main variables in this study. Finally, environmental psychology was included, given that the theoretical models proposed in this study assessed the working environment of international flight attendants and its influence on service-delivery and service-recovery performance.

35

In the next chapter, the service delivery (including the service-delivery and service-recovery performance) of international flight attendants and the working environment factors or independent variables that might influence their service performance are discussed. A literature review is provided investigating the dependent, independent, and intervening variables. Alongside the literature review, the two theoretical models proposed in this study are also introduced.

CHAPTER 3
THE PROPOSED THEORETICAL MODELS

"A simple please and thank you makes a big difference in our lives,
as we are often looked down on... Just hearing those words [please and thank you]
make us feel as though we are still part of the human existence"
(Anonymous flight attendant, 2020a).

3.1 INTRODUCTION

The focus of this study was on the working environment of international flight attendants employed by four- and five-star full-service airlines. In this chapter, two theoretical models are proposed depicting the unique working environment factors that could influence international flight attendants' service-delivery and service-recovery performance. The literature as well as feedback from former and current international flight attendants was taken into consideration when reviewing the factors or independent variables that could influence crew members' performance. These factors included company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources. In addition, the effect of fatigue and job experience as intervening variables was assessed.

However, in order to fully understand the job of international flight attendants and their unique working environment, the service delivery of frontline employees in the context of services marketing is discussed first.

3.2 SERVICES MARKETING AND SERVICE DELIVERY

The purpose of marketing is to identify human needs and to meet them profitably (Kotler & Keller, 2012). According to the American Marketing Association (2007), the term 'marketing' can be defined as "the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large".

37

The following entities can be marketed: goods, services, events, experiences, persons, places, properties, firms, information, and ideas (Kotler & Keller, 2012). In the context of this study, the service delivery and service recovery of international flight attendants was assessed. Therefore, the focus was on the marketing of services or otherwise known as *services marketing*. Services are deeds, processes, and performances (Wilson *et al.*, 2012) delivered by frontline employees and service firms (Lamb, Hair, McDaniel, Boshoff, Terblanche, Elliot & Klopper, 2015). Examples of frontline employees' services include banking employees who offer financial services, flight attendants who deliver meals and beverages to passengers, front desk staff or receptionists who welcome guests at lodges or hotels, and nurses or doctors who take care of hospital patients.

The characteristics of services include intangibility, heterogeneity, inseparability, perishability, and lack of ownership (Wilson *et al.,* 2012). According to Berndt and Boshoff (2018), intangibility refers to the fact that services cannot be felt, smelled, or seen compared to physical products that are tangible items. In addition, the quality or standard of service deliveries vary from one service encounter to the next because of human involvement (Mudie & Pirrie, 2006). Therefore, services can be described as heterogeneous. Services are also considered to be inseparable because service delivery (or the production of services) and the consumption of services cannot be separated during a service encounter. Moreover, services are perishable compared to physical products because a service cannot be 'saved' or stored away for later use (Wilson *et al.*, 2012). As stated by Berndt and Boshoff (2018), there is no 'transfer of ownership' that can be related to services, which indicates a lack of ownership in comparison to physical products that can be owned by an individual consumer.

The unique characteristics of services make the marketing of services more challenging than the marketing of physical products (Lamb *et al.*, 2015). For example, the traditional marketing mix was extended to create what is known as the services marketing mix (Figure 3.1), because of the complexity of human involvement during service delivery. The traditional marketing mix consists of product, price, promotion, and place, whereas the services marketing mix also includes process, people, and physical evidence (Berndt & Boshoff, 2018; Mudie & Pirrie, 2006).

Figure 3.1: The services marketing mix

Product	• Product variety, quality, design, brand name, packaging and size
Price	• List price, discounts, allowances, payment period and credit terms
Promotion	• Sales force, advertising, public relations, and direct marketing
Place	• Channels, coverage, assortments, locations, inventory, and transport
Process	• Procedures, activities, discipline and structure
People	• Employee and customer relations
Physical evidence	• Physical surroundings, appearance, design, signage and equipment

Source: Adapted from Kotler and Keller (2012); Mudie and Pirrie (2006)

Firms use the services marketing mix as a conceptual framework to develop their marketing strategies. *Product* refers to goods or services provided by firms and marketed to potential customers (Kotler & Keller, 2012). These goods or services consist of the following components: product variety, quality, design, brand name, packaging, and sizes (refer to Figure 3.1). *Price* refers to the economic value attached to the goods or services provided by firms. According to Išoraitė (2016), price is one of the most important features in the services marketing mix, because of its flexibility and potential influence on competitive advantage. *Promotion* can be used to create both awareness of the product or service as well as to shape the image of firms (Thabit & Raewf, 2018). Promotion can also increase sales or profit (Išoraitė, 2016). Furthermore, *place,* or distribution, involves marketing channels, coverage, locations, inventory and transportation. Firms use distribution channels to move products from one location to another in order to reach the end-consumer (Singh, 2012). *Process* refers to the 'how' of service delivery (Yelkur, 2000) and may include procedures, activities, discipline and the behaviour of frontline employees. In this study, the process involved the service delivery of international flight attendants.

According to Bitner (1991), in the services marketing mix, *people* refer to the human involvement and relations during service delivery, which include both employees and customers. Finally, *physical evidence* refers to the physical surroundings or space where the service is provided and may include appearance, design, signage, and the use of equipment (Mudie & Pirrie, 2006).

There are many ways to assess the service quality of firms and their employees. However, the most recognised measurement tools in the assessment of service quality are SERVQUAL and SERVPERF (Jain & Gupta, 2004). SERVQUAL is a disconfirmation-based approach that assesses the quality of a service by comparing customers' perceptions with their expectations of a service (An & Noh, 2009; Mudie & Pirrie, 2006). To explain, when the service-delivery performance of frontline employees is equal to or better than customers' expectations of a service, customers are generally satisfied. However, when the service-delivery performance of frontline employees is lower than customers' expectations of a service, customers are generally dissatisfied (Cassidy-Smith *et al.,* 2007). SERVQUAL consists of five dimensions, namely reliability, responsiveness, assurance, empathy, and tangibles (Parasuraman, Zeithaml & Berry, 1988). According to Stodnick and Rogers (2008), reliability can be defined as the ability to perform services dependably and accurately, whereas responsiveness can be defined as the willingness of the service firm and frontline employees to help customers. Moreover, assurance indicates the ability of the service firm to inspire trust and involves the courtesy and knowledge of employees. Udo, Bagchi and Kirs (2011) suggest that empathy refers to the attention given to customers and whether frontline employees are caring. Finally, tangibles refer to physical equipment, facilities, the presence of frontline employees and the communication mediums used (Mudie & Pirrie, 2006).

In comparison, SERVPERF is a performance-based approach that is used to assess service quality (Cronin & Taylor, 1992). The difference between SERVQUAL and SERVPERF is that SERVQUAL assesses five dimensions of service quality that includes the difference between customers' expectations and perceptions of service quality, whereas SERVPERF only assesses firms' and employees' performance levels while disregarding the expectations of customers.

Adil, Al Ghaswyneh and Albkour (2013) argue that SERVPERF is a more efficient service quality measure and suggest that researchers use SERVPERF when conducting marketing research. Jain and Gupta (2004) believe the opposite by suggesting that SERVQUAL outperforms SERVPERF because of its higher diagnostic power. According to Carrillat, Jaramillo, and Mulki (2007), SERVQUAL and SERVPERF are both valid measures of service quality.

Services marketing is primarily about keeping promises (Wilson *et al.*, 2012). As displayed in Figure 3.2, firms make promises to customers (external marketing). For example, high-end airlines promise five-star service experiences to their passengers. These promises are enabled by both the airline and its employees (internal marketing). However, frontline employees are the ones responsible for delivering these promises (interactive marketing). For example, international flight attendants are required to 'keep the promises' that airlines make by providing five-star service experiences to passengers. In this study, the service-delivery and service-recovery performance of international flight attendants were assessed.

Figure 3.2: The services triangle
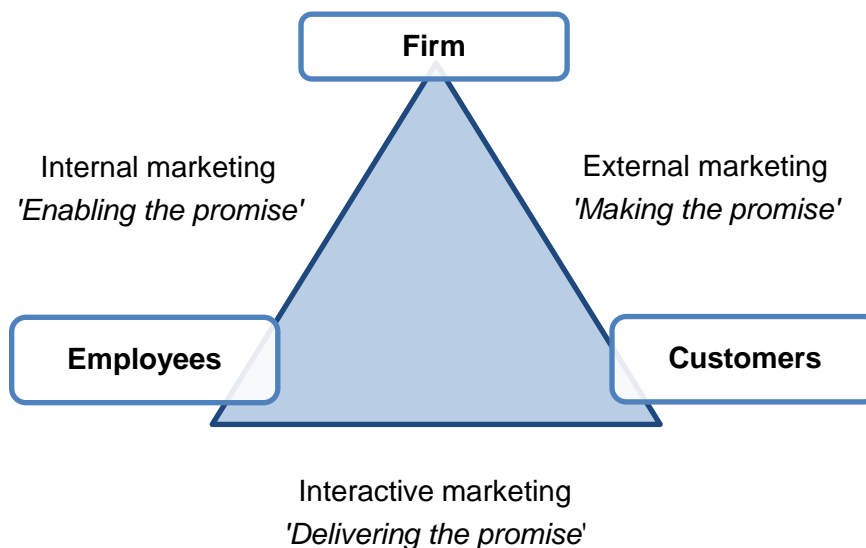
Source: Adapted from Bitner (1995)

3.2.1 The service delivery of international flight attendants

The focus of this study was on the influence of the working environment on the service-delivery and service-recovery performance offered by international flight attendants working for full-service airlines with four- and five-star Skytrax ratings. The service delivery and service recovery of these international flight attendants may include the following: welcoming passengers on board; distributing headsets, amenity kits and refreshing towels; serving beverages and meals to passengers; selling duty-free items; handling passenger complaints; taking care of unaccompanied minors; and assisting passengers with additional requests.

An airline is a service firm that provides air transportation services to passengers (Tavassoli, Faramarzi & Saen, 2014). According to Bonsor (2021), the types of airline are international, national and regional referring to airlines operating flights internationally (across the world), nationally (within one country) and/or regionally (only within a certain area or region in a country). Airlines can also be classified as offering full-service, low-cost, or charter flights (Hamill, 2016). As stated before, a full-service airline is a commercial airline that offers scheduled routes. Full-service airlines include a range of additional services in the ticket price such as a baggage allowance and in-flight meals and beverages. A low-cost airline is also a commercial airline. However, with low ticket prices, low-cost airlines have additional costs related to a baggage allowance and meals and beverage services. Finally, a charter airline is an airline that leases their aircraft to service firms and/or individuals and therefore does not have scheduled routes (Hamill, 2016).

Skytrax is an international air transport rating firm that evaluates airlines (and airports) using a detailed, professional analysis of their quality standards (Skytrax, 2021). According to Skytrax, some of the worlds' four-star airlines are Air Canada, Air France, Air New Zealand, Bangkok Airways, British Airways, China Airlines, China Southern Airlines, Emirates, Etihad Airways, Finnair, KLM Royal Dutch Airlines, Korean Air, Qantas, South African Airways, Thai Airways and Virgin Atlantic (4-Star Airlines, 2020). In addition, some of the worlds' five-star airlines are ANA All Nippon Airways, Asiana Airlines, Cathay Pacific Airways, EVA Air, Garuda Indonesia, Hainan Airlines, Japan Airlines, Korean Air, Lufthansa, Qatar Airways, and Singapore Airlines (The World's 5-Star Airlines, 2020).

As stated earlier, an airline is first and foremost a service firm. However, four- and five-star full-service airlines that strive to provide excellent service quality have shifted their focus from being merely a service provider to being a provider of *service experiences* (Fetais, Al-Kwifi, Ahmed & Tran, 2020, 2020; Wilson *et al.,* 2012:). International flight attendants working for these high-end airlines play a significant role in the delivery of these experiences since they are the ones providing the service to passengers (Ahn & Lee, 2011; Wilson *et al.,* 2012). However, flight attendants have not been adequately studied (McNeely *et al.,* 2018). More specifically, not much consideration has been given to the tasks and responsibilities of international flight attendants and the factors that might influence their service performance (Damos *et al.,* 2013). One of these factors, for example, is the effect of fatigue, which is a common occurrence among international flight attendants as a result of their work schedules and working environment (MacDonald *et al.,* 2003).

Against this background, the working environment of international flight attendants, which included company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources was investigated in this study. Referring to Model 1 and Model 2 (depicted in Figures 3.6 and 3.7), the influences of these factors on the service-delivery and service-recovery performance of international flight attendants were empirically assessed. In the following sections, the dependent, independent, and intervening variables as illustrated in the proposed models are discussed.

3.3 THE DEPENDENT VARIABLES

A dependent variable is a variable that is explained or predicted by other variables (Zikmund, Babin, Carr & Griffin, 2013). The dependent variables in this study were service-delivery performance (SDP) and service-recovery performance (SRP).

3.3.1 Service-delivery performance

Service-delivery performance can be defined as the actions and/or behaviours of frontline employees that ultimately increase efficiency, service quality and customer satisfaction (Chen & Kao, 2014).

According to Bettencourt and Brown (2003:395), service-delivery performance refers to frontline employees' providing services in a "conscientious, responsive, attentive, and courteous manner". A frontline employee is someone who directly interacts with customers (Grossmann, 2020) and can be seen as *the service*, *the brand*, *the firm*, and *the marketer* from the customer's perspective (Wilson *et al.,* 2012). Frontline employees are considered a key input for service firms wanting to provide service excellence, maintain a competitive advantage, and ensure business success (Lamb *et al.,* 2015; Wirtz, Heracleous & Pangarkar, 2008; Wilson *et al.,* 2012). However, the job of a frontline employee is among the most demanding jobs in the service industry as frontline employees are expected to be fast and efficient when executing tasks but at the same time friendly and helpful when dealing with customers (Wirtz *et al.,* 2008). Examples of frontline employees include nurses, doctors, hotel front desk staff, client-facing banking or insurance employees, sales and retail staff, teachers or educators, and flight attendants.

According to Chang and Chiu (2009), flight attendants play a vital role in shaping customer outcomes as they represent the majority of service employees in the airline industry. Since superior service quality is considered a prerequisite for success in competitive industries such as the airline industry (Ahn & Lee, 2011; Parasuraman *et al.,* 1988), international flight attendants working for these high-end airlines are expected to deliver high-quality services to passengers (Ahn & Lee, 2011).

The service profit chain introduced by Heskett, Jones, Loveman, Sasser and Schlesinger (1994) and illustrated in Figure 3.3 suggests that internal service quality is the starting point for service firms to realise their goal of revenue growth and profitability. In addition, the importance of employee satisfaction is highlighted in the chain as employee satisfaction precedes customer satisfaction and loyalty. Wilson *et al.* (2012) argue that employee satisfaction is not a direct cause of customer satisfaction but that they are interrelated components that feed off each other. According to Bowen, Gilliland, and Folger (1999), fair treatment of firms towards their employees can result in both employee and customer satisfaction as employees who are treated fairly by their firms naturally treat their customers better. In other words, service firms that focus on employee satisfaction and well-being may very well be equally successful in increasing customer satisfaction and loyalty.

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Figure 3.3: The service profit chain
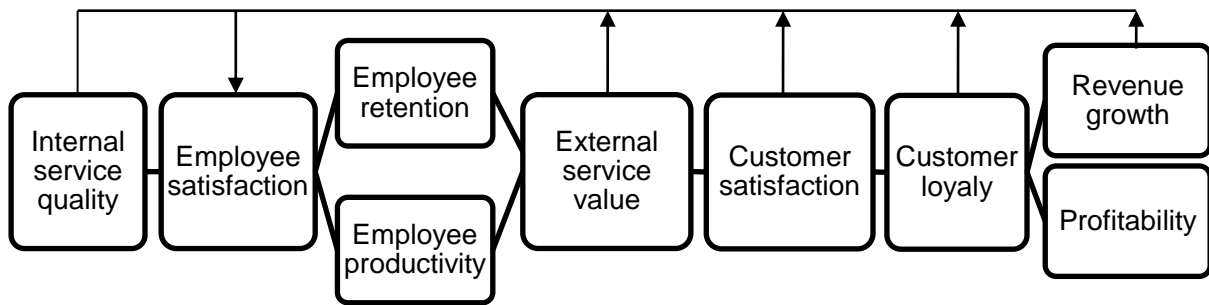
Source: Adapted from Heskett *et al.* (1994)

Employees' behaviour and service-delivery performance can also be influenced by a firm's culture, values, and norms (Wilson *et al.,* 2012). For example, providing service excellence can be considered as second nature for firms that possess a service-oriented culture compared to firms that do not have one but have a creative or innovative corporate culture instead. However, excellent service delivery is crucial for the success of *any* service firm (Chen, Tsou, & Huang, 2009). Therefore, service-delivery performance and the factors that might influence frontline employees' service-delivery performance are particularly important.

Operationalisation of service-delivery performance:

International flight attendants provide in-flight services to passengers on board commercial flights. In this study, service-delivery performance refers to the effectiveness or success of international flight attendants' in-flight services with regard to efficiency and quality (Chen & Kao, 2014); in other words, how well international flight attendants deliver their in-flight services. These services include the following: being friendly, cheerful, and courteous when greeting and assisting passengers on board an aircraft; serving beverages and meals (including snacks, light meals, and three-course meals) in a conscientious (diligent or thorough) manner; making in-flight passenger announcements; tidying the galley, cabin and toilet areas; and being both attentive and responsive to passenger requests (Bailey & McCollough, 2000; Bettencourt & Brown, 2003). In this study, service-delivery performance was measured from the flight attendants' perspective and not from the supervisors or passengers' perspective.

45

3.3.2 Service-recovery performance

A service failure can be defined as a service delivery that fails to meet customers' expectations and therefore results in customer dissatisfaction (Wilson *et al.,* 2012). When a service failure occurs, frontline employees are typically responsible to perform service-recovery performance. Service-recovery performance can be defined as frontline employees' perceptions of their own actions and abilities to resolve a service failure to the satisfaction of the customer (Babakus, Yavas, Karatepe & Avci, 2003). Returning customers to a state of satisfaction (a result of service recovery) can be referred to as 'satisfaction with service recovery' or 'post-recovery satisfaction' and can be measured using an instrument called RECOVSAT. RECOVSAT is a measurement instrument that consists of six dimensions, namely atonement, communication, feedback, empowerment, tangibles, and explanation (Boshoff, 2005).

Service failure and consequently service recovery is a common occurrence in air travel (Migacz *et al.,* 2018) and can be explained in the following example: A flight attendant spills a glass of juice on a passenger's table. Therefore, the flight attendant has to perform service-recovery performance by first apologising to the passenger, secondly, cleaning the table, thirdly, offering napkins to the passenger and, fourthly, providing the passenger with a new glass of juice. In other words, service recovery is about acknowledging a wrong and making it right (Grönroos, 2009).

Examples of service recovery strategies performed by frontline employees can include, but are not limited to (1) assistance or problem-solving, (2) offering an apology, (3) offering compensation, (4) providing an explanation, (5) prompt handling of the service failure, and (6) being courteous (Levesque & McDougall, 2000; Liao, 2007). The first strategy, namely assistance or problem-solving, can be defined as employees' taking action to correct the mistake and solve the problem (Levesque & McDougall, 2000). The second strategy, offering an apology to the customer, is an effective strategy when dealing with minor service failures. However, in situations where the level of severity of the service failure is high, an apology alone will not suffice in returning the customer to a state of satisfaction (Mattila, 2001).

Compensation, which is the third service recovery strategy, includes monetary benefits or rewards such as replacements, discounts, or coupons (Leong & Kim, 2002). According to Wong (2004), customers from different countries or cultural backgrounds react differently to compensation during service recovery (refer to cultural differences, Chapter 3, section 3.4.5). Therefore, frontline employees cannot always use the same type of compensation for every customer.

Following compensation, frontline employees can also provide customers with a causal explanation, which is the fourth service recovery strategy. Providing customers with a causal explanation includes open communication, offering information and showing some understanding of the reasons for the service failure (Liao, 2007). The fifth service recovery strategy is prompt handling of the service failure. Prompt handling of the service failure refers to a quick response or recovery time from frontline employees. Finally, the last service recovery strategy discussed in this section refers to frontline employees being courteous, which include being friendly, patient, and polite when interacting with complaining customers (El-Helaly, Ebeid & El-Menbawey, 2015).

In addition to these six service recovery strategies, Bies (1987) and Folger and Cropanzano (1998) propose that providing an explanation (the fourth strategy) can be divided into four subcategories, namely excuses, justifications, referential accounts, and apologies. Excuses refer to making circumstances sound less severe than they are in order to liberate the service firm of its responsibilities in terms of the service failure. Justifications involve a service firm's admitting responsibility, but in the same process legitimising or validating their actions (Folger & Cropanzano, 1998). Moreover, referential (or reframing) accounts involve minimising the perceived unfavourability of the service failure by invoking what is known as 'downward comparisons' (i.e., referring to those who are worse off because of the service failure in order to feel better about one's own circumstances). Finally, apologies involve an admission of guilt and expression of remorse (Bradley & Sparks, 2012). In other words, excuses, justifications, referential accounts, and apologies form part of providing an explanation as the fourth service recovery strategy. However, an excuse, justification, or referential account does not necessarily involve an admission of guilt or expression of remorse as is the case when offering an apology.

Furthermore, as customers have different expectations for various levels of failure severity, the effectiveness of these service recovery strategies may vary (Johnston & Fern, 1999). Therefore, service firms should prepare their frontline employees by means of adequate customer service training to be able to handle a variety of service failure situations. Customers (or passengers in the case of this study) expect fair treatment during a service recovery. As discussed in Chapter 2 (Rawls' theory of justice), customers expect procedural justice, interactional justice and distributive or outcome justice during the service recovery process performed by frontline employees (Wilson *et al.,* 2012). Procedural justice refers to the policies and rules for the complaint handling or service recovery process. Interactional justice can be defined as interpersonal treatment during a service recovery. Finally, distributive justice refers to the outcome or result of a service recovery, usually in the form of compensation (Migacz *et al.,* 2018). In other words, in their assessment of service-recovery performance, customers assess the policies and procedures that frontline employees follow (procedural justice), the way frontline employees treat customers (interactional justice), and the potential tangible outcomes received by customers (distributive justice).

According to Chang and Chang (2010), procedural justice and interactional justice positively influence the post-recovery satisfaction of airline passengers, which in turn affect their loyalty. McCollough *et al*. (2000) also conducted a study among airline passengers and report that distributive justice and interactional justice specifically increase the post-recovery satisfaction of airline passengers. In addition, several studies report a relationship between all three dimensions of justice and the post-recovery satisfaction of customers in various hospitality industries such as hotels, restaurants, and airlines (Ding *et al.,* 2015; Kim *et al*., 2009; Migacz *et al.,* 2018; Nikbin *et al.,* 2015; Ok *et al.,* 2005; Siu *et al.,* 2013; Wen & Chi, 2013). Therefore, it can be argued that procedural, distributive, and interactional justice influence customers' evaluation of frontline employees' service-recovery performance.

As displayed in Figure 3.4, customers respond to service failures in different ways (Wilson *et al.,* 2012). Some customers complain directly to the service provider whereas others spread negative word-of-mouth by complaining to their friends, family, or colleagues. In addition, some customers do not complain at all.

However, whether customers complain or not, when a service failure occurs, they are faced with the decision of whether they want to stay with the initial service firm or switch to a competitor firm.

Figure 3.4: Customer complaint actions following a service failure
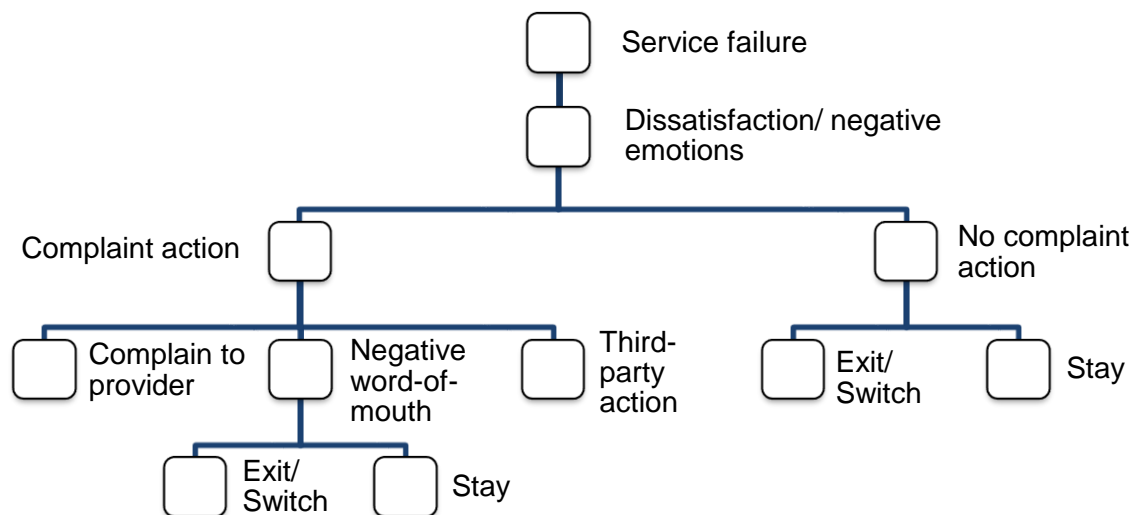
Source: Wilson *et al.* (2012:343)

An inadequate response to a service failure or failed service-recovery performance can be referred to as a 'double deviation' and may result in customer dissatisfaction, which in turn can lead to direct complaining, negative word-of-mouth, and switching behaviour (Bitner *et al.,* 1990; Mattila & Ro, 2008). However, if properly executed, frontline employees' service-recovery efforts may result in a service recovery paradox, which refers to a situation where a customer is more satisfied after a service recovery than before the service failure occurred (McCollough & Bharadwaj, 1992). In conclusion, effective service-recovery performance can lead to customer loyalty, positive WOM, and enhanced bottom-line performance (Wilson *et al.,* 2012), making the service-recovery performance of frontline employees particularly important among service firms.

<u>Operationalisation of service-recovery performance:</u>

A service failure can be defined as a service delivery that fails to meet customers' expectations and therefore results in customer dissatisfaction (Wilson *et al.,* 2012). In this study, service-recovery performance refers to international flight attendants' perceptions of their ability to resolve service failures and to return passengers on board commercial flights to a state of satisfaction (Babakus *et al.,* 2003). As explained earlier, frontline employees make use of certain service recovery strategies to resolve service failures which include but are not limited to (1) assistance or problem-solving, (2) offering an apology, (3) offering compensation, (4) providing an explanation, (5) prompt handling of the service failure and (6) being courteous (Levesque & McDougall, 2000; Liao, 2007). In this study, service-recovery performance was measured from the flight attendants' perspective and not from the supervisors or passengers' perspective.

3.4 THE INDEPENDENT VARIABLES

An independent variable is a variable that is expected to influence a dependent variable (Zikmund *et al.,* 2013). There were nine independent variables in this study which were categorised into the following four groups: organisational, crew, customer, and environmental factors (refer to Figures 3.6 and 3.7).

3.4.1 Company service delivery expectations

As outlined earlier, international flight attendants' key responsibilities are safety, security and service delivery (Damos *et al.,* 2013). With regard to safety, flight attendants have to ensure that no passenger or crew member gets injured during a flight. During turbulence or critical flight times such as take-off and landing flight attendants are responsible to make sure that passengers are seated with their seatbelts fastened, that hand luggage is stowed away in the overhead compartments or under the seats, and that service equipment like carts/trolleys, trays and other service items are stowed away in their proper locations.

As far as security duties are concerned, flight attendants have to make sure that no undesirable objects are brought onto the aircraft and that no strange activities or behaviour take place during the course of the flight that may cause harm to anyone on board or to the flight process (Damos *et al.,* 2013). Finally, in terms of service duties, flight attendants, especially those working for four- and five-star international full-service airlines, are expected to deliver high-quality services at all times. These services include serving beverages, light meals or three-course meals, tidying the galley (kitchen area), cabin and toilets, attending to general passenger requests and making in-flight announcements.

Damos *et al.* (2013) examined the potential conflict between flight attendants' service performance standards and the prompt execution of their safety and security duties. These authors report that flight attendants often find it difficult to complete all of their safety and security duties because they have too many other service-related tasks at hand. Flight attendants not having enough time to complete their safety and security duties pose a problem, not only because it can become a safety hazard for everyone on board, but also because safety, security and service are not the only responsibilities flight attendants have (Joyner, 2018). International flight attendants are also brand ambassadors, supposed-to-be administrative geniuses, trained first aiders, if-need-be fire fighters, carers of unaccompanied minors, and therapists on board an aircraft. Flight attendants often have to calm passengers' nerves, solve in-flight entertainment (IFE) problems, resolve seating issues, and clean the toilets. In short, whatever the situation demands at 36 000 feet above sea level, flight attendants have to fulfil their part. After all, they are the ones who may be expected to evacuate hundreds of passengers in less than 90 seconds in emergency situations.

International flight attendants also have to follow strict rules on their physical appearance. They are expected to be well-groomed at all times and follow strict guidelines on how to wear their hair, nails and make-up, which can be stressful for them to maintain. In addition, aside from routine assessments where flight attendants should be prepared to be assessed on board an aircraft, some airlines strategically place managers on their flights to record crew members' performance.

This method of evaluation (called 'mystery shopping') can be quite stressful and demanding for flight attendants as they do not know if and when a manager might be seated in front of them (Damos *et al.,* 2013). Therefore, they could be serving someone from top management without knowing their performance is being observed.

It is clear that the job of being an international flight attendant is far more complex and demanding than simply being a 'waitress in the sky', as some might say. Therefore, taking into account the long list of international flight attendants' actual responsibilities (both formal and informal), the service delivery expectations of four- and five-star full-service airlines are considered to be quite high.

3.4.1.1 Company service delivery expectations: service-delivery performance

In this study, company service delivery expectations was measured as role overload. Role overload can be described as situations in which frontline employees feel that too many responsibilities or activities are expected of them considering the time they have available, their abilities, and other constraints (Bolino & Turnley, 2005; Rizzo, House & Lirtzman, 1970).

As stated before, international flight attendants are subjected to 'undercover' performance assessments by top management as well as routine performance assessments (up to four a year) conducted by their on-board supervisors. According to former and current international flight attendants, it is very difficult to focus on service delivery while being assessed at the same time, since the service delivery expectations from the airlines' side are considered quite high (Feedback from informal discussions, 2020). In addition, Nesthus, Schroeder, Connors, Rentmeister-Bryant and DeRoshia (2007) suggest that flight attendants' workload have increased over time owing to changes in security responsibilities since 9/11. Therefore, this study proposed that unrealistically high company service delivery expectations (or role overload) might influence the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

3.4.1.2 Company service delivery expectations: service-recovery performance

According to former and current international flight attendants, service recovery can be quite stressful as crew members are responsible to return the passenger to a state of satisfaction immediately (Feedback from informal discussions, 2020). As stated by a former flight attendant: "There is a lot of pressure on us to perform high-quality services at all times. However, this pressure is increased when service failures occur, and service recovery is necessary" (Anonymous flight attendant, 2020b). Taking into consideration the long list of flight attendants' formal and informal responsibilities, and the fact that required service recovery efforts increase their levels of stress, this study proposed that unrealistically high company service delivery expectations might influence the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

Operationalisation of company service delivery expectations:

Although international flight attendants' main responsibilities are safety, security and service delivery (Damos *et al.,* 2013; Law, 2019) these are not their only responsibilities (Joyner, 2018). As noted earlier, flight attendants are also brand ambassadors, supposed-to-be administrative geniuses, trained first aiders, if-need-be fire fighters, carers of unaccompanied minors and therapists on board. Moreover, flight attendants working for four- and five-star airlines are expected to provide nothing less than excellent service-delivery and service-recovery performance. Against this background, it was suggested that international flight attendants may be faced with unrealistically high company service delivery expectations. In this study, company service delivery expectations was measured as role overload since the flight attendants interviewed in this study expressed their views that four- and five-star airlines expect too much from them considering the time available, their abilities and other job constraints (Bolino & Turnley, 2005; Rizzo *et al.,* 1970).

The construct (company service delivery expectations) was measured using the following items:

1. The amount of work I usually have prevents me from doing my job to the best of my ability
2. I am not given enough time to do what is expected of me in my job
3. I often have too much work for one person to do
4. The performance standards on my job are very high
5. I can do a better job if I have more time available

3.4.2 Customer service training

International flight attendants receive different types of training before they are allowed to come into contact with passengers. They receive training in the different types of aircraft, dangerous goods (inside the aircraft), emergency equipment and procedures, fire-fighting, ditching (in case of a water landing), security awareness, first aid (aviation medicine), customer services, crew resource management (CRM) and emotional intelligence training (Cabin crew course list, 2021). However, this study centred on the customer service training that international flight attendants receive.

Customer service training refers to the information, practices and/or policies that are used to train and equip frontline employees to offer high levels of service quality, to handle customer complaints, and to deal with dissatisfied customers (Crawford & Riscinto-Kozub, 2011; Hamir, Salleh, Mohd Said, Ariffin & Ahmad, 2020; Yavas & Babakus, 2010). Not only do well-trained employees perform more effectively than untrained or less trained employees, but they also enhance service firms' competitive advantage (Yavas *et al.,* 2010). In addition, training programmes can improve frontline employees' task-related and behavioural skills and help them to deal with varying customer needs (Yavas & Babakus, 2010). In the context of passenger services, this study assessed the influence of customer service training on international flight attendants' service-delivery and service-recovery performance.

3.4.2.1 Customer service training: service-delivery performance

Yavas *et al.* (2010) found a positive relationship between customer service training and job performance among frontline employees in the hotel industry in Turkey. In another study, Mpofu and Hlatywayo (2015) suggest that training and development positively affect the service-delivery performance of municipal workers in South Africa. Furthermore, Karatzas, Papadopoulos and Godsell (2020) concur with Yavas *et al.* (2010) and Mpofu and Hlatywayo (2015) by reporting a positive relationship between training and service-delivery performance among employees in the United Kingdom service sector.

According to the feedback received from international flight attendants, customer service training and the fact that international flight attendants are taught how to perform services makes service delivery and dealing with passengers much easier (Feedback from informal discussions, 2020). Therefore, this study investigated the influence of customer service training on the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

3.4.2.2 Customer service training: service-recovery performance

A study conducted by Boshoff and Allen (2000) among frontline banking employees in New Zealand established a non-significant relationship between customer service training and service-recovery performance. Yavas *et al.* (2003) also found a non-significant relationship between customer service training and service-recovery performance in their study on the antecedents of service-recovery performance among frontline banking employees in Turkey. These results were confirmed by Ashill, Krisjanous and Carruthers (2004; 2005) who also report a non-significant relationship between customer service training and service-recovery performance in their two studies among frontline employees at private and public hospitals in New Zealand.

In contrast, studies by Ardahan (2007), Yavas *et al.* (2010) and Crawford and Riscinto-Kozub (2011) indicate a significant positive relationship between customer service training and service-recovery performance among frontline employees in Turkey and the United States.

Piaralal, Bhatti, Piaralal and Juhari (2016) and Costers, Van Vaerenbergh and Van den Broeck (2019) concur and also report a positive relationship between customer service training and service-recovery performance among frontline employees in Malaysia and Asia. In other words, multiple studies have reported on the relationship between the extent of customer service training and service-recovery performance among frontline employees. However, empirical results vary as some studies suggest a non-significant relationship between customer service training and service-recovery performance (Boshoff & Allen, 2000; Yavas *et al.,* 2003; Ashill *et al.,* 2004, 2005); whereas other studies suggest a significant positive relationship (Ardahan, 2007; Yavas *et al.,* 2010; Crawford & Riscinto-Kozub, 2011; Piaralal *et al.,* 2016; Costers *et al.,* 2019).

Subsequently, Masoud and Hmeidan (2013) propose that more research should be conducted, specifically among frontline employees in hotels, restaurants, airlines, hospitals and travel agencies to clarify the relationship. Against this background, this study specifically investigated the influence of customer service training on the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

Operationalisation of customer service training:

International flight attendants receive extensive training before they are permitted to not only serve passengers on board commercial flights but also to carry the responsibility for passengers' safe keeping. As stated before, flight attendants receive training in aircraft types, emergency equipment and procedures, first aid, firefighting, dangerous goods (items not allowed on board a flight), customer services and CRM to name a few (Cabin crew course list, 2021). However, the focus of this study was on customer service training, which refers to the information, practices, and policies taught to frontline employees to equip them to conduct service delivery and service recovery (Crawford & Riscinto-Kozub, 2011). Against this background, adequate customer service training was measured in this study by reviewing whether international flight attendants are trained to provide high-quality services, trained to deal with passenger problems and complaints, and whether they receive recurrent and/or annual retraining.

The construct (customer service training) was measured using the following items:

1. I receive continuous training to provide a high quality of service
2. I have received training on how to serve passengers better
3. I have received training on how to deal with complaining passengers
4. I received adequate customer service training before I came into contact with passengers
5. I have received training on dealing with passenger problems

3.4.3 Supervisory support

Supervisory support can be described as support from one's supervisor and the positive work interaction between a supervisor and a subordinate (Bhanthumnavian, 2003). More specifically, supervisory support refers to supervisors providing feedback on subordinates' job performance and supervisors encouraging subordinates' career development and growth (Ito & Brotheridge, 2005). Supervisory support is also a job resource, which is a working condition that assists employees to realise work goals, to develop and grow, and to reduce the potentially negative effects of job demands (Demerouti *et al.,* 2001).

International flight attendants generally have two on-board supervisors: the chief purser (also known as the cabin services director or 'CSD'), who is normally the supervisor for both the business and economy class cabins, and the purser (known as the cabin senior or 'CS'), who is normally the supervisor of a certain area or section in the aircraft, typically the economy class cabin. Flight attendants who work in business class report to the chief purser and flight attendants who work in economy class report to the purser. In this study, the influence of these supervisors' support on the service-delivery and service-recovery performance of international flight attendants was assessed.

3.4.3.1 Supervisory support: service-delivery performance

Chen and Kao (2014) conducted a study on social support (a broader spectrum of support that may include the support of family, friends and colleagues) among flight attendants in Taiwan.

The authors determined a positive relationship between social support and flight attendants' service-delivery performance. In addition, Babin and Boles (1996) conducted a study on the working environment of frontline employees at a restaurant in the United States. They report that an improvement in the perception of supervisory support reduces role ambiguity and role conflict, and enhances job performance. Evidently, the authors found an indirect positive relationship between supervisory support and the job performance of employees (Babin & Boles, 1996).

Furthermore, former and current international flight attendants interviewed in the exploratory phase of this study suggested that supervisory support is a key determinant of customer satisfaction and excellent service delivery (Feedback from informal discussions, 2020). However, it can also be argued that supervisors are a source of stress rather than a source of support (Kickul & Posig, 2001; Wilk & Moynihan, 2005). Kickul and Posig (2001) report that supervisory support significantly increases emotional exhaustion, indicating that supervisory support can be perceived as emotionally stressful. To investigate this contradiction in the literature, this study assessed the influence of supervisory support specifically on the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

3.4.3.2 Supervisory support: service-recovery performance

According to JD–R model, supervisory support is a job resource that can be used to improve employees' job performance (Demerouti *et al.,* 2001; Chen & Kao, 2012b). In addition, Yavas *et al.* (2010) report a positive relationship between supervisory support and service-recovery performance among frontline employees. However, as there are only limited studies available on the relationship between supervisory support and service-recovery performance, this study explored the influence of supervisory support on the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

Operationalisation of supervisory support:

As stated earlier, supervisory support can refer to the positive work interaction between a supervisor and a subordinate employee (Bhanthumnavian, 2003). Supervisory support also includes feedback from supervisors on subordinates' job performance and supervisors encouraging subordinates' career development and growth (Ito & Brotheridge, 2005). In addition, supervisory support consists of assisting subordinate employees with tasks if they require help and accrediting exceptionally good performance in the team (Demerouti *et al.,* 2001).

The construct (supervisory support) was measured using the following items:

1. My in-flight supervisors usually give me helpful feedback about my performance
2. My in-flight supervisors care about whether I achieve my career goals
3. My in-flight supervisors make sure I get the credit when I accomplish something significant on the job
4. My in-flight supervisors take the time to learn about my career goals
5. My in-flight supervisors support me in times of difficultly

3.4.4 Teamwork

Teamwork can be described as co-workers working together to realise a common goal or objective (Crawford & Riscinto-Kozub, 2011). The benefits of teamwork include information-sharing, increased communication, innovation and creativity, energy and synergy, as well as active inclusion of employees at different levels in a firm (Ardahan, 2007).

Although teamwork generally has a positive effect on organisational performance (Ardahan, 2007), teamwork can sometimes have negative effects. These possible negative outcomes include delays in decision-making (because of the size of the team), passivity among team members and possible feelings of exclusion among team members (Ardahan, 2007).

Depending on the aircraft type, international flight attendants work in teams of between four and 21 crew members. However, major airlines such as Emirates, Qatar Airways, Qantas and Southwest Airlines have thousands of crew members and therefore schedule new sets of flight attendants for many flights. In other words, crew members scheduled on the same flight are not necessarily familiar with one another and are introduced to one another during briefing sessions approximately one hour before boarding, yet they are expected to work together efficiently for extended periods of time.

3.4.4.1 Teamwork: service-delivery performance

While serving meals and beverages to passengers, flight attendants work in teams (as can be seen in the picture in Figure 3.5). Furthermore, in a narrow-bodied or single-aisle aircraft one flight attendant can be situated at the front of the meal cart serving passengers while another flight attendant can be situated at the back serving passengers. In this way, service delivery can be quick and efficient. Also, in a wide-bodied or twin-aisle aircraft (an aircraft with two passenger aisles) flight attendants are situated at certain points of both aisles and are required to start and finish their meal service delivery simultaneously. This co-ordination requires excellent communication and teamwork among the flight attendants working on opposite sides of the aisles.

Figure 3.5: In-flight passenger service delivery

Source: Kawee (2021)

Kelemba, Chepkilot and Zakayo (2017) report a significant positive relationship between teamwork and employees' performance in their study among frontline employees in Kenya. The authors found that frontline employees enhance their skills, knowledge and abilities by working in teams with others. Interviews with former and current international flight attendants concur with the findings of Kelemba *et al.* (2017) that support from one's team makes service delivery easier (Feedback from informal discussions, 2020). Therefore, this study explored the influence of teamwork on the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

3.4.4.2 Teamwork: service-recovery performance

A non-significant relationship between teamwork and service-recovery performance was found among frontline banking employees in New Zealand (Boshoff & Allen, 2000) and in Turkey (Yavas *et al.,* 2003). Similarly, Crawford and Riscinto-Kozub (2011), who conducted their study among frontline employees in hotels, along with Piaralal *et al.* (2016), who conducted their study among frontline employees in the insurance industry, did not find a significant relationship between teamwork and service-recovery performance.

In contrast, Ashill *et al.* (2005) found a significant positive relationship between teamwork and service-recovery performance in their study among frontline healthcare staff in New Zealand. In addition, Ardahan (2007) revealed a significant positive relationship between teamwork and service-recovery performance, also among frontline employees in the healthcare industry in Turkey.

In summary, the literature is not conclusive with regard to the empirical results. Some studies suggest a non-significant relationship between teamwork and service-recovery performance (Boshoff & Allen, 2000; Crawford & Riscinto-Kozub, 2011; Piaralal *et al.,* 2016; Yavas *et al.,* 2003) while other studies suggest a significant positive relationship (Ashill *et al.,* 2005; Ardahan, 2007). Therefore, in order to address these conflicting results, this study investigated the influence of teamwork on the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

<u>Operationalisation of teamwork:</u>

Teamwork can be described as co-workers, in this case flight attendants, working together effectively to realise a common goal or objective (Crawford & Riscinto-Kozub, 2011). Teamwork also refers to the willingness of employees to co-operate and can be applied across different levels in a firm (Coyle-Shapiro & Morrow, 2003; Dean & Bowen, 1994). Finally, according to Coyle-Shapiro and Morrow (2003), teamwork can be measured by a strong team spirit, willingness of employees to help one another with tasks, and encouragement among employees.

The construct (teamwork) was measured using the following items:

1. Most times flight attendants in my workgroup work together effectively
2. There is usually a lot of co-operation in my workgroup
3. The flight attendants in my workgroup always encourage each other to work as a team
4. There is usually a strong team spirit in my workgroup
5. Usually, the flight attendants in my workgroup help each other with tasks

3.4.5 Cultural differences

Matsumoto (1996:16) describes culture as "the set of attitudes, values, beliefs and behaviours shared by a group of people but different for each individual, communicated from one generation to the next". Culture can also be defined as the characteristics and knowledge of a particular group of people (Zimmermann, 2017).

According to Ricaud (2006), service firms have to be aware of cultural differences among their employees and customers, because the survival of service firms depends on understanding and embracing these differences. Against this background, this study investigated cultural differences among airline passengers and the influence these differences may have on international flight attendants' service-delivery and service-recovery performance.

3.4.5.1 Cultural differences: service-delivery performance

A study was conducted among frontline employees working at a hostel in London and their experience interacting with customers from different cultural backgrounds (Moufakkir & Alnajem, 2017). In order to test the effect of cultural differences among customers on these frontline employees' perceptions of a service encounter, they were categorised into four groups of customers as Western (which included Europe, the United States, Canada, Australia and New Zealand); Asian; Middle Eastern/North African; and African (sub-Sahara Africa). The following profound differences are reported in terms of the frontline employees' perceptions: Western and Asian customers are seen as being 'nicer' than Middle Eastern/North African and African customers. Asian customers are seen as the friendliest among all the customers. Western and Asian customers are furthermore believed to give the best tips to frontline employees. Among the 'less troublesome' customers are Asians who also complain the least. Finally, Western customers are perceived to be the most demanding whereas Asian customers are regarded as the least demanding. Overall, the frontline employees are reported to be most happy to serve Western and Asian customers (Moufakkir & Alnajem, 2017).

It is therefore clear that cultural differences among customers exist and that these differences influence frontline employees' perceptions of the service delivery encounter. According to Karami, Maleki, and Dubinsky (2016), cultural values also influence customers' expectations and perceptions of service quality. This influence can be seen in a study conducted among customers staying at a first-class hotel in Singapore (Mattila, 2000). Mattila (2000) reports that Western customers generally give higher service performance scores (or ratings) to frontline hotel employees than, for example, Asian customers do. In other words, cultural differences among customers directly influence frontline hotel employees' service-delivery performance.

The international flight attendants who participated in the exploratory phase of this study agree that the cultural differences among passengers may influence their service-delivery performance (Feedback from informal discussions, 2020). According to the feedback from these international flight attendants, different cultural values among passengers substantially influence the outcome and experience of service delivery encounters between them and the passengers.

Against this background, this study explored the potential influence of cultural differences among passengers on the service-delivery performance of international flight attendants employed by four- and five-star full-service airlines.

3.4.5.2 Cultural differences: service-recovery performance

Wong (2004) conducted a study on the role of culture in shaping customers' perceptions of service failure and recovery. The author assessed two service recovery strategies, namely compensation and apology, among American, Australian and Singaporean customers and reports the following: Providing compensation for a service failure increased American customers' positive word-of-mouth and repurchase intent (Wong, 2004). Therefore, it can be argued that providing compensation as a service recovery strategy can be advantageous to service firms among American customers. In a similar vein, providing an apology is reported to increase the satisfaction, word-of-mouth and repurchase intention of Australian customers. Therefore, the findings suggest that, similar to compensation, providing an apology can be advantageous to service firms when compensating Australian customers. These results indicate that cultural differences have an influence on the success or effectiveness of service recovery strategies and therefore potentially influence service-recovery performance.

Mattila and Patterson (2004) conducted a similar study on the influence of culture on customers' perceptions of service recovery. The authors investigated compensation and offering an explanation as service recovery strategies used by frontline employees. Their results show that compensation has a positive effect on customers' perception of fairness (which is linked to post-recovery satisfaction) among American customers whereas offering an explanation has a positive effect on American, Malaysian and Thai customers. Again, the results suggest that cultural differences among customers influence the success of service recovery strategies and therefore frontline employees' service-recovery performance. To conclude, frontline employees serving international markets have to understand that customers with different cultural values and norms have different needs and expectations (Wong, 2004). Against this background, this study investigated the influence of cultural differences among airline passengers on the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

Operationalisation of cultural differences:

As stated earlier, Matsumoto (1996:16) describe culture as "the set of attitudes, values, beliefs and behaviours shared by a group of people but different for each individual, communicated from one generation to the next". Furthermore, cultural differences among customers can be seen in their friendliness, the severity of their complaints, whether they are demanding, and the degree to which frontline employees enjoy serving certain customer groups more than other customer groups (Moufakkir & Alnajem, 2017).

The construct (cultural differences) was measured using the following items:

1. Some cultural groups I serve are friendlier than other cultural groups
2. Certain cultural groups are more pleasant to serve than others
3. Passengers from some countries complain more than others
4. Certain cultural groups are less demanding than other cultural groups
5. I enjoy serving passengers from some countries more than others

3.4.6 Unreasonably demanding passengers

Frontline employees are typically expected to be quick, efficient, friendly and helpful – all at the same time (Wirtz *et al.,* 2008). In addition, frontline employees often have to 'keep smiling' while confronted with demanding and stressful situations, such as dealing with unreasonably demanding or even insulting passengers (Chen & Kao, 2012a).

According to Rafaeli and Sutton (1990), demanding customers are customers who require a prolonged and complex response from service employees. Demanding customers are also "more concerned about the benefits they receive from market offerings, better attuned to nuances and differences within a product category, and more attracted to products that are tailored specifically to their particular problems and needs" (Zhou, Brown, Dev & Agarwal, 2007:308). In other words, demanding customers (or passengers, in this case) have high expectations and know exactly what they want and how they want it.

65

Zhou *et al.* (2007) investigated the effects of customer and competitor orientations on organisational performance. Their results suggest that demanding customers, amongst others, positively moderate the relationship between customer orientation and organisational performance, indicating an indirect positive relationship between demanding customers and organisational performance (Zhou *et al.,* 2007). Against this background, the current study suggests that unreasonably demanding passengers might also influence the service-delivery and service-recovery performance of frontline employees, more specifically international flight attendants.

3.4.6.1 Unreasonably demanding passengers: service-delivery performance

Jaramillo, Mulki and Boles (2013) investigated the influence of demanding customers and ethical climate (or working environment) on the job meaningfulness of employees (i.e., the feeling of doing something in one's job that is important or good). The authors report a significant positive relationship between demanding customers and job performance, indicating that high customer demands and expectations increase frontline employees' job performance (Jaramillo *et al.,* 2013). In addition, Itani, Jaramillo, and Paesbrugghe (2020) conducted a study on frontline investment account managers and how they manage to deal with unreasonably demanding customers. The authors report that frontline employees adapt and/or increase their service performance in response to the unreasonable demands of customers. The results of Itani *et al.* (2020) are consistent with the views of Jaramillo *et al.* (2013), who indicate that there is a positive relationship between dealing with unreasonably demanding customers and frontline employees' performance. In other words, dealing with unreasonably demanding customers may lead to an improvement in frontline employees' service-delivery performance.

However, international flight attendants who were interviewed in the exploratory phase of this study suggested a negative relationship between unreasonably demanding passengers and service-delivery performance. As stated by a former flight attendant: "When a customer shows gratitude towards you, you will go above and beyond for that customer; however, when customers are unreasonably demanding it makes our service delivery very difficult" (Anonymous flight attendant, 2020a).

In another statement a flight attendant commented: "Later it feels like you have nothing left to give – you have poured out and given everything you have, yet they [unreasonably demanding passengers] want/expect more...it is sometimes just too much to handle" (Anonymous flight attendant, 2020b).

According to Hochschild (1983), flight attendants do not only perform physical labour (pushing meal carts and serving passengers) and mental labour (memorising emergency procedures and passenger requests), but they also perform *emotional labour*, which involves the management of feelings to create a publicly observable facial and/or bodily display. Therefore, it can be argued that flight attendants adopt one of two emotional labour strategies (refer to Chapter 2, section 2.3) in order to cope with unreasonably demanding passenger situations. Flight attendants can use either deep acting, which involves trying to force oneself to feel or experience certain emotions, or they can use surface acting, which involves displaying emotions that are not truly felt, in other words, faking a desired emotion (Lee *et al.,* 2015; Williams, 2003). According to Chen *et al.* (2012), deep acting decreases job burnout and enhances job performance while surface acting enhances job burnout and decreases job performance. For this reason, frontline employees such as flight attendants are encouraged to use deep acting as an emotional labour strategy (Lee *et al.,* 2015).

To conclude, earlier research found a positive relationship between unreasonably demanding customers and frontline employees' performance (Itani *et al.,* 2020; Jaramillo *et al.*, 2013) whereas a negative relationship was observed from interviews with former and current international flight attendants. Against this background of inconsistent views, this study investigated the influence of unreasonably demanding passengers on the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

3.4.6.2 Unreasonably demanding passengers: service-recovery performance

International flight attendants are responsible for the service delivery and potential service recovery of up to 50 passengers each per flight duty. As unreasonably demanding passengers often require a prolonged and complex response, flight attendants also have to give more care and attention to these passengers, which require service-recovery performance as a result of service failures.

According to the literature reviewed in this study, the relationship between unreasonably demanding passengers and service-recovery performance has not been examined before. Therefore, this study explored the possible influence of unreasonably demanding passengers on the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

Operationalisation of unreasonably demanding passengers:

According to Zhou *et al.*, (2007:308), demanding customers are "more concerned about the benefits they receive from market offerings, better attuned to nuances and differences within a product category, and more attracted to products that are tailored specifically to their particular problems and needs". In addition, demanding customers have specific requirements concerning quality, costs, and delivery of a product and/or service (Li & Calantone, 1998). In other words, demanding customers are customers with high expectations; customers who prefer products and services tailored specifically to their problems and needs; and who have specific requirements concerning quality, costs, and product/service delivery.

The construct (unreasonably demanding customers) was measured using the following items:

1. Some passengers have unreasonably high expectations in terms of service
2. Sometimes passengers are unreasonably demanding with regards to service quality
3. Passengers often expect me to deliver unreachably high levels of service quality
4. The passengers I serve require a perfect fit between their needs and my services
5. Some passengers are very demanding about the quality of the services they expect

3.4.7 Limited physical space

Several studies have been conducted on the so-called cabin effects that flight attendants and pilots may experience, because of their unique working environment being the inside of an aircraft cabin.

68

Cabin effects can include deep vein thrombosis (DVT), infection, jet lag, the intake of poor air quality (including dry air intake), cosmic radiation, poor illumination, low humidity levels and exposure to noise and vibration (Brown, Shuker, Rushton, Warren & Stevens, 2001; Hocking, 2000; Mellert, Baumann, Freese & Weber, 2008; Nagda & Koontz, 2003). However, not one of these studies have considered the emotional and/or mental (cognitive) effect of working in an aircraft for up to 18 hours and 30 minutes – one of the longest flight durations in the world – and its effect on employee performance (Lakritz, 2020).

The emotional and/or mental effect of working in an aircraft cabin can be explained by reviewing the term *environmental psychology*, which, simply put, can be defined as the interrelationship between people and their physical environment (McCunn & Schultz, 2021). In the context of this study, the inside of a commercial aircraft cabin is the physical working environment of international flight attendants who are the key role players in this study. According to McCoy (2002), the primary features of physical working environments that should be addressed are thermal conditions, light, sound, and air quality and the influence of these factors on employee performance. Moreover, the most researched feature in the domain of physical working environments is spatial organisation, which was addressed in this study as limited physical space (McCoy, 2002).

The organisation of space determines the level of enclosure, adjacencies, proximities, and territories that can provide privacy and control, variety and adaptability, flexibility, and legibility (McCoy, 2002). In addition, spatial organisation can either facilitate or inhibit communication and can contribute to the efficiency and effectiveness of a firm. Moreover, McCoy (2002) suggests that features in a workspace such as physical enclosure, aesthetics, privacy, furniture, status, communication, temperate control, and lighting can influence employees' job performance, job satisfaction, ease and quality of communication, and satisfaction with the environment.

Against this background, this study explored the influence of limited physical space inside a commercial aircraft on the service-delivery and service-recovery performance of international flight attendants employed by four- and five-star full-service airlines.

69

3.4.7.1 Limited physical space: service-delivery performance

Inside an aircraft, flight attendants have limited physical space to execute their duties (Chen & Chen, 2014; Farnen, 2018; Flight attendants - working conditions, 2020). One of the international flight attendants who participated in the exploratory phase of this study offered the following view: "The space inside an aircraft becomes your working environment and it is limited. There is limited space in the galley [kitchen area] to prepare meals and carts/trolleys and there is limited space in the cabin and aisles to serve passengers" (Anonymous flight attendant, 2020b). In addition, a flight attendant interviewed by Lee *et al.* (2006:159) stated the following with regard to space inside an aircraft: "You have only so much room to work with. If you are at a certain door [in the aircraft] where the galley is, then you are trying to accommodate the passengers who are sitting near the galley so that you don't throw the cart on them. You are actually trying to keep the cart away from the passengers. You do that by any means necessary, perhaps causing yourself injury."

To illustrate the spatial limitations inside an aircraft cabin, Ingraham (2016) studied the space available per person inside a Boeing 737-700 aircraft. With 914 square feet inside a Boeing 737-700 and seating capacity for up to 149 passengers (Boeing Next-Generation 737, 2021) there is approximately seven (7) square feet of space available per person. Compared to a king-size bed, which is 42.15 square feet in size, the space that passengers and flight attendants have inside an aircraft cabin is thus very limited. Flight attendants also work physically close to passengers and colleagues and are sometimes forced into awkward working positions because of spatial limitations (Flight attendants - working conditions, 2020). For example, when a flight attendant or passenger is caught in the aisle between two trolleys, one of them has to squeeze their way out or stay put for the remainder of the service period.

To summarise, flight attendants perform most of their duties while standing, partially because of limited physical space (Farnen, 2018). Against this background, this study explored the influence of limited physical space on the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

3.4.7.2 Limited physical space: service-recovery performance

According to the literature reviewed in this study, the influence of limited physical space inside an aircraft on international flight attendants' service-recovery performance has not yet been empirically assessed. However, international flight attendants are constantly faced with limited physical space as a job demand (Chen & Chen, 2014). Therefore, this study explored the influence of limited physical space on the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

Operationalisation of limited physical space:

As mentioned in the preceding discussion, limited physical space refers to the limited space inside an aircraft in which flight attendants have to perform their duties (Chen & Chen, 2014; Farnen, 2018; Flight Attendants - working conditions, 2020). Flight attendants who were interviewed agreed that the limited space inside aircraft may hinder their performance (Feedback from informal discussions, 2020).

The construct (limited physical space) was measured using the following items:

1. Inside the aircraft, I do not always have enough space to perform my duties
2. The aisles in an aircraft are too narrow for me to work efficiently
3. There should be more space in the galley for flight attendants to work better
4. The limited space inside an aircraft is sometimes a problem
5. Often, the aircraft feels very cramped inside

3.4.8 Limited time/time pressure

Time pressure can be described as limited or insufficient time to complete a task (Tufte, 2013). According to Kickul and Posig (2001), time pressure is also a job demand that can lead to physiological and psychological effects, such as exhaustion (Demerouti *et al.,* 2001).

3.4.8.1 Limited time/time pressure: service-delivery performance

A study among Danish medical workers found that, owing to time reductions (less time given to do their tasks), care workers often do not have enough time to provide certain additional services to patients (Tufte, 2013). In response, management suggested they focus on their core duties only and do not provide any additional services when they are pressed for time. However, these care workers view additional services as rather essential in their overall perception of the work they do. Therefore, it was concluded that the time pressures care workers face, firstly, reduce their perceptions of the meaningfulness of their work and, secondly, reduce their ability to improve their job performance (Tufte, 2013).

The observations of Tufte (2013) can be related to what international flight attendants experience. Flight attendants have three key responsibilities namely safety, security, and service delivery (Damos *et al.,* 2013). However, according to Damos *et al.* (2013), flight attendants often do not have enough time to complete their safety and security duties owing to too many other service-related duties they are expected to perform. In other words, international flight attendants certainly do not always have the time to go the proverbial extra mile for passengers. To demonstrate, one former international flight attendant stated the following: "We are trained to focus on detail and to give an out-of-this-world service experience for passengers. However, we often do not have the time. This makes our service delivery difficult" (Anonymous flight attendant, 2020a). According to another flight attendant, the "time or the lack of time has an influence on your service-delivery performance as being rushed for time makes you stressed" (Anonymous flight attendant, 2020c).

Thompson, Dalgleish, Bucknall, Estabrooks, Hutchinson, Fraser, De Vos, Binnekade, Barrett, and Saunders (2008) examined registered nurses' risk assessment in acute care environments. The question asked was whether there is a relationship between time pressure and nurses' decision-making performance. Their results indicated that nurses perform better without time pressure, suggesting a negative relationship between time pressure and nurses' decision-making performance (Thompson *et al.,* 2008).

In addition, Teng, Shyu, Chiou, Fan, and Lam (2010) investigated the interaction between time pressure and burnout among nurses in Taiwan. The authors report a negative relationship between time pressure and patient safety for nurses with high levels of burnout (Teng *et al.*, 2010).

In other words, to conclude, time pressure can influence the service performance of care takers (Tufte, 2013). Against this background, this study explored the influence of limited time/time pressure on the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

3.4.8.2 Limited time/time pressure: service-recovery performance

In another study among nurses in Taiwan, Teng, Chen, Chang, and Fu (2014) found that time pressure is positively related to service failures, specifically for employees with low levels of conscientiousness. In addition, Dzerzhinskiy (2016) wrote an article about the possible positive and negative effects of time pressure in a learning environment in the software development industry. The author points out that certain degrees of time pressure are acceptable and sometimes unavoidable, but that constantly working under time pressure has its consequences. Not only can time pressure hinder creative thinking, but excessive time pressure can also lead to mistakes, defects, drawbacks, and/or non-optimal solutions with negative consequences (Dzerzhinskiy, 2016). Dzerzhinskiy (2016) concludes that more emphasis should be placed on exposing the disadvantages of working under time pressure. In summary, time pressure can be associated with service failures (Teng *et al.*, 2014) and can lead to mistakes (Dzerzhinskiy, 2016). Therefore, this study investigated the influence of limited time/time pressure on the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

Operationalisation of limited time/time pressure:

Time pressure is a job demand that can be described as limited or insufficient time to complete a task (Tufte, 2013). As expressed by the international flight attendants interviewed in the exploratory phase of this study, the lack of time has an influence on their service delivery (Feedback from informal discussions, 2020).

In addition, time pressure can be associated to service failures (Teng *et al.*, 2014). Therefore, the influence of limited time/time pressure on the service-delivery and service-recovery performance of international flight attendants was assessed.

The construct (limited time/time pressure) was measured using the following items:

1. I feel high levels of time pressure at work
2. I always feel rushed during work hours
3. I often do not have sufficient time to finish my work properly
4. As flight attendant, I feel very busy at work
5. I find that the time allocated to perform certain services is very limited

3.4.9 Limited physical resources

According to Law (2019), airline passengers typically respond to the unavailability of their preferred meal choices in one of four ways. To illustrate, hypothetical flight attendant Betty* has 30 passengers to serve on her flight. Today, she has 20 chicken pasta meals and 10 beef spaghetti meals in her cart. As Betty reaches her 25th passenger she realises that she has served all of the 20 chicken pasta meals and is left with only beef spaghetti. Passenger A does not mind and is satisfied to accept the beef spaghetti meal. Passenger B expects Betty to have both meal options available for him to choose from, but accepts the beef spaghetti meal after requesting that she at least ask her colleagues if they have spare chicken pasta meals available.

Passenger C has religious beliefs or allergies to certain types of food and therefore refuses to accept the beef spaghetti meal. Betty has to return to the galley (kitchen area) to establish whether there is a crew meal (i.e., additional food/meals loaded onto the aircraft for the flight attendants and pilots) that is suitable for the passenger, or alternatively, she has to ask her colleagues in the business class for one of their meals. Passenger D is a valued frequent traveller and therefore Betty looks for alternative meals among the crew meals and in business class even before approaching the passenger.

International flight attendants regularly have to deal with limited available resources such as meal shortages, as airlines do not provide a 100 per cent availability of each meal option on flights. To illustrate: if there are two meal options for the flight (chicken and vegetarian) and 100 passengers, the ratio of meals would be 50:50 (50 chicken and 50 vegetarian), 60:40 (60 chicken and 40 vegetarian), or 70:30 (70 chicken and 30 vegetarian), depending on the calculations made by the catering firm. Therefore, there is always the possibility of a passenger not receiving their desired meal option. However, meal options are not the only physical resource that can be depleted during the course of a commercial flight. Other physical resource shortages may include a shortage of any item on board the aircraft such as cold drinks, beer and/or wine, condiments, snacks, toiletry items, and complementary items.

Even though airlines try their best in providing the right quantities of physical resources, passengers' demands vary and shortages sometimes occur. In case of physical resource shortages, flight attendants have to apologise and improvise by offering alternative options or solutions to passengers. In other words, they are expected to manage the situation to try and avoid passenger dissatisfaction. Sometimes passengers are satisfied with alternative options, for example, passengers A and B (in Betty's case), but other times they are not satisfied with alternative options, for example, passengers C and D. Therefore, managing resource shortages can be stressful and demanding for crew members.

3.4.9.1 Limited physical resources: service-delivery performance

Physical resource shortages may influence service delivery encounters. According to former and current international flight attendants, service delivery is made easy when passengers accept an apology or explanation for a resource shortage like a meal option shortage (Feedback from informal discussions, 2020). However, when passengers are unwilling to accept an apology or explanation, service delivery can be very difficult. Against this background, this study assessed the potential influence of limited physical resources on the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

3.4.9.2 Limited physical resources: service-recovery performance

In the event of a physical resource shortage, international flight attendants often have to explain, apologise or compensate passengers, which are known as service recovery strategies (Bitner *et al.,* 1990). However, to the researcher's knowledge, the relationship between limited physical resources and service-recovery performance has not yet been empirically assessed. Therefore, this study investigated the potential influence of limited physical resources on the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

Operationalisation of limited physical resources:

Even though airlines make an effort to provide adequate quantities of physical resources on flights, passenger demand varies, and shortages sometimes occur. In case of physical resource shortages, flight attendants often have to improvise by offering alternative options and/or solutions in order to bring the passenger to a state of satisfaction. In other words, flight attendants are expected to manage the situation in such a way that passenger dissatisfaction is avoided.

The construct (limited physical resources) was measured using the following items:

1. I often run out of meal options when serving passengers
2. As flight attendant, I cannot always satisfy my passengers' needs because of the limited resources we have inside the aircraft
3. Sometimes I have to apologise to passengers because I do not have their preferred meal or beverage in my cart
4. Airlines should provide flight attendants with more resources on-board such as sufficient meals, beverages, snacks and complementary items
5. I often feel embarrassed for not having the meal or beverage option a passenger requests

3.5 THE INTERVENING VARIABLES

An intervening variable is a variable that influences the relationship between an independent and a dependent variable (MacKinnon, Lockwood, Hoffman, West & Sheets, 2002). In this study, there were two intervening variables, namely fatigue and job experience.

3.5.1 Fatigue

Fatigue can be defined as a mental and/or physical state of extreme tiredness or lack of motivation (Wedro, 2021). Those struggling with fatigue may describe their state as feeling lethargic, exhausted, or simply sleepy (Sharpe & Wilks, 2002). Fatigue was investigated and assessed in this study given that high levels of fatigue are common among international flight attendants because of their work schedule and working environment (MacDonald *et al.,* 2003; McNeely *et al.,* 2014).

Fatigue can be caused by sleep deprivation, circadian rhythm abnormalities, health-related tiredness, and task-induced influences (Bendak & Rashid, 2020). Sleep deprivation is caused by getting less than the recommended eight (8) hours of sleep per night (Van Cauter, Spiegel, Tasali & Leproult, 2008). Circadian rhythm, which can be defined as one's internal sleep or body clock that runs in 24-hour cycles, can be disturbed by a delayed sleep pattern, for example, going to bed two hours later than usual (Mayo Clinic, 2021). In addition, health-related tiredness can be related to underlying diseases such as thyroid disorder, heart disease, or diabetes. Finally, task-induced influences that can cause fatigue may include external factors such as type of work or occupation and physical labour.

Based on the example shown in Table 3.1, it can be argued that international flight attendants' work schedule and working environment can be associated with sleep deprivation and circadian rhythm abnormalities, because a week's work schedule in an international flight attendant's life may consist of the following: flying from London to Haneda in Japan on a Monday morning; arriving in Haneda on the Tuesday morning (because of the time difference); spending Tuesday night in a hotel in Haneda; and flying back to London the Wednesday morning.

On Thursday and Friday, the flight attendant might have resting time (off duty) in their home-base country (the country in which they reside). However, on the Saturday morning the flight attendant departs from London to New York, spends Saturday night in a hotel in New York, and then returns to London on the Sunday evening. These types of schedule change weekly. In other words, not one week in an international flight attendant's life and work schedule is exactly the same. Moreover, flight attendants' schedules regularly involve crossing time zones and working throughout the night (refer to the example in Table 3.1). Therefore, reports of high levels of fatigue among international flight attendants should not be surprising (MacDonald *et al.,* 2003; McNeely *et al.,* 2014).

Table 3.1: Example of an international flight attendant's work schedule

Day	Flight
Monday	**London to Haneda** – flight time 11h 55min Departure time: 09:40am (local time GMT+1) Arrival time: 05:35am (local time GMT+9)
Tuesday	Off duty
Wednesday	**Haneda to London** – flight time 12h 30min Departure time: 11:20am (local time GMT+9) Arrival time: 15:50pm (local time GMT+1)
Thursday	Off duty
Friday	Off duty
Saturday	**London to New York** – flight time 7h 55min Departure time: 09:35am (local time GMT+1) Arrival time: 12:30pm (local time GMT-4)
Sunday	**New York to London** – flight time 7h 5min Departure time: 23:00pm (local time GMT-4) Arrival time: 11:05am (local time GMT+1)
Note: GMT + 1 means one hour ahead of the Greenwich Mean Time (GMT), also known as the 'universal time coordinated (UTC)'.	

The effect of fatigue on transportation safety has become a very important topic in the literature (Brown & Niehaus, 2009), as the primary purpose of both pilots and flight attendants are the safety of passengers and crew. However, international pilots and flight attendants' work schedules and working environment may distract them from their primary duties.

This is so because their alertness, level of concentration, reaction times, co-ordination, decision-making performance, risk assessment, flexible thinking, judgement, and memory – all required to keep passengers safe – are affected by fatigue (Curcio, Casagrande & Bertini, 2001; Dawson, Ian Noy, Härmä, Åkerstedt & Belenky, 2011; Lim & Dinges, 2010; Zuehlke, 2004). It is estimated that between 15 and 20 per cent of accidents in civil aviation are related to pilot or crew fatigue (Moore, 2012). In addition, the total costs of accidents in aviation, in the United States only, are estimated to be more than US$1.64 billion annually (Sobieralski, 2013). Therefore, fatigue and its influence on transportation safety, especially in the aviation industry, should be considered when compiling international flight attendants' work schedules. However, few changes have been made to crew scheduling regardless of the influence of fatigue on international flight attendants' performance (Caldwell, 2005).

Over the years, countermeasures have been developed to try and reduce high levels of fatigue. According to Brown and Niehaus (2009), one of the most crucial countermeasures for fatigue is early recognition. It is important for flight attendants to be aware of the potential signs and symptoms of fatigue. These include forgetfulness, slower reaction time, decreased vigilance, communication difficulties, moodiness, fixation, and poor decision-making. Flight attendants should be able to identify these signs among themselves and among other crew members. In addition to early recognition, preventative and operational strategies can be used to minimise fatigue among international flight attendants and include the following: getting enough sleep before flights (at least eight hours), regular exercise, avoiding extensive caffeine consumption and staying hydrated (Brown & Niehaus, 2009). These measures can be implemented by international flight attendants to prevent and manage levels of fatigue. However, ultimately, international flight attendants' work schedules are dependent on the regulations stipulated by aviation authorities and implemented by airlines.

More specifically, airlines follow detailed guidelines regarding the (maximum) number of working hours and the (minimum) number of resting times/hours when structuring flight attendants' work schedules. These guidelines are published by aviation authorities such as The International Civil Aviation Organization (ICAO) that regulate or control crew scheduling.

However, there are discrepancies regarding the implementation of the regulations set by authorities among countries that are members of the same authority (Missoni, Nikolić & Missoni, 2009). For example, crew scheduling regulations may state that the minimum time given to flight attendants to rest between flights is 10 hours. However, some airlines start calculating the resting times/hours from the time that the aircraft has landed. Therefore, they do not take into account the fact that flight attendants often have to wait 15–20 minutes or longer for passengers to disembark and that it can take up to two hours to travel from an airport to their hotel before they can start resting.

Because of these differences in implementing crew scheduling regulations, the maximum annual flying hours of international flight attendants differ among countries: flight attendants in the United States fly up to 1 400 hours per year, whereas flight attendants in Germany fly up to 1 000 hours and those in Australia only fly up to 900 hours per year (Missoni *et al.*, 2009). Nevertheless, international flight attendants have in common unpredictable working hours, long duty periods, and frequent disruptions in their circadian rhythm and sleeping patterns, all of which are linked to high levels of fatigue. In addition, because few changes have been made to crew scheduling regarding the influence of extended duty hours and sleep deprivation on performance (Caldwell, 2005) it is up to flight attendants themselves to recognise and manage their levels of fatigue or tiredness.

3.5.1.1 Fatigue: service-delivery performance

International flight attendants can be scheduled to work on turn-around or layover flights. Turn-around flights are shorter flights (of up to four hours) in which flight attendants are expected to serve passengers on the flight to the destination and back without resting in between. An example is a return flight between Cape Town to Johannesburg (flight time: two hours one-way). Layover flights are longer flights (typically more than four hours), which require flight attendants to be on the flight to the destination, stay there for a day or two and then fly back to their home-base country. For example, serving passengers on a flight from Cape Town to Zanzibar (flight time: five hours and 37 minutes), resting in Zanzibar for 24 hours, and then flying back to Cape Town.

The number of hours that flight attendants can spend in a different location or country (for example in Zanzibar) is referred to as a 'layover period' and is calculated from the time the aircraft arrives at the particular destination to the time that the aircraft departs again. 'Resting times' refer to the minimum number of hours that flight attendants have to rest specifically at their home-base country after working on a turn-around or layover flight (both to the destination and back) before having to report for duty on another flight.

Over the years, flight attendants' minimum layover periods have been reduced from 44 to 24 hours (Ng, Sambasivan & Zubaidah, 2011). In addition, their minimum resting times have been reduced from nine hours to eight hours. In other words, flight attendants generally have less time to rest than previously. Airlines are also flying on a 'minimum crew' arrangement, which means they are using fewer crew members to operate flights, and thus increasing the workload of flight attendants in general. These changes may cause flight attendants to experience increased fatigue, disruptions to efficient service delivery, and a low morale (Ng *et al.,* 2011).

During the informal discussions with former and current international flight attendants, crew members stressed the influence of fatigue on service delivery (Feedback from informal discussions, 2020). It is therefore proposed that fatigue may influence the job performance of international flight attendants (Bendak & Rashid, 2020). According to Roma, Mallis, Hursh, Mead, and Nesthus (2010), flight attendants experience impaired performance related to fatigue even before starting their workday. In a similar vein, Avers, Nei, King, Thomas, Roberts, Banks and Nesthus (2011) report that fatigue influences both the safety and service performance of flight attendants regardless of their seniority level (junior, mid, or senior). In their study, the flight attendants who participated expressed their concern regarding "the inability to remember routine tasks" and "the compromised quality of their performance", owing to fatigue (Avers *et al.*, 2011:9).

As alluded to earlier, feelings of fatigue may result in complacency, a reduced attention span, and short-term memory loss (Zuehlke, 2004). Also, fatigue may result in poor communication, possible anger emotions, and mood swings (Kim, Cranor & Ryu, 2009), which may influence flight attendants' performance and ability to provide outstanding services.

81

Therefore, the influence of fatigue on the relationships between organisational, crew, customer, and environmental factors and international flight attendants' service-delivery and service-recovery performance was assessed in this study.

a) Fatigue and organisational factors

Company service delivery expectations and customer service training were classified as *organisational factors* in this study. It is argued that fatigue may mediate the relationship between high company service delivery expectations and service-delivery performance, as fatigue may influence alertness, perceptual skills, flexible thinking, and the ability of flight attendants to manage the service delivery expectations of the firm (Curcio *et al.,* 2001; Dawson *et al.,* 2011; Lim & Dinges, 2010). In addition, it can be argued that fatigue might influence flight attendants' ability to effectively use and retain the information from their customer service training, given that feelings of fatigue may result in a reduced attention span, short-term memory loss, and complacency (Zuehlke, 2004).

Against this background, this study assessed the potential influence of fatigue on the relationships between company service delivery expectations and customer service training and the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

b) Fatigue and crew factors

Supervisory support and teamwork were deemed the *crew factors* investigated in this study. During the informal discussions with former and current international flight attendants, one of them stressed the influence of fatigue on teamwork: "If you are tired you will not feel like helping your fellow crew members with tasks. There is also a good chance that you might come across as rude or unfriendly to passengers and fellow crew [when feeling fatigued]. This might not be your personality at all, but because you are tired your emotions and service performance are influenced." The same might be said for supervisors since fatigue may very well influence their willingness to assist or support subordinates because of the influence of fatigue on their emotions.

Therefore, fatigue was modelled as an intervening variable that possibly influences the relationships between teamwork and supervisory support and the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

c) Fatigue and customer factors

In this study, cultural differences and unreasonably demanding passengers were described as *customer factors* that might influence the service-delivery performance of international flight attendants. According to the international flight attendants who participated in the informal discussions of this study, passengers from different cultural backgrounds and passengers who are unreasonably demanding can make service delivery very difficult (Feedback from informal discussions, 2020). Therefore, it can be argued that serving passengers from different cultural backgrounds and dealing with passengers that are unreasonably demanding is not any easier for international flight attendants if and when they feel fatigued.

Against this background, this study explored the intervening influence of fatigue on the relationships between cultural differences and unreasonably demanding passengers and the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

d) Fatigue and environmental factors

In this study limited physical space, limited time/time pressure, and limited physical resources were classified as *environmental factors* that might influence the service-delivery performance of international flight attendants. As stated before, flight attendants have limited physical space inside an aircraft to perform their duties and responsibilities (Chen & Chen, 2014; Farnen, 2018; Flight attendants - working conditions, 2020). Flight attendants also have limited time to complete their service and safety and/or security duties (Damos *et al.,* 2013) and, apart from their long list of formal and informal responsibilities, they also have to manage physical resource shortages (refer to limited physical resources, section 3.4.9).

According to Chen and Chen (2014), working in a confined space under time constraints and with limited resources are some of the job demands that flight attendants face which can be associated with exhaustion, similar to fatigue (Demerouti *et al.,* 2001). Consequently, this study investigated the intervening influence of fatigue on the relationships between limited physical space, limited time/time pressure, and limited physical resources and the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

3.5.1.2 Fatigue: service-recovery performance

As stated earlier, reductions in minimum layover periods and minimum crew have caused flight attendants to experience increased fatigue, disruptions to efficient service delivery, and a low morale (Ng *et al.,* 2011). In addition, a significant negative relationship has been reported between fatigue and overall job performance (Avers *et al.,* 2011; Bendak & Rashid, 2020; Roma *et al.,* 2010) given that fatigue affects individuals' level of concentration, reaction times, co-ordination, risk assessment, flexible thinking, and memory (Curcio *et al.,* 2001; Dawson *et al.,* 2011; Lim & Dinges, 2010). Rudin-Brown (2015) adds that people who are fatigued easily get distracted, may take longer to solve problems, tend to make more mistakes, and take more risks than they might otherwise.

In a study conducted in Korea's tourism sector, the authors report that emotional exhaustion (associated with fatigue) has a significant negative impact on the service-recovery performance of frontline employees (Kim, Paek, Choi & Lee, 2012a). Therefore, it was argued that the service-recovery performance of international flight attendants may be influenced and be more challenging if and when flight attendants feel fatigued since the effects of fatigue include a lack of good judgement and poor decision-making compared to the otherwise sound judgement and excellent decision-making performance required in service recovery situations (Zuehlke, 2004).

a) Fatigue and organisational factors

The *organisational factors* investigated in this study were company service delivery expectations and customer service training. As outlined earlier, fatigue may influence the high company service delivery expectations that flight attendants face, since fatigue influences alertness, perceptual skills, and flexible thinking (Curcio *et al.,* 2001; Dawson *et al.,* 2011; Lim & Dinges, 2010). Therefore, this study explored the intervening influence of fatigue on the relationships between company service delivery expectations and customer service training and the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

b) Fatigue and crew factors

In this study, supervisory support and teamwork were recorded as *crew factors*. It is suggested that fatigue may affect flight attendants' emotions, service delivery, and overall willingness to help each other when it comes to teamwork (Feedback from informal discussions, 2020). In addition, feelings of fatigue may result in complacency, which might regulate supervisors' inclination to fully support subordinates (Zuehlke, 2004). Against this background, this study explored the intervening influence of fatigue on the relationships between teamwork and supervisory support and the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

c) Fatigue and customer factors

The *customer factors* investigated in this study were cultural differences and unreasonably demanding passengers. As stated before, flight attendants' service delivery to passengers from different cultural backgrounds and passengers that are unreasonably demanding will not be easier when the flight attendants feel fatigued. In the same way, it is suggested that service recovery might be influenced and be more challenging if and when flight attendants feel fatigued since the effects of fatigue include a lack of good judgement and poor decision-making (Zuehlke, 2004).

Against this background, this study investigated fatigue as an intervening influence on the relationships between cultural differences and unreasonably demanding passengers and the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

d) Fatigue and environmental factors

The *environmental factors* modelled in this study were limited physical space, limited time/time pressure, and limited physical resources. As stated earlier, limited physical space is a job demand that flight attendants face (Chen & Chen, 2014). Flight attendants also face time pressures (Damos *et al.,* 2013), which in turn are associated with service failures (Teng *et al.*, 2014) and mistakes (Dzerzhinskiy, 2016). Adding to the already stressful and demanding job of a frontline employee (Chen & Kao, 2012a; Wirtz *et al.,* 2008), international flight attendants have to manage physical resource shortages on board an aircraft by regularly apologising, offering explanations, and/or offering redress to passengers. Therefore, this study investigated the intervening influence of fatigue on the relationships between limited physical space, limited time/time pressure, and limited physical resources and the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

Operationalisation of fatigue:

Fatigue is a mental and/or physical state of exhaustion that anyone can face (Michielsen, De Vries, Van Heck, Van de Vijver & Sijtsma, 2004). Fatigue can also be explained as a lack of energy or motivation (Wedro, 2021). Roma *et al.* (2010) argue that flight attendants experience impaired performance related to fatigue even before starting their workday. Finally, the components of job burnout include emotional exhaustion (related to fatigue), depersonalisation, and diminished personal accomplishment (Maslach & Jackson, 1986). Therefore, international flight attendants' feeling emotionally drained or burned out can be related to fatigue.

The construct (fatigue) was measured using the following items:

1. I often feel fatigued when I get up in the morning and have to face another day at work
2. As flight attendant, I often feel emotionally drained from my work
3. As flight attendant, I often feel burned out from my work
4. As flight attendant, I often feel physically exhausted
5. As flight attendant, I often feel mentally exhausted

3.5.2 Job experience

The second intervening variable assessed in this study was job experience or job tenure, which refers to the length of time (years spent working) in a specific field or occupation (Work experience, 2021). In this study, job experience was categorised as follows: less than one year, one to three years, four to six years, seven to nine years, and 10 or more years.

3.5.2.1 Job experience: service-delivery performance

Previous literature suggests both indirect and direct relationships between job experience and employee performance. Hunter and Thatcher (2007) report that job experience moderates the relationship between affective organisational commitment and job performance, indicating that employees with more job experience show higher levels of performance. In addition, in a study among frontline hotel employees in Turkey, Yilmaz (2015) found a direct relationship between job experience and job performance, suggesting that the levels of job performance among employees with one to five years of experience are higher than employees with less than one year of job experience.

According to Chen and Kao (2012b), job tenure (or job experience) moderates the relationship between burnout and job performance. In other words, the negative influence that burnout can have on flight attendants' job performance is less severe among experienced flight attendants than flight attendants with little or no job experience.

Finally, international flight attendants interviewed in this study suggest that job experience makes service delivery easier (Feedback from informal discussions, 2020). Against this background, this study investigated the intervening influence of job experience on the relationships between organisational, crew, customer, and environmental factors and the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

a) Job experience and organisational factors

As stated before, the *organisational factors* investigated in this study were company service delivery expectations and customer service training. Job experience may influence the perceptions of company service delivery expectations given that more experienced employees generally have a better understanding of their working environment and what their employers expect of them (Penrose, 2020). In addition, job experience may influence the positive relationship between customer service training and job performance (Yavas *et al.,* 2010) as flight attendants receive continuous and/or refresher training (meaning the more experience they have the more recurrent training they have received). Therefore, this study explored job experience as an intervening variable that might influence the relationships between company service delivery expectations and customer service training and the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

b) Job experience and crew factors

The *crew factors* investigated in this study were supervisory support and teamwork. Supervisors attempt to guide and support their subordinates, especially if they are new to the job. As illustrated by a purser (supervisor): "If they [flight attendants] are new, we take extra care to help them get their work done. I just go and offer if they need help physically completing the task or remembering the next task to do or all the tasks they need to get done" (Flight attendant interviewed by Wong & Neustaedter, 2017:952). However, new and inexperienced flight attendants are not always welcomed in such a way by the rest of the crew.

Flight attendants interviewed in the exploratory phase of this study mentioned that they sometimes struggled to complete their own duties because "new and inexperienced flight attendants do not only need the help from supervisors but also need help from the rest of the team", which makes service delivery strenuous, often delaying the entire service delivery process (Feedback from informal discussions, 2020). Against this background, this study explored the intervening influence of job experience on the relationships between supervisory support and teamwork and the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

c) Job experience and customer factors

The *customer factors* investigated to influence the service-delivery and service-recovery performance of flight attendants in this study were cultural differences and unreasonably demanding passengers. As stated before, cultural differences among customers and unreasonably demanding passengers can influence the service-delivery performance of flight attendants (Feedback from informal discussions, 2020). In addition, the more experienced flight attendants are the better they tend to manage passenger requests and complaints (Karatepe & Talebzadeh, 2016).

Subsequently, this study investigated job experience as an intervening variable that possibly influences the relationships between cultural differences and unreasonably demanding passengers and the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

d) Job experience and environmental factors

The *environmental factors* modelled in this study were limited physical space, limited time/time pressure, and limited physical resources. Flight attendants have limited physical space to work and perform the required service delivery inside an aircraft (Chen & Chen, 2014; Farnen, 2018). It can be argued that experienced flight attendants are more organised and comfortable in the physically restricted working environment of an aircraft than less experienced crew. In other words, job experience may mitigate the negative influences of limited physical space on service-delivery performance.

Also, in terms of limited time/time pressure, the flight attendants interviewed in this study suggested that time pressure significantly increases stress levels (Feedback from informal discussions, 2020), which may also influence job performance (Motowidlo, Packard & Manning, 1986). Finally, dealing with physical resource shortages may require flight attendants to have good interpersonal, social, and problem-solving skills gained from years of job experience (Phillpott, 2020). Against this background, this study explored the influence of job experience as an intervening variable on the relationships between limited physical space, limited time/time pressure, and limited physical resources and the service-delivery performance of international flight attendants working for four- and five-star full-service airlines.

3.5.2.2 Job experience: service-recovery performance

Karatepe and Talebzadeh (2016), who conducted a study among flight attendants in Iran, found a positive relationship between organisational tenure and service-recovery performance, implying that more experienced flight attendants manage passenger complaints better and more effectively than those with less experience. Breaky (2020), an international flight attendant who participated in the exploratory phase of this study, agrees with Karatepe and Talebzadeh (2016), stating the following: "The more experience you have and the longer you have worked for the airline the easier it is to deal with customer complaints, as you know exactly what to do and what to say." Moreover, multiple studies report a positive relationship between job experience and job performance (Quińones, Ford & Teachout, 1995; Rozi & Sunarsi, 2020; Uppal, Mishra & Vohra, 2014; Yilmaz, 2015). Therefore, this study investigated the intervening influence of job experience on the relationships between organisational, crew, customer, and environmental factors and the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

a) Job experience and organisational factors

Job experience might influence flight attendants' perceptions of company service delivery expectations and their service-recovery performance as more experienced flight attendants know exactly what is expected of them during a service recovery situation (Feedback from informal discussions, 2020).

In addition, it can be argued that flight attendants' perceptions and use of skills learnt in customer service training might be influenced by their annual recurrent training (refresher or retraining that flight attendants receive every year). Against this background, this study explored the influence of job experience as an intervening variable on the relationships between company service delivery expectations and customer service training and the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

b) Job experience and crew factors

The *crew factors* investigated in this study were supervisory support and teamwork. The flight attendants interviewed agreed that teamwork makes service recovery easier (Feedback from informal discussions, 2020). In addition, former and current international flight attendants suggest that it is always better to inform supervisors of customer complaints as they have more experience and can give better advice with regard to service recovery (Feedback from informal discussions, 2020). However, inexperienced crew can put strain on the rest of the team as they are mostly dependent on the assistance, guidance, and support from more experienced crew members such as supervisors (Feedback from informal discussions, 2020). Against this background, this study explored the influence of job experience as an intervening variable on the relationships between supervisory support and teamwork and the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

c) Job experience and customer factors

As stated earlier, cultural differences among customers may influence the service-recovery performance of frontline employees (Wong, 2004). Also, more experienced flight attendants manage passenger complaints, which are linked to service recovery, better than those who are less experienced (Karatepe & Talebzadeh, 2016). Therefore, job experience was modelled as an intervening variable that possibly influences the relationships between cultural differences and unreasonably demanding passengers and the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

d) Job experience and environmental factors

The *environmental factors* modelled in this study were limited physical space, limited time/time pressure, and limited physical resources. As stated before, flight attendants perform most of their duties while standing, because of limited physical space (Farnen, 2018). In addition, time pressure that flight attendants face can be associated with service failure and service recovery (Teng *et al.*, 2014). Dealing with physical resource shortages may include offering an explanation and an apology, which is also related to service failure and service recovery. This study therefore explored the influence of job experience as an intervening variable on the relationships between limited physical space, limited time/time pressure, and limited physical resources and the service-recovery performance of international flight attendants working for four- and five-star full-service airlines.

Operationalisation of job experience:

In this study, job experience or job tenure referred to the length of time (years spent working) in a specific field or occupation (Work experience, 2021). Hunter and Thatcher (2007) report an indirect positive relationship between job experience and employees' job performance (Hunter & Thatcher, 2007), whereas Yilmaz (2015) reports a direct positive relationship between job experience and job performance. According to Yilmaz (2015), employees with one to five years of job experience perform better than those with less than one year of job experience. To conclude, job experience was categorised in this study as less than one year, one to three years, four to six years, seven to nine years, and 10 years or more.

Figure 3.6: Model 1 – International flight attendants' working environment and its influence on service-delivery performance (SDP)
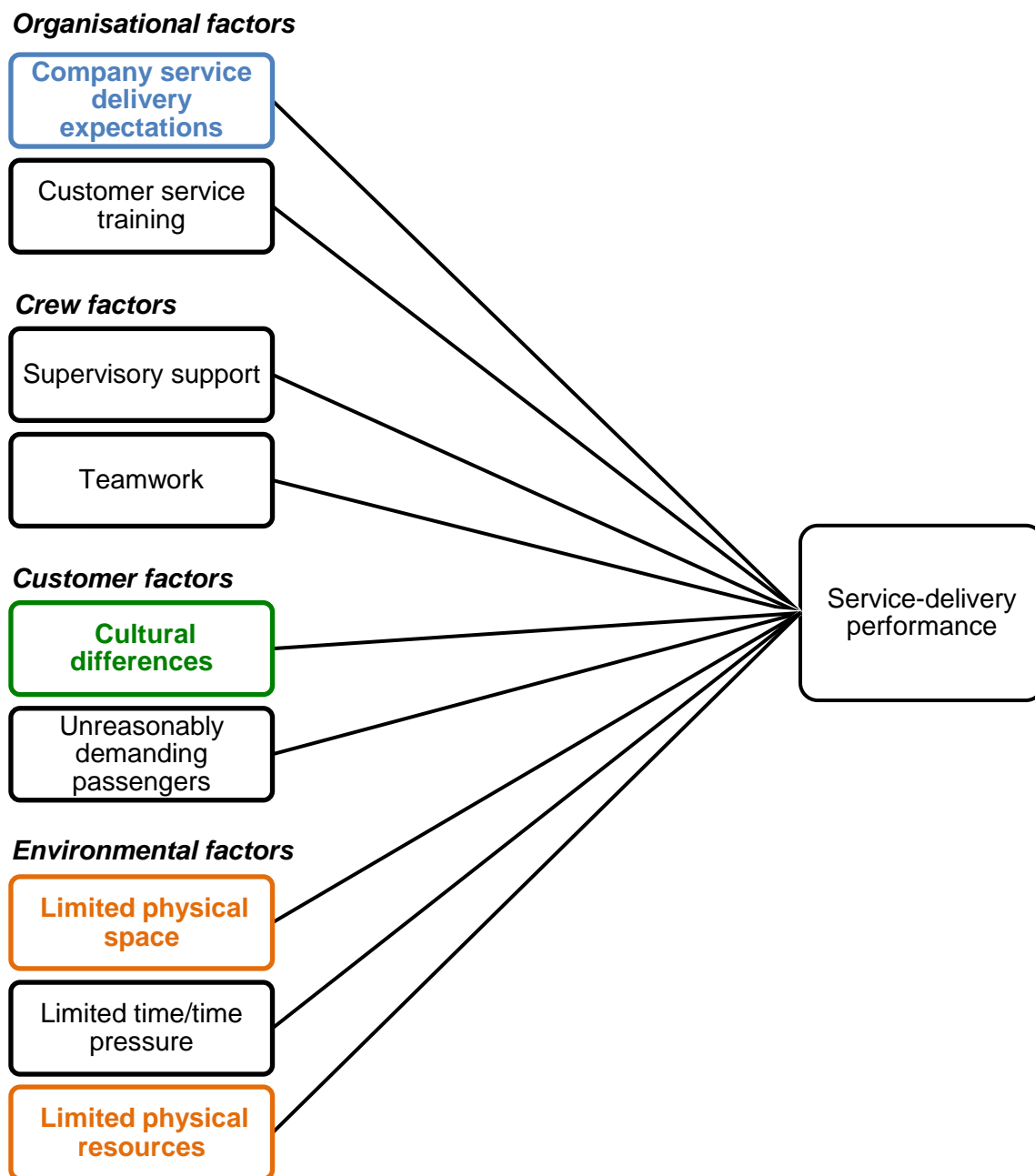
Note:

- The variables that originated from this study are highlighted in bold and in colour, whereas the variables that originated from previous literature are indicated in plain text

- The potential intervening (mediating) role of fatigue and job experience is not shown in this model

Figure 3.7: Model 2 – International flight attendants' working environment and its influence on service-recovery performance (SRP)
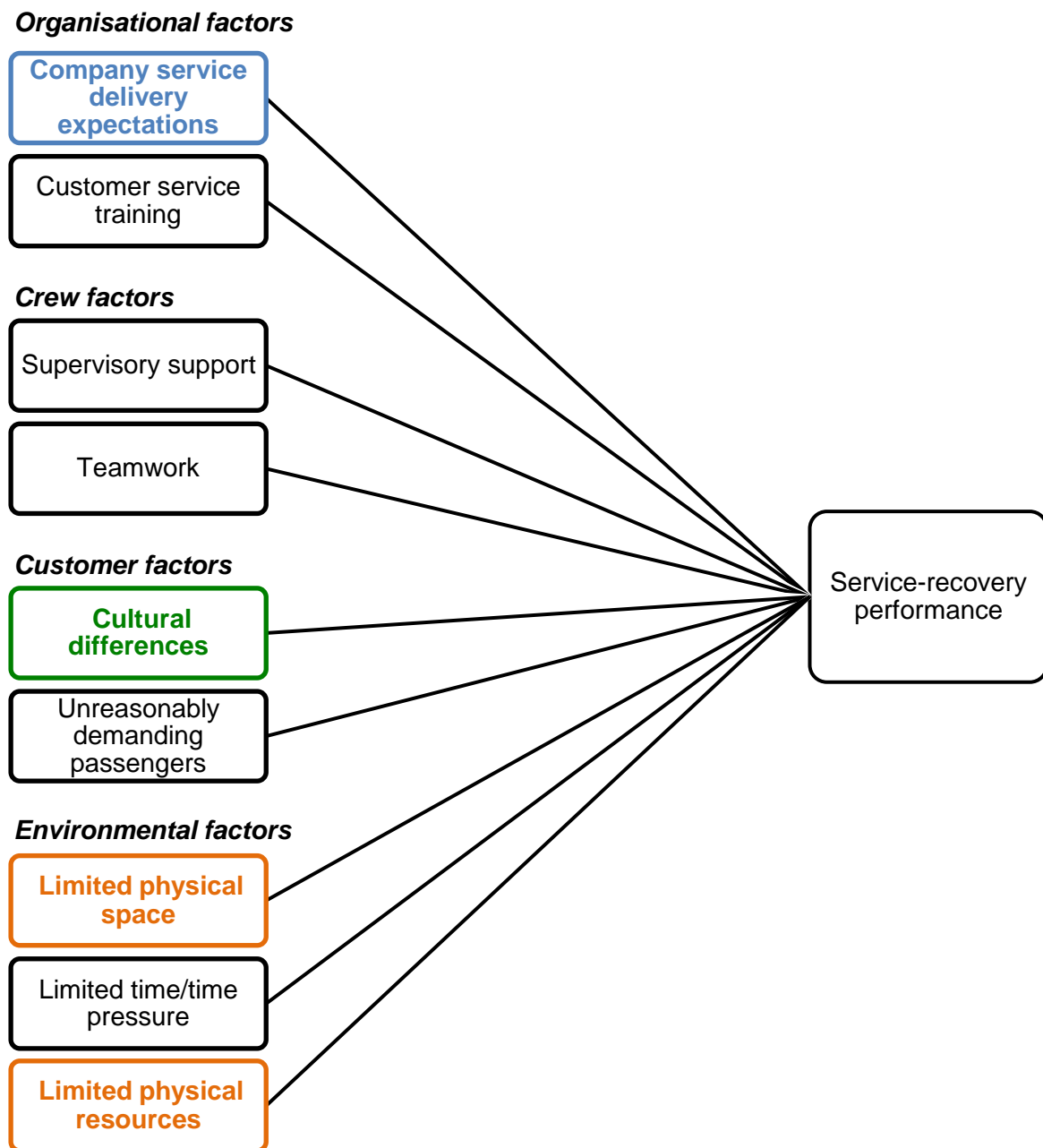
Organisational factors

- Company service delivery expectations
- Customer service training

Crew factors

- Supervisory support
- Teamwork

Customer factors

- Cultural differences
- Unreasonably demanding passengers

Environmental factors

- Limited physical space
- Limited time/time pressure
- Limited physical resources

Service-recovery performance

Note:

- The variables that originated from this study are highlighted in bold and in colour, whereas the variables that originated from previous literature are indicated in plain text

- The potential intervening (mediating) role of fatigue and job experience is not shown in this model

94

3.6 SUMMARY

The two theoretical models proposed in this study were introduced in this chapter. The dependent variables as illustrated in the theoretical models were service-delivery performance and service-recovery performance. The independent variables were company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure, and limited physical resources. These variables in turn were divided into four groups, namely organisational factors, crew factors, customer factors, and environmental factors. Finally, the intervening variables assessed in this study were fatigue and job experience.

With regard to the independent variables, company service delivery expectations refer to the high expectations that airlines have of flight attendants in terms of their duties and responsibilities. Customer service training refers to the training that flight attendants receive to be equipped to provide high-quality services to passengers. In addition, supervisory support refers to the willingness of on-board supervisors to help and support their subordinates. Teamwork was defined as flight attendants working together in order to achieve a common goal. In this study, cultural differences were defined as the cultural differences among customers regarding their cultural background. Demanding customers refer to unreasonably demanding passengers who require a prolonged and complex response from international flight attendants. In addition, limited physical space refers to the limited space that flight attendants have to perform their duties inside an aircraft. Limited time/time pressure was described as the insufficient time in which flight attendants have to perform tasks. Finally, limited physical resources refer to the potential resource shortages on flights, for example, when certain meals or beverages are not available. Fatigue was defined as the state of feeling physically and/or mentally exhausted, whereas job experience referred to the length of time (years spent working) in a specific field or occupation.

These variables were explored by reviewing both previous literature and the information collected during the exploratory research phase of this study. An operationalisation (or working definition) of each variable was given as well as a list of the questionnaire items related to the variable(s). In the following chapter, Chapter 4, the research methodology will be discussed.

CHAPTER 4
RESEARCH METHODOLOGY

4.1 INTRODUCTION

The literature reviewed in Chapters 2 and 3 and the information collected during the informal discussions with former and current international flight attendants provided the background for the two theoretical models proposed in the previous chapter. However, in order to assess the validity of these models, primary research had to be conducted.

This chapter describes the research methodology that guided the research process in this study. The problem statement, research objectives, and hypotheses are discussed first, followed by the research design, measurement instrument, sampling methods, and data analysis. The problem statement refers to the limited literature available on the duties and responsibilities of international flight attendants and the factors that influence their service-delivery and service-recovery performance. The research objectives and hypotheses include an assessment of the working environment of international flight attendants and its influence on service-delivery and service-recovery performance. Moreover, the research design of this study includes both primary and secondary research. During secondary research (Phase 1), previous literature was reviewed and with regard to primary research, exploratory research (Phase 2) and survey research (Phase 3) was conducted.

The target population of this study was international flight attendants employed by four- and five-star airlines, and the sampling methods used were a combination of judgement and snowball sampling. The raw data were collected in Qualtrics and then exported to a Microsoft Excel spreadsheet. Thereafter, the Excel spreadsheet was imported to SPSS 26.0 and LISREL 8.80 for analysis. Descriptive data analysis included calculating the means, modes, standard deviation, and ranges. Moreover, the inferential analyses included the following statistical tests: exploratory factor analysis (EFA), Kaiser-Meyer-Olkin (KMO), Bartlett's test of sphericity, Cronbach's alpha, and structural equation modelling (SEM).

4.2 DEMANDS OF SERVICE DELIVERY ON INTERNATIONAL FLIGHT ATTENDANTS

Competitive advantage is a differentiation strategy that allows a firm to outperform its competitors (Kotler & Keller, 2012). One way in which firms can maintain a competitive advantage is by means of delivering superior service quality, especially those that promote service excellence like high-end airlines such as Qatar Airways, Qantas, Garuda Indonesia, Emirates, Air New Zealand, and KLM Royal Dutch Airlines investigated in this study (Parasuraman *et al.,* 1988). On these prestigious airlines, thousands of international flight attendants roam the skies daily serving passengers' day in and day out. International flight attendants (in this study, specifically those working for four- and five-star full-service airlines) play a crucial role in the delivery of superior service quality, as frontline employees are a key input for service excellence (Wirtz *et al.,* 2008). International flight attendants have limited physical and human resources to serve sometimes demanding passengers within restricted time allocations while facing the potential physical effects of jet lag and crossing different time zones. However, flight attendants are an understudied occupation group (McNeely *et al.*, 2018) and as far as previous research is concerned, not much consideration has been given to the duties and responsibilities of international flight attendants and the factors that affect their service performance (Damos *et al.*, 2013). Although some studies have been conducted on the factors that influence the service-delivery and service-recovery performance of other frontline employees such as hotel front desk staff, banking employees, and nurses, limited studies have been conducted on the service-delivery and service-recovery performance of *international flight attendants* as frontline employees. In addition, few changes have been made to these flight attendants' work schedules to mitigate the effect of fatigue on their service performance and well-being (Caldwell, 2005).

Against this background, the gap in the literature was investigated by proposing two theoretical models that feature the unique working environment factors that potentially influence the service-delivery performance and service-recovery performance of international flight attendants (refer to theoretical models, Figure 3.6 and 3.7). Thus, model testing was guided by several objectives and the testing of several hypotheses.

4.3 RESEARCH OBJECTIVES AND HYPOTHESES

The primary objective of this study was to empirically assess the validity of the proposed theoretical models, more specifically to assess the influence of international flight attendants' working environment factors on their service-delivery and service-recovery performance.

To address the primary objective the following secondary objectives were formulated:

- to assess the influence of company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure, and limited physical resources on international flight attendants' (1) service-delivery performance and (2) their service-recovery performance
- to assess the role of the intervening influence of fatigue and job experience on the relationships between the independent variables (company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources), and international flight attendants' (1) service-delivery performance and (2) their service-recovery performance
- to assess the consistency between the empirical results of this study and the job demands–resources (JD–R) model, Hochschild's emotional labour theory, Rawls' theory of justice, and the environmental psychology theory

To address these objectives the following hypotheses were assessed in terms of Model 1 (service-delivery performance):

H_1: There is a negative relationship between unrealistic company service delivery expectations and service-delivery performance (SDP)

H_2: There is a positive relationship between the level of customer service training and service-delivery performance (SDP)

H$_3$: There is a positive relationship between the level of supervisory support and service-delivery performance (SDP)

H$_4$: There is a positive relationship between the extent of teamwork and service-delivery performance (SDP)

H$_5$: There is a negative relationship between the perceptions of cultural differences among passengers and service-delivery performance (SDP)

H$_6$: There is a negative relationship between the perceptions of unreasonably demanding passengers and service-delivery performance (SDP)

H$_7$: There is a negative relationship between the perceptions of limited physical space and service-delivery performance (SDP)

H$_8$: There is a negative relationship between limited time/time pressure and service-delivery performance (SDP)

H$_9$: There is a negative relationship between limited physical resources and service-delivery performance (SDP)

Proposition 1: Fatigue has an intervening influence on the relationships between the independent variables (company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources) and service-delivery performance (SDP)

Proposition 2: Job experience has an intervening influence on the relationships between the independent variables (company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources) and service-delivery performance (SDP)

Although it was expected that fatigue and job experience would be intervening variables, this potential relationship was not statistically tested.

To address the objectives the following hypotheses were assessed in terms of Model 2 (service-recovery performance):

H_{10}: There is a negative relationship between unrealistic company service delivery expectations and service-recovery performance (SRP)

H_{11}: There is a positive relationship between the level of customer service training and service-recovery performance (SRP)

H_{12}: There is a positive relationship between the level of supervisory support and service-recovery performance (SRP)

H_{13}: There is a positive relationship between the extent of teamwork and service-recovery performance (SRP)

H_{14}: There is a negative relationship between the perceptions of cultural differences among passengers and service-recovery performance (SRP)

H_{15}: There is a negative relationship between the perceptions of unreasonably demanding passengers and service-recovery performance (SRP)

H_{16}: There is a negative relationship between the perceptions of limited physical space and service-recovery performance (SRP)

H_{17}: There is a negative relationship between limited time/time pressure and service-recovery performance (SRP)

H_{18}: There is a negative relationship between limited physical resources and service-recovery performance (SRP)

Proposition 3: Fatigue has an intervening influence on the relationships between the independent variables (company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources) and service-recovery performance (SRP)

Proposition 4: Job experience has an intervening influence on the relationships between the independent variables (company service delivery expectations, customer service training, supervisory support, teamwork, cultural differences, unreasonably demanding passengers, limited physical space, limited time/time pressure and limited physical resources) and service-recovery performance (SRP)

Again, although it was expected that fatigue and job experience would be intervening variables, this potential relationship was not statistically tested.

4.4 RESEARCH DESIGN

A multiple methods research design was used in this study. In other words, both qualitative and quantitative research were conducted. In addition, the research process was divided into three phases. Phase 1 consisted of assessing previous literature (secondary research), Phase 2 of conducting exploratory research (primary research/collecting data during informal discussions), and Phase 3 of survey research (also primary research).

4.4.1 Phase 1: Previous literature

Secondary research refers to data that already exist or data collected by another researcher (Saunders, Lewis & Thornhill, 2009; Zikmund *et al.,* 2013). During Phase 1 of the research process in this study, secondary research was conducted by reviewing previous literature on frontline employees' service-delivery and service-recovery performance and the factors that influence their performance. As pointed out earlier, several studies have been reported among nurses, banking employees, and hotel front desk staff as frontline employees, but limited studies have been conducted among international flight attendants as frontline employees.

4.4.2 Phase 2: Exploratory research

Exploratory research is a qualitative research method used to explore or clarify ambiguous situations, discover new ideas, and/or guide and refine research efforts (Zikmund *et al.,* 2013). In Phase 2 of the research process in this study, exploratory research was conducted.

The researcher conducted informal discussions with one former and three current international flight attendants in order to collect information regarding potential factors that might influence international flight attendants' service performance. The electronic communication application WhatsApp was used to ask former and current international flight attendants four open-ended questions regarding their service delivery (refer to Appendix A). The information collected and the data accumulated from the secondary research in Phase 1 were used to create the two theoretical models assessed in this study.

4.4.3 Phase 3: Survey research

During Phase 3 of the research process survey research was conducted. Survey research, a quantitative research method, is a relatively quick, efficient, and accurate way of assessing information about a specific group of people (Zikmund *et al.,* 2013). A self-administered questionnaire was designed in Qualtrics and distributed to former and current international flight attendants via WhatsApp and/or email. The questionnaire was sent in the form of an electronic link that respondents could open and complete on their smartphone, tablet, or personal computer.

According to Saunders *et al.* (2009:419), the design of a questionnaire directly affects its response rate, reliability, and validity. However, these can be maximised by "careful design of individual questions, clear and pleasing layout of the questionnaire, lucid explanation of the purpose of the questionnaire, pilot testing, and carefully planned and executed delivery and return of completed questionnaires". To ensure the careful design of individual questions the items in the questionnaire were critically reviewed before the questionnaire was finalised. In addition, the layout of the questionnaire was clear and simple as well as mobile-friendly so that participants could open the link easily and in the comfort of their homes. The purpose of the study was clearly stated in the consent form which was included in the first section of the questionnaire. Finally, regarding the delivery and return of the questionnaire, the survey link was distributed to international flight attendants via email and/or Whatsapp which made it fairly easy for respondents to complete.

4.5 MEASUREMENT INSTRUMENT

The measurement instrument used in this study was a self-administered online questionnaire. As previously stated, the questionnaire was designed in Qualtrics and an electronic survey link was distributed to respondents. (The tenses used in the questionnaire were different depending on whether the respondent was a former or current international flight attendant). The questionnaire comprised a consent form, screening questions, demographic questions, and scale items. The consent form had to be completed first before respondents could continue to the rest of the questionnaire.

4.5.1 Consent form

The first page that respondents viewed as soon as they opened the electronic questionnaire link was the consent form, which outlined the purpose of the research study (refer to Appendix B). Respondents were asked to confirm whether they had read and understood the information provided in the consent form and to indicate whether they agree to take part in the study.

4.5.2 Screening questions

There were two screening questions. As illustrated in Figure 4.1, if the respondent answered 'Yes' to either of the two screening questions (S1 or S2), the respondent could continue with the questionnaire. However, if the respondent answered 'No' to both S1 and S2 the respondent could not continue with the questionnaire.

Figure 4.1: Screening questions
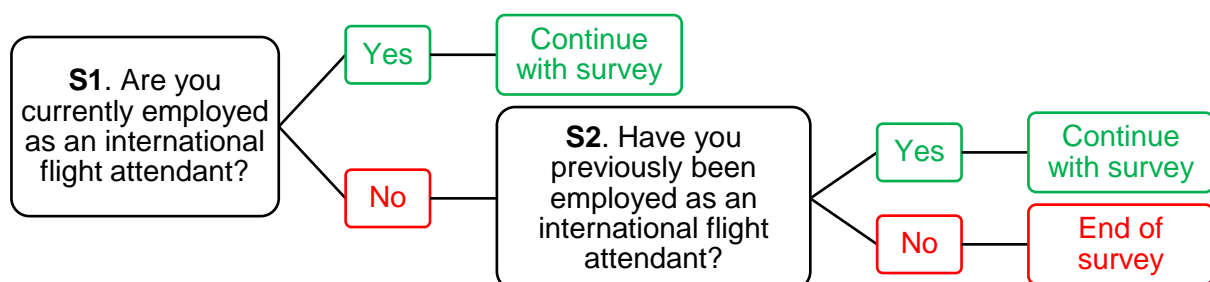
4.5.3 Demographic questions

As shown in Table 4.1, there were six demographic questions in the questionnaire related to the respondents' nationality, gender, age, former or current airlines employed by, experience as an international flight attendant, and cabin class worked in (Table 4.1, Appendix C).

Table 4.1: Demographic questions

Code	Item					
S3	Please indicate your nationality	☐ South African			☐ Other. Please specify: _____	
S4	Please indicate your gender	☐ Male			☐ Female	
S5	Please indicate your age in years	☐ 18–23	☐ 24–29		☐ 30–35	☐ 36+
S6	Please indicate the names of the airline(s) that you have been/are employed by (You may select more than one option)	☐ Emirates		☐ Qatar Airways	☐ Other. Please specify: _____	
S7	How many years' experience do you have as an international flight attendant?	☐ Less than one (1) year	☐ 1–3 years	☐ 4–6 years	☐ 7–9 years	☐ 10+ years
S8	Have you worked in Economy or Business class or in both?	☐ Economy		☐ Business	☐ Both Economy and Business	

4.5.4 Scale items

There were 60 scale items in the questionnaire (Appendix C). The following variables or constructs were used in previous literature and therefore some evidence of their psychometric properties were available and could be used in the questionnaire: service-delivery performance (Lages, Piercy, Malhotra & Simões, 2018), service-recovery performance (Boshoff & Allen, 2000), company service delivery expectations (Ashill & Rod, 2011), customer service training (Boshoff & Allen, 2000), supervisory support (Greenhaus, Parasuraman & Wormley, 1990), teamwork (Coyle-Shapiro & Morrow, 2003), cultural differences (Moufakkir & Alnajem, 2017), unreasonably demanding passengers (Wang & Netemeyer, 2004; Zhou *et al.,* 2007), limited time/time pressure (Teng, *et al.,* 2014), fatigue (Kim *et al.,* 2012a; Michielsen, De Vries & Van Heck, 2003) and job experience (Yilmaz, 2015).

There were no previously available measurement instruments for the following variables: limited physical space and limited physical resources. Therefore, self-developed instruments or items were used to measure these constructs (refer to Table 4.2). The scale items were linked to a seven-point Likert scale where seven (7) was labelled as strongly agree and one (1) as strongly disagree. (Job experience was the only variable that was not measured using a Likert-scale as it was included in the demographic section.)

Table 4.2: Questionnaire items

Construct	Code	Item	Source
Service-delivery performance	SDP1	I always follow up on passengers' requests	Adapted from Bettencourt & Brown, 2003
	SDP2	Regardless of circumstances, I am courteous (polite, respectful) to passengers	
	SDP3	I follow through in a conscientious (diligent) manner on promises to passengers	
	SDP4	I am efficient in my service delivery	Adapted from Chen & Kao, 2014
	SDP5	As flight attendant, I deliver excellent service quality to passengers	
Service-recovery performance	SRP1	Considering all the things I do, I handle dissatisfied passengers quite well	Adapted from Boshoff & Allen, 2000
	SRP2	No passenger I deal with leaves the aircraft with problems unresolved	
	SRP3	I don't mind dealing with complaining passengers	
	SRP4	Satisfying complaining passengers delights me	
	SRP5	Dissatisfied passengers I deal with always leave the aircraft satisfied	Self-developed
Company service delivery expectation (measured as role overload)	EXPEC1	The amount of work I usually have prevents me from doing my job to the best of my ability	Adapted from Chen & Chen, 2014
	EXPEC2	I am not given enough time to do what is expected of me in my job	Adapted from Ashill & Rod, 2011
	EXPEC3	I often have too much work for one person to do	
	EXPEC4	The performance standards on my job are very high	
	EXPEC5	I can do a better job if I have more time available	Self-developed

Table 4.2: Questionnaire items (continued)

Construct	Code	Item	Source
Customer service training	TRAIN1	I receive continuous training to provide a high quality of service	Adapted from Boshoff & Allen, 2000
	TRAIN2	I have received training on how to serve passengers better	
	TRAIN3	I have received training on how to deal with complaining passengers	
	TRAIN4	I received adequate customer service training before I came into contact with passengers	
	TRAIN5	I have received training on dealing with passenger problems	
Supervisory support	SUPER1	My in-flight supervisors usually give me helpful feedback about my performance	Adapted from Greenhaus *et al.,* 1990
	SUPER2	My in-flight supervisors care about whether I achieve my career goals	
	SUPER3	My in-flight supervisors make sure I get the credit when I accomplish something significant on the job	
	SUPER4	My in-flight supervisors take the time to learn about my career goals	
	SUPER5	My in-flight supervisors support me in times of difficulty	Self-developed
Teamwork	TEAM1	Most times flight attendants in my workgroup work together effectively	Adapted from Coyle-Shapiro & Morrow, 2003
	TEAM2	There is usually a lot of co-operation in my workgroup	
	TEAM3	The flight attendants in my workgroup always encourage each other to work as a team	
	TEAM4	There is usually a strong team spirit in my workgroup	
	TEAM5	Usually, the flight attendants in my workgroup help each other with tasks	Self-developed
Cultural differences	CULTURE1	Some cultural groups I serve are friendlier than other cultural groups	Adapted from Moufakkir & Alnajem, 2017
	CULTURE2	Certain cultural groups are more pleasant to serve than others	
	CULTURE3	Passengers from some countries complain more than others	
	CULTURE4	Certain cultural groups are less demanding than other cultural groups	
	CULTURE5	I enjoy serving passengers from some countries more than others	

Table 4.2: Questionnaire items (continued)

Construct	Code	Item	Source
Unreasonably demanding passengers	DEMAND1	Some passengers have unreasonably high expectations in terms of service	Adapted from Wang & Netemeyer, 2004
	DEMAND2	Sometimes passengers are unreasonably demanding with regards to service quality	
	DEMAND3	Passengers often expect me to deliver unreachably high levels of service quality	
	DEMAND4	The passengers I serve require a perfect fit between their needs and my services	
	DEMAND5	Some passengers are very demanding about the quality of the services they expect	Adapted from Zhou *et al.*, 2007
Limited physical space	SPACE1	Inside the aircraft, I do not always have enough space to perform my duties	Self-developed
	SPACE2	The aisles in an aircraft are too narrow for me to work efficiently	
	SPACE3	There should be more space in the galley for flight attendants to work better	
	SPACE4	The limited space inside an aircraft is sometimes a problem	
	SPACE5	Often, the aircraft feels very cramped inside	
Limited time/time pressure	TIME1	I feel high levels of time pressure at work	Adapted from Teng *et al.*, 2014
	TIME2	I always feel rushed during work hours	
	TIME3	I often do not have sufficient time to finish my work properly	
	TIME4	As flight attendant, I feel very busy at work	
	TIME5	I find that the time allocated to perform certain services is very limited	
Limited physical resources	RESOUR1	I often run out of meal options when serving passengers	Self-developed
	RESOUR2	As flight attendant, I cannot always satisfy my passengers' needs because of the limited resources we have inside the aircraft	
	RESOUR3	Sometimes I have to apologise to passengers because I do not have their preferred meal or beverage in my cart	

Table 4.2: Questionnaire items (continued)

Construct	Code	Item	Source
Limited physical resources (continued)	RESOUR4	Airlines should provide flight attendants with more resources on-board such as sufficient meals, beverages, snacks and complementary items	Self-developed
	RESOUR5	I often feel embarrassed for not having the meal or beverage option a passenger requests	
Fatigue	FATIGUE1	I often feel fatigued when I get up in the morning and have to face another day at work	Adapted from Kim *et al.,* 2012a
	FATIGUE2	As flight attendant, I often feel emotionally drained from my work	
	FATIGUE3	As flight attendant, I often feel burned out from my work	
	FATIGUE4	As flight attendant, I often feel physically exhausted	Adapted from Michielsen *et al.,* 2003
	FATIGUE5	As flight attendant, I often feel mentally exhausted	

4.6 VALIDITY, RELIABILITY, AND SENSITIVITY

Validity, reliability, and sensitivity are fundamental criteria in the evaluation of a measurement instrument (Tavakol & Dennick, 2011; Zikmund *et al.,* 2013). These three criteria assess the accuracy, consistency and variability of a measurement instrument.

4.6.1 Validity

Validity indicates the accuracy of a measurement instrument (Saunders *et al*., 2009). The four basic approaches to assess validity are face validity, content validity, criterion validity, and construct validity (Zikmund *et al.,* 2013). Face validity refers to whether a scale measures that which it intended to measure and can be established using clear and understandable questions. Secondly, content validity refers to whether a measure covers the entire domain of interest. For example, whether every aspect of the subject matter is investigated. In this study, content validity was ensured by means of a thorough review of the services literature.

Thirdly, criterion validity can be defined as the extent to which a measure correlates with an existing measure. In this study, criterion validity was assessed by comparing the results in this study with those of previous studies. The fourth approach to assess validity is construct validity, which refers to the extent to which scale items measure the constructs they intended to measure (Saunders *et al.*, 2009). A claim of construct validity must be based on an assessment of face validity, content validity, criterion validity, convergent validity, and discriminant validity (Zikmund *et al.,* 2013).

In the context of construct validity, convergent validity refers to whether constructs that are expected to be related to each other are indeed related. In order to ensure convergent validity, correlations between the constructs have to be tested. Furthermore, discriminant validity ensures the uniqueness of a measure by confirming that a scale should not be too highly correlated with another dissimilar construct (Zikmund *et al.,* 2013). In this study, convergent and discriminant validity was determined by conducting exploratory factor analysis (EFA) in SPSS. In addition, the validity of the measurement model was assessed by means of goodness-of-fit (GOF) indices during stage four of structural equation modeling.

4.6.2. Reliability

Reliability is an indicator of a measure's internal consistency (Saunders *et al.,* 2009). That is, if various attempts at measuring a construct result in the same outcome, the measurement instrument can be considered reliable (Zikmund *et al.,* 2013). The internal reliability of the measurement instrument used in this study was assessed by using Cronbach's alpha in SPSS. The results are reported in Chapter 5.

4.6.3 Sensitivity

Sensitivity refers to the ability of a measurement instrument to accurately measure variability in a concept (Zikmund *et al.,* 2013). Zikmund *et al.* (2012) suggest that sensitivity can be increased by increasing the scale items or using a scale that has more response points, for example, using a five-or seven-point Likert scale. The measurement instrument used in this study consisted of 60 scale items. In addition, a seven-point Likert scale was used. Therefore, it can be argued that the measurement instrument was fairly sensitive.

4.7 THE SAMPLE

A unit of analysis or otherwise sample is a subset of a larger group of people and can be used to represent an entire population (Zikmund *et al.,* 2013). In addition, a sampling frame is a list with information about a specific group of people (Zikmund *et al.,* 2013). In this study, there was no sampling frame available and therefore the sampling technique was by necessity non-probability. Non-probability sampling is a sampling technique that involves selecting a sample according to personal judgement or convenience (Zikmund *et al.,* 2013).

4.7.1 Target population

The target population of this study was former and current international flight attendants employed or formerly employed by one of the worlds' four- or five-star full-service international airlines (rated by Skytrax).

4.7.2 Sampling method

A list of former and current international flight attendants with their contact details was compiled by the researcher. Thereafter, a combination of judgement (purposive) and snowball sampling was used to generate a sampling frame. Judgement sampling is a sampling technique in which personal judgement is used whereas snowball sampling involves obtaining information from initial or 'first' respondents in order to expand the list of respondents (Zikmund *et al.,* 2013). A minimum sample size of 200 flight attendants was suggested. Respondents could be aged between 18 to 60 and preference regarding the gender distribution was 80 per cent female and 20 per cent male, as the majority of flight attendants in the world are female (Ash, 2020; Industry News, 2020).

4.8 DATA ANALYSIS

The statistical programs SPSS 26.0 and LISREL 8.80 were used to analyse the data collected in this study. Descriptive and inferential data analysis was conducted.

4.8.1 Descriptive analysis

Descriptive analysis, which is the most basic form of data analysis, was conducted in order to describe the demographic profile of the sample (Zikmund *et al.,* 2013). The following demographic characteristics were reported using tables and graphs: nationality, gender, age, and number of years' experience as an international flight attendant. The names of the airline(s) that the flight attendants were employed (or formerly employed) by and the cabin class in which they worked were also reported. Finally, the means and standard deviation of each variable were calculated to assess the distribution and variability of the data.

4.8.2 Inferential analysis

Inferential data analyses can be used to draw inferences about an entire population based on the findings from a sample (Zikmund *et al.,* 2013). Inferential analyses can also be used to test hypotheses and to address research questions (Sullivan-Bolyai & Bova, 2014). The following statistical tests were executed to analyse the data in this sample:

4.8.2.1 Exploratory factor analysis

EFA was conducted to assess the discriminant validity among the variables captured in the theoretical models. The estimation method used was principal axis factoring (it was assumed that the data would be more-or-less normally distributed) and the rotation method used was direct quartermin oblique rotation since it was assumed that the variables would be at least to some extent correlated. However, first, the sampling adequacy of the data was assessed by reviewing the Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity. According to Dziuban and Shirkey (1974), a KMO score of above 0.5 and close to 1.0 indicate sampling adequacy. In addition, Bartlett's test of sphericity level of significance (< 0.05) indicates whether the use of a factor analysis is appropriate given the nature of the data collected (sufficient variability).

111

4.8.2.2 Cronbach's alpha

The reliability of the measurement instrument used in this study was assessed using Cronbach's alpha. Cronbach's alpha, α (or coefficient alpha), is the most commonly used measure to assess the internal reliability of a scale (Tavakol & Dennick, 2011). Cronbach's α values range between 0 and 1. A Cronbach's α below 0.60 indicates poor reliability, whereas a Cronbach's α between 0.60 and 0.70 indicates fair reliability (Zikmund *et al.,* 2013). In addition, Cronbach's α values between 0.70 and 0.80 indicate good reliability compared to Cronbach's α values between 0.80 and 0.95 that indicate very good reliability. The generally accepted cut-off point is 0.70.

4.8.2.3 Multicollinearity assessment

Multicollinearity measures the extent to which independent variables are correlated with each other (Zikmund *et al.,* 2013). In this study, multicollinearity was assessed by inspecting the variance inflation factors (VIF) available in SPSS (< 5). According to Zikmund *et al.* (2013), VIF scores should not exceed 5.0, since high VIF scores indicate problems with multicollinearity, which can make it difficult to interpret parameter estimates.
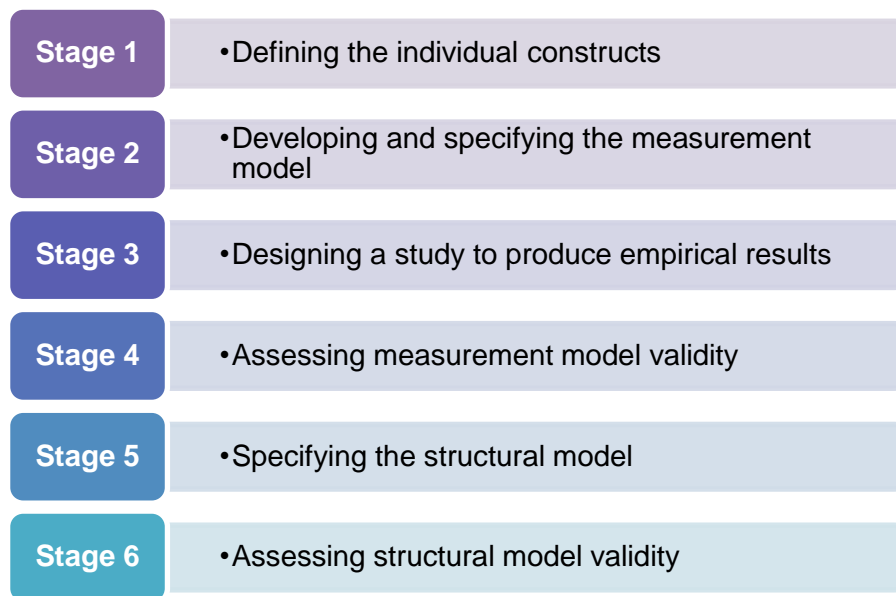
4.8.2.4 Structural equation modeling

Multiple multivariate techniques such as multiple regressions, multivariate analysis of variances, factor analysis, and discriminant analyses can be used to assess the relationships between dependent and independent variables (Hair *et al.,* 2014). However, these techniques only assess a single relationship between two variables without taking into consideration the potential influence of other variables. Structural equation modeling (SEM) is a multivariate technique that allows for simultaneous assessment of relationships among variables. In other words, SEM considers all possible information when assessing the structure of relationships between independent and dependent variables. SEM also has the ability to represent unobserved concepts (or latent variables), which can be measured by examining the consistency between measurable or observable variables (Hair *et al.,* 2014). In addition, SEM accounts or 'corrects for' measurement error by providing an estimate of the true structural coefficient.

As illustrated in Figure 4.2, SEM consists of a six-stage decision process that was executed in this study. The first stage involves defining the individual constructs. Researchers can use well-established scales to measure the constructs in their proposed models, adapt existing scales, or develop entirely new scales when designing a measurement instrument (Hair *et al.*, 2014). In this study, some of the constructs were self-developed. However, most of the constructs were adapted from existing scales (refer to Table 4.2). The second stage of SEM involves the development and specification of the measurement model. During this stage, indicator variables (or scale items) are assigned to each construct or latent variable. In this study, each construct was assigned at least five indicator variables (again, refer to Table 4.2).

The third stage, designing a study to produce empirical results, involves the research design and model estimation. In terms of the research design, the type of data analysed (covariance or correlation), the impact and remedies for missing data, as well as the impact of the sample size have to be addressed (Hair *et al.,* 2014). The type of data analysed in this study was a covariance matrix. In terms of the impact and remedy applied for missing data values two questions have to be answered, namely (1) Is the missing data sufficient and non-random so as to cause problems in estimation or interpretation, and (2) If missing data must be remedied, what is the best approach? (Hair *et al.,* 2014). However, only data from fully completed questionnaires without missing values were analysed in this study. Therefore, these questions were not applicable. The impact of the sample size was assessed. Weston and Gore (2006) suggest a minimum sample size of 200 if the researcher anticipates no missing values and a normal data distribution.

Model estimation (continuing Stage 3) in SEM involves the model structure, estimation technique, and selected computer software (Hair *et al.,* 2014). First, the theoretical model structure has to be communicated to the statistical program (in this case the software program LISREL 8.80 was used). For this purpose, path diagrams can be used. Secondly, an estimation technique has to be specified. In this study, maximum likelihood estimation with a scaling correction using the Satorra-Bentler chi-square was used.

Figure 4.2: Six-stage process of structural equation modeling (SEM)

Stage 1	• Defining the individual constructs
Stage 2	• Developing and specifying the measurement model
Stage 3	• Designing a study to produce empirical results
Stage 4	• Assessing measurement model validity
Stage 5	• Specifying the structural model
Stage 6	• Assessing structural model validity

Source: Hair *et al.* (2014:566)

The fourth stage of the SEM process involves the assessment of the measurement models' validity. According to Hair *et al.* (2014), evidence of construct validity depends on acceptable levels GOF. Goodness-of fit can be described as an indicator of the similarity or 'fit' between the observed and the estimated covariance matrices. The closer the values of these matrices are, the better they 'fit' and the closer the proposed theory or model is to reality. However, chi-square (χ^2) and degrees of freedom (*df*) have to be recorded first as these values are essential in the assessment of any GOF measure (Hair *et al.*, 2014). To assess model fit, the researcher must report three to four fit indices (Hair *et al.*, 2014). In this study, the normed chi-square (χ^2 / df), the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the expected cross-validation index (ECVI) are reported. Normed chi-square values of less than 5.0 (Schumacker & Lomax, 2004; Wheaton, Muthen, Alwin & Summers, 1977), RMSEA values less than 0.05 (Browne & Cudeck, 1992), and CFI values close to one (1) (Hair *et al.,* 2014) indicate a good model fit. When comparing two models with each other the smallest ECVI value indicates the better fit (Browne & Cudeck, 1993).

Stage five in the six-stage decision process of SEM involves specifying the structural model. During this stage, the empirical relationships between the constructs are specified using path estimates (Hair *et al.,* 2014). Finally, stage six in SEM involves assessing structural model validity that can be evaluated based on the same principles used in stage four. In other words, fit indices of the structural model were calculated using normed chi-square, RMSEA, CFI, and ECVI.

4.9 SUMMARY

The gap that was identified in this study was the limited availability of literature supporting the factors that influence international flight attendants' service-delivery and service-recovery performance. To address this problem, primary research was conducted. First, exploratory primary research was conducted by means of informal discussions with former and current international flight attendants. Secondly, survey research was conducted to assess the validity of the two proposed theoretical models, which were derived from previous literature as well as the information gathered during the informal discussions with international flight attendants.

The measurement instrument used in this study was an electronic self-administered questionnaire. The questionnaire was distributed using an electronic survey link which was sent to former and current international flight attendants via Whatsapp and/or email. The responses were captured in Qualtrics and then exported to a Microsoft Excel spreadsheet.

The statistical programs that were used in this study were SPSS 26.0 and LISREL 8.80. Descriptive analysis was conducted first to determine the demographic profile of the sample which included respondents' nationality, age, gender, experience as an international flight attendant, airlines currently/formerly employed by, and cabin class worked in. Inferential analyses conducted in this study included calculating the KMO score and Bartlett's test of sphericity, conducting EFA, assessing Cronbach's alpha values, and performing SEM. In the next chapter, the results of these statistical tests are provided and discussed. The relationships between the dependent, independent, and intervening variables are reviewed and the objectives and hypotheses of this study are reconciled.

CHAPTER 5
DATA ANALYSIS AND RESULTS

5.1 INTRODUCTION

The data required for this study were collected by distributing an online questionnaire to flight attendants across the world. The realised sample consisted of 228 former and current international flight attendants. The raw data collected from these flight attendants were captured using Qualtrics and downloaded as a Microsoft Excel spreadsheet. Thereafter the data were prepared and imported to the statistical programs SPSS 26.0 and LISREL 8.80. The data were prepared for analysis by removing missing values and deleting unnecessary data columns, for example, the start and end date of the questionnaire (the exact dates when the respondents started and ended the survey), the internet protocol (IP) codes (which were unique to each respondent and therefore deleted), time duration (the time each respondent took to complete the survey) and the date recorded (the date on which respondents completed the questionnaire).

Both descriptive and inferential data analysis was conducted. In terms of descriptive analysis, the means, modes, variances, and standard deviation of the variables were calculated. The respondents' gender, age, years' experience as an international flight attendant, airlines employed by, cabin class worked in, and nationality are also reported in this chapter. The inferential analyses included calculating the Kaiser-Meyer-Olkin (KMO) score and Bartlett's test of sphericity in SPSS to assess the sampling adequacy of the data. In addition, exploratory factor analysis (EFA) was conducted and to assess the reliability of the measurement instrument Cronbach's alpha was used. Multicollinearity was assessed using the variance inflation factors (VIF) metrics available in SPSS. Moreover, the relationships between the independent, intervening, and dependent variables were assessed using path estimates in structural equation modeling (SEM). Finally, the objectives and hypotheses were reconciled.

5.2 DATA PREPARATION

The online questionnaire was designed in Qualtrics. An anonymous survey link was distributed to a list of former and current international flight attendants using Whatsapp and/or email. In total, 228 responses were recorded. The raw data were extracted from Qualtrics as a Microsoft Excel spreadsheet and imported to both SPSS 26.0 and LISREL 8.80 for analysis.

5.3 DESCRIPTIVE ANALYSIS

The descriptive analysis included an overview of the biographical data of the 228 responses recorded in this study. The respondents were 60.96 per cent *former* (formerly employed) international flight attendants and 39.04 per cent *current* (currently employed) international flight attendants (see Figure 5.1). In addition, the cabin class worked in, age, gender, years of experience as an international flight attendant, and airlines worked for are reported in this section.

**Figure 5.1: Former versus current international flight attendants**
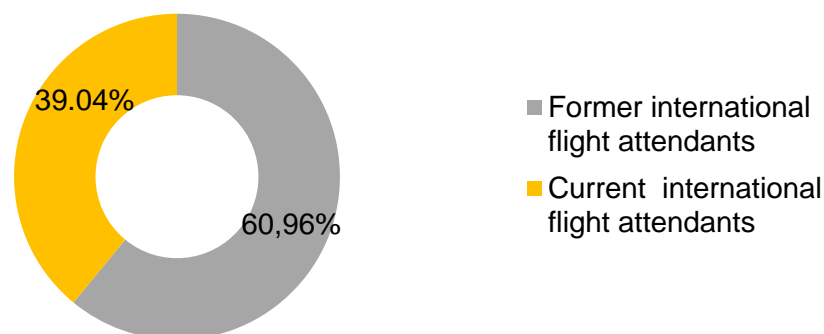
More than half of the sample (54.82 per cent) consisted of flight attendants with work experience in the economy class cabin, while 45.18 per cent were flight attendants with experience working in both the business class and economy class cabins. The respondents were also asked to indicate their age by selecting one of four age categories. The age categories 18–23 and 24–29 were collapsed to create a more equal age distribution. The realised sample consisted of 137 respondents between the ages of 18 and 29, 69 respondents between the ages of 30 and 35, and 22 respondents aged 36 or above (see Figure 5.2).

Figure 5.2: Age distribution of respondents
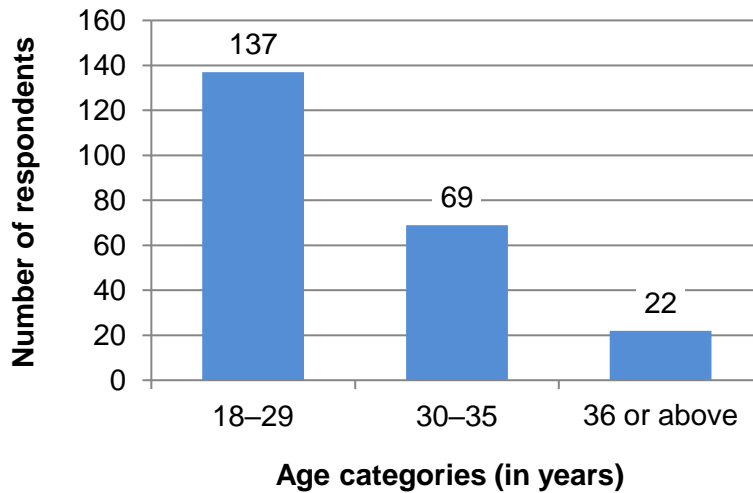
The gender distribution was 14.91 per cent male and 85.09 per cent female (see Figure 5.3). Considering the fact that the majority of flight attendants in the world are female (Ash, 2020; Industry News, 2020) these statistics were not unexpected.

Figure 5.3: Gender distribution of respondents
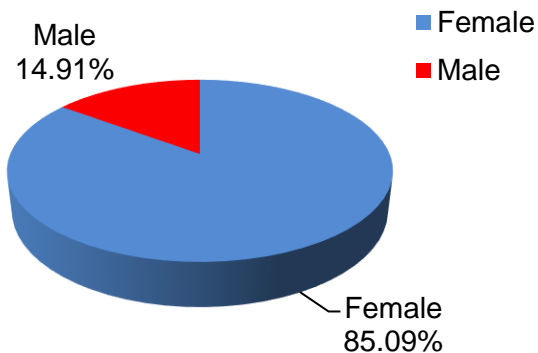
Job experience as an international flight attendant was also measured among respondents. For a more equal distribution of job experience, the following categories were collapsed: less than one year and one to three years as well as seven to nine and 10 years or more, resulting in the following new categories: zero to three years, four to six years, and seven or more years. The realised sample consisted of 114 respondents who had less than three years of experience as an international flight attendant, 65 respondents who had four to six years of experience and 49 respondents who had seven or more years of experience as an international flight attendant (refer to Figure 5.4).

Figure 5.4: Years of job experience as an international flight attendant
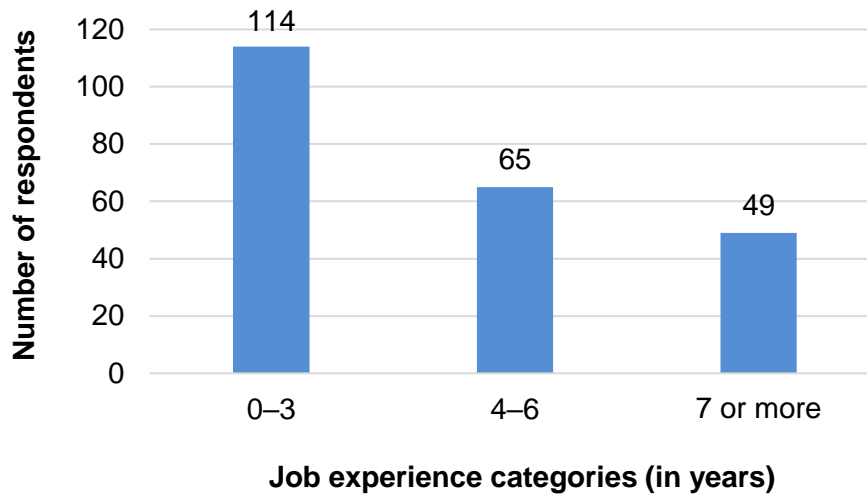
The name(s) of the airlines that respondents were employed by were also recorded, in view of the fact that this study only included flight attendants who were either employed at the time of the study or who were formerly employed by full-service international airlines with four- and five-star Skytrax ratings. The majority of the respondents (102) were former or current international flight attendants from Qatar Airways (a five-star airline), whereas 86 respondents were former or current international flight attendants from Emirates (a four-star airline). The remaining 40 respondents were former or current international flight attendants from other four- and five-star airlines such as Air France, British Airways, Edelweiss Air, Etihad Airways, Fiji Airways, KLM Royal Dutch Airlines, Luxair, Oman Air, Qantas Airways, Saudi Arabian Airlines, South African Airways and Thai Airways (four-star airlines) and Garuda Indonesia and Singapore Airlines (five-star airlines).

Concerning respondents' nationality, 49.56 per cent (113 respondents) were South African citizens whereas 50.44 per cent (115 respondents) were non-South African citizens. In total, 46 nationalities participated in this study including respondents from Australia, France, India, the Philippines, South Africa, Thailand, the United States, and Ukraine to name a few. Table 5.1 shows the full list of the nationalities of the non-South African respondents. To conclude, the sample was considered a good representation of the entire population of international flight attendants as the 228 respondents were flight attendants representing 46 different nationalities or countries and 16 of the world's international four- and five-star full-service airlines.

119

Table 5.1: List of non-South African nationalities

	Nationality	Number of respondents
1	Albanian	1
2	American	1
3	Asian	1
4	Australian	4
5	Belgian	1
6	Bosnian	1
7	Brazilian	2
8	British	7
9	Bulgarian	1
10	Canadian	1
11	Czech	3
12	Dutch	3
13	Egyptian	2
14	Fijian	1
15	Filipino	6
16	Finnish	1
17	French	3
18	Greek	5
19	Indian	7
20	Indonesian	5
21	Irish	1
22	Italian	1
23	Lithuanian	1
24	Luxembourger	1
25	Malawian	1
26	Malaysian	2
27	Moroccan	1
28	Nepalese	1
29	New Zealander	1
30	Paraguayan	1
31	Polish	5
32	Romanian	6
33	Saudi	1
34	Serbian	2
35	Singaporean	2
36	Slovenian	1
37	Spanish	1
38	Sri Lankan	1
39	Swedish	2
40	Swiss	3
41	Taiwanese	3
42	Thai	10
43	Tunisian	2
44	Ukrainian	8
45	Zimbabwean	1
	Total	**115**

5.4 INFERENTIAL ANALYSES

As stated earlier, inferential analysis can be used to test hypotheses and address research questions (Sullivan-Bolyai & Bova, 2014). In addition, inferential analysis make it possible for researchers to draw inferences of an entire population by assessing a sample of the population (Zikmund *et al.,* 2013).

5.4.1 Validity of measurement instrument

Validity is an indicator of the accuracy of a measurement instrument (Saunders *et al.,* 2009). To assess discriminant validity EFA was conducted using the statistical program SPSS 26.0. It was assumed that the data were more-or-less normally distributed and therefore the estimation method used was principal axis factoring. In addition, the rotation method used was direct quartermin oblique rotation since it was assumed that the variables would at least to some extent be correlated.

However, first, the sampling adequacy of the data was assessed by reviewing the KMO score and Bartlett's test of sphericity. Sampling adequacy suggests whether it would be justified for the researcher to conduct a factor analysis given the nature of the data available (Zikmund *et al.,* 2013). A KMO score of above 0.5 and close to 1.0 indicate sampling adequacy. In addition, Bartlett's test of sphericity compares the correlation matrix to an identity matrix. Significance levels of less than 0.05 indicate a significant difference in variances, which suggests sampling adequacy. In this study, the KMO score was .851 and the significance level of the Bartlett's test of sphericity was .000 (Table 5.2). These metrics suggest that the data were suitable for factor analysis.

Table 5.2: KMO and Bartlett's test of sphericity

Kaiser-Meyer-Olkin measure of sampling adequacy		.851
Bartlett's test of sphericity	Approx. Chi-Square	5967.613
	df	1081
	Sig.	.000

5.4.1.1 Exploratory factor analysis

Primarily, EFA is used to identify the underlying structure of variables in a data set (Hair *et al.,* 2014). In this study, factor loadings of 0.4 and above were regarded as significant. Nine factors measured by 47 items were extracted during the EFA (refer to Table 5.3 for the final factor matrix). Items DEMAND4, SRP1, SRP3, SRP4, TRAIN1, EXPEC4, RESOUR1, RESOUR2, RESOUR3, RESOUR4, and RESOUR5 were deleted because they did not load to a significant extent. In addition, items TIME1 and TIME5 were deleted, because of cross-loadings. Owing to poor discriminant validity, one construct, namely limited physical resources, had to be removed from further analysis. As a result, the hypotheses related to limited physical resources could not be addressed.

In this study, working conditions were operationalised as a collective term incorporating both the physical and psychological features of a flight attendant's working environment. The 12 items that loaded onto Factor 1 (working conditions) were initially designed to measure the following three constructs: limited physical space, limited time/time pressure, and company service delivery expectations. However, since the items loaded together, they were combined, and the resultant factor was renamed. *Working conditions* can be described as the interaction between employees and their physical working environment (Gerber, Nel & Van Dyk, 1998). In addition, working conditions consist of physical working conditions, psychological working conditions, and physical layout of the working environment. According to Gerber *et al.* (1998), physical working conditions refer to the volume of work and availability of facilities and/or equipment. Therefore, physical working conditions can be related to the factor company service delivery expectations since airlines' service delivery expectations of international flight attendants are considered quite high (refer to company service delivery expectations, Chapter 3, section 3.4.1). In the context of this study, psychological working conditions can be related to limited time/time pressure as psychological working conditions includes the psychological effect of work pressure on individuals/employees. Moreover, Gerber *et al.* (1998) contend that physical layout relates to the neatness, organisation, convenience, and attractiveness of employees' working environment. Therefore, limited physical space can be associated with the physical layout of one's working environment.

Table 5.3: Exploratory factor analysis (EFA): Pattern matrix

Factor		1	2	3	4	5	6	7	8	9
1. Working conditions	SPACE1	**.765**	-.056	.105	-.161	.042	-.366	-.075	-.335	.090
	TIME3	**.751**	-.144	.117	-.323	.025	-.529	-.104	-.313	.080
	TIME2	**.744**	-.127	.160	-.227	.055	-.503	-.203	-.381	.001
	EXPEC5	**.727**	-.039	.125	-.155	-.061	-.393	-.007	-.337	-.017
	EXPEC1	**.721**	-.142	.107	-.227	-.054	-.479	-.118	-.207	-.001
	EXPEC3	**.719**	-.116	.166	-.208	.030	-.515	-.017	-.351	-.121
	SPACE4	**.718**	-.020	.173	-.130	-.020	-.200	-.025	-.273	.064
	SPACE3	**.689**	-.047	.165	-.152	-.051	-.353	-.123	-.285	-.047
	EXPEC2	**.665**	-.190	.141	-.215	.018	-.396	-.252	-.321	.183
	SPACE5	**.611**	-.117	.090	-.152	.062	-.391	-.206	-.264	.079
	SPACE2	**.609**	-.140	.054	-.131	.034	-.350	-.111	-.130	.003
	TIME4	**.509**	.083	.019	.037	-.068	-.416	-.142	-.289	-.236
2. Customer service training	TRAIN3	-.032	**.905**	-.046	.197	.080	.065	.282	-.007	-.189
	TRAIN5	-.083	**.852**	-.021	.290	.155	.074	.228	-.029	-.173
	TRAIN2	-.034	**.560**	-.038	.187	.065	.004	.352	.008	-.250
	TRAIN4	-.192	**.531**	.012	.153	.130	.042	.369	.069	-.167
3. Cultural differences	CULTURE4	.302	-.120	**.824**	-.082	.141	-.185	-.167	-.328	-.010
	CULTURE3	.141	-.095	**.720**	-.119	.140	-.109	-.194	-.243	.039
	CULTURE1	.114	.005	**.718**	-.050	.082	-.187	-.141	-.354	-.291
	CULTURE2	.092	.009	**.709**	-.078	.038	-.137	-.174	-.247	-.023
	CULTURE5	.091	.071	**.694**	-.106	.012	-.202	-.142	-.204	.116
4. Teamwork	TEAM5	-.187	.315	-.086	**.789**	.008	.184	.266	.086	-.252
	TEAM2	-.075	.187	-.002	**.777**	.295	.143	.156	.018	-.219
	TEAM1	-.294	.126	-.102	**.760**	.120	.166	.220	.129	-.079
	TEAM4	-.180	.229	-.085	**.709**	.110	.233	.344	.174	-.113
	TEAM3	-.040	.288	-.203	**.655**	-.014	.074	.409	.130	-.312
5. Service-recovery performance	SDP4	-.022	.168	.096	.097	**.556**	.054	-.052	-.198	-.143
	SRP5	.035	.031	.007	.072	**.550**	.052	.293	.142	-.137
	SDP1	-.052	.127	.146	.193	**.525**	.010	.054	-.013	-.139
	SDP3	-.089	.171	.114	.153	**.482**	-.078	-.045	-.067	-.253
	SRP2	.046	.086	-.076	.144	**.477**	.117	.277	.213	-.170
6. Fatigue	FATIGUE3	.408	-.044	.241	-.178	-.063	**-.843**	-.130	-.312	-.039
	FATIGUE5	.559	-.132	.163	-.240	-.075	**-.801**	-.229	-.437	.097
	FATIGUE2	.574	-.123	.169	-.279	.032	**-.773**	-.298	-.396	.041
	FATIGUE1	.368	-.081	.114	-.212	.053	**-.747**	-.112	-.273	-.056
	FATIGUE4	.533	-.041	.218	-.115	-.098	**-.726**	-.133	-.332	-.072
7. Supervisory support	SUPER2	-.129	.338	-.158	.311	.198	.177	**.754**	.125	-.060
	SUPER1	-.140	.354	-.156	.306	.048	.132	**.710**	.157	-.165
	SUPER5	-.198	.308	-.221	.313	.052	.148	**.652**	.072	-.131
	SUPER3	-.186	.360	-.253	.405	.037	.166	**.648**	.195	-.066
	SUPER4	-.066	.220	-.146	.223	.065	.150	**.641**	.188	.090
8. Unreasonably demanding passengers	DEMAND2	.364	-.021	.323	-.159	-.098	-.374	-.170	**-.800**	.032
	DEMAND5	.306	.005	.457	-.077	.069	-.270	-.208	**-.797**	-.100
	DEMAND1	.375	-.039	.321	-.114	-.041	-.336	-.121	**-.745**	-.020
	DEMAND3	.326	.040	-.029	-.151	.299	-.388	-.014	**-.505**	.045
9. Interpersonal service-delivery performance	SDP2	-.053	.199	-.030	.247	.153	.044	-.024	-.026	**-.717**
	SDP5	-.062	.249	.042	.142	.358	-.081	.146	.033	**-.575**

As can be seen in Table 5.3, items SDP4, SDP1, and SDP3 and items SRP5 and SRP2 loaded together onto Factor 5. However, SDP4, SDP1, and SDP3 were initially designed to measure service-delivery performance (SDP), while SRP5 and SRP2 were designed to measure service-recovery performance (SRP). It was decided to merge these items and name Factor 5 *service-recovery performance* since the service delivery items (SDP4, SDP1, and SDP3) can be interpreted as measures of service recovery. To explain: service-recovery performance can be defined as frontline employees' perceptions of their own actions and abilities to 'resolve a service failure' to the satisfaction of the customer (Babakus *et al.,* 2003:274). In addition, ways to resolve a service failure can include *following up on passengers' requests* (referring to SDP1), *following through on a conscientious (diligent) manner on promises to passengers* (referring to SDP3), and *being efficient during service delivery,* which includes both service-delivery and service-recovery performance (referring to SDP4). Therefore, these items were regarded as measures of the service-recovery performance construct.

The items that loaded onto Factor 9 (SDP2 and SDP5) were directly related to international flight attendants' interaction with passengers (Table 5.3). Therefore, service-delivery performance (SDP) was renamed as *interpersonal service-delivery performance (ISDP).* The construct was renamed to create a clear distinction between service-delivery performance and service-recovery performance. In summary, the factors that remained were Factor 2: Customer service training, Factor 3: Cultural differences, Factor 4: Teamwork, Factor 6: Fatigue, Factor 7: Supervisory support, and Factor 8: Unreasonably demanding passengers. Based on the results of the EFA, the original theoretical models (refer to Chapter 3, Figures 3.6 and 3.7) had to be reconfigured and are illustrated in Figures 5.5 and 5.6.

5.4.1.2 Multicollinearity assessment

To assess convergent validity, the potential multicollinearity among variables was investigated. Multicollinearity refers to the extent to which independent variables are correlated with each other. As stated earlier, VIF scores above 5.0 suggest problems with multicollinearity (Zikmund *et al.,* 2013). In this study, the highest VIF score was 1.543 (see Table 5.4). Therefore, no difficulties with multicollinearity were apparent and convergent validity was established.

Table 5.4: Multicollinearity (VIF scores)

Independent variable	Collinearity statistics	
	Tolerance	VIF
Working conditions	.709	1.411
Customer service training	.784	1.276
Cultural differences	.823	1.215
Teamwork	.760	1.315
Supervisory support	.648	1.543
Unreasonably demanding passengers	.675	1.482

5.4.2 Reliability of the measurement instrument

Reliability is an indicator of a measure's internal consistency (Zikmund *et al.,* 2013). To assess the reliability of the measurement instrument the Cronbach's alpha, α (or coefficient alpha), of each factor was determined using SPSS. The factors included working conditions, customer service training, cultural differences, teamwork, service-recovery performance, fatigue, supervisory support, unreasonably demanding passengers, and interpersonal service-delivery performance (Table 5.5).

Table 5.5: Reliability analysis of each factor

	Factor	Cronbach's alpha
1	Working conditions	.917
2	Customer service training	.803
3	Cultural differences	.848
4	Teamwork	.854
5	Service-recovery performance (SRP)	.634
6	Fatigue	.896
7	Supervisory support	.837
8	Unreasonably demanding passengers	.783
9	Interpersonal service-delivery performance (ISDP)	.610

Cronbach's α can be interpreted as follows: values below 0.6 indicate poor reliability, values between 0.60 and 0.70 indicate fair reliability, values between 0.70 and 0.80 indicate good reliability, and values between 0.80 and 0.95 indicate high reliability (Zikmund *et al.,* 2013). In this study, Cronbach's α ranged between 0.610 and 0.917, therefore the scale used was considered a reliable measurement instrument.

Based on the EFA results and modification indices in LISREL, the following original hypotheses could not be empirically tested:

H_1: There is a negative relationship between unrealistic company service delivery expectations and service-delivery performance (SDP)

H_2: There is a positive relationship between the level of customer service training and service-delivery performance (SDP)

H_3: There is a positive relationship between the level of supervisory support and service-delivery performance (SDP)

H_4: There is a positive relationship between the extent of teamwork and service-delivery performance (SDP)

H_5: There is a negative relationship between the perceptions of cultural differences among passengers and service-delivery performance (SDP)

H_6: There is a negative relationship between the perceptions of unreasonably demanding passengers and service-delivery performance (SDP)

H_7: There is a negative relationship between the perceptions of limited physical space and service-delivery performance (SDP)

H_8: There is a negative relationship between limited time/time pressure and service-delivery performance (SDP)

H_9: There is a negative relationship between limited physical resources and service-delivery performance (SDP)

H_{10}: There is a negative relationship between unrealistic company service delivery expectations and service-recovery performance (SRP)

H_{14}: There is a negative relationship between the perceptions of cultural differences among passengers and service-recovery performance (SRP)

126

H_{15}: There is a negative relationship between the perceptions of unreasonably demanding passengers and service-recovery performance (SRP)

H_{16}: There is a negative relationship between the perceptions of limited physical space and service-recovery performance (SRP)

H_{17}: There is a negative relationship between limited time/time pressure and service-recovery performance (SRP)

H_{18}: There is a negative relationship between limited physical resources and service-recovery performance (SRP)

As stated before, based on the EFA results and the modification indices in LISREL the original theoretical models had to be reconfigured (see Figures 5.5 and 5.6) and new hypotheses were formulated.

The following hypotheses were used to assess Empirical model 1 (Figure 5.5). H_{19}–H_{27} were newly formulated hypotheses:

H_{19}: There is a positive relationship between the level of customer service training and interpersonal service-delivery performance (ISDP)

H_{20}: There is a positive relationship between the level of supervisory support and interpersonal service-delivery performance (ISDP)

H_{21}: There is a positive relationship between the extent of teamwork and interpersonal service-delivery performance (ISDP)

H_{22}: There is a positive relationship between working conditions and the levels of fatigue among international flight attendants

H_{23}: There is a positive relationship between the perceptions of unreasonably demanding passengers and the levels of fatigue among international flight attendants

H_{24}: There is a positive relationship between the perceptions of cultural differences among passengers and the levels of fatigue among international flight attendants

H_{25}: There is a negative relationship between the years of job experience and the levels of fatigue among international flight attendants

H_{26}: There is a positive relationship between the years of job experience and interpersonal service-delivery performance (ISDP)

H_{27}: There is a negative relationship between the levels of fatigue among international flight attendants and interpersonal service-delivery performance (ISDP)

Figure 5.5: Empirical model 1 – Interpersonal service-delivery performance (ISDP)
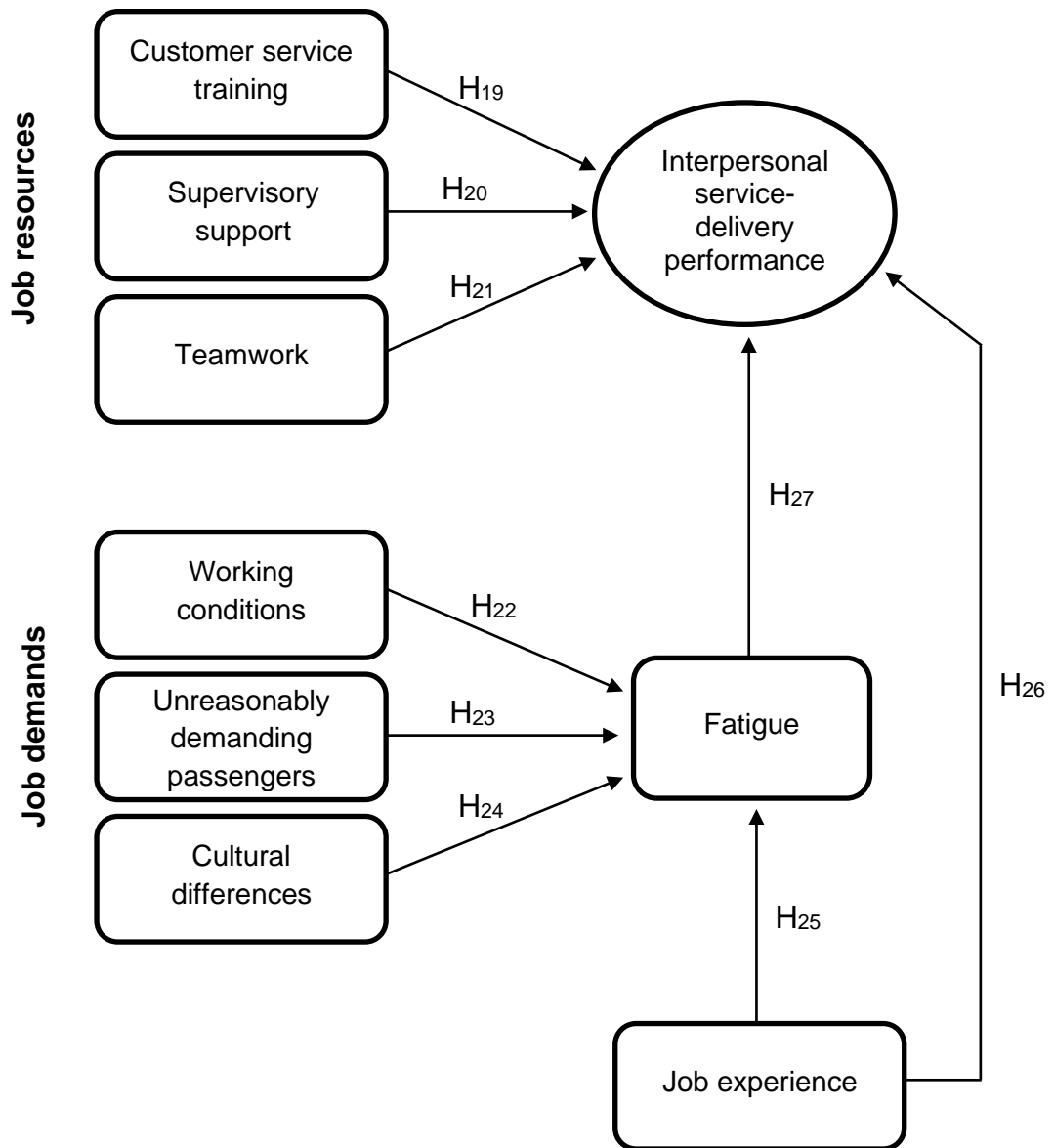
The following hypotheses were used to assess Empirical model 2 (Figure 5.6). Hypotheses H_{11}–H_{13} formed part of the original hypotheses, whereas H_{28}–H_{33} were newly formulated hypotheses:

H_{11}: There is a positive relationship between the level of customer service training and service-recovery performance (SRP)

H_{12}: There is a positive relationship between the level of supervisory support and service-recovery performance (SRP)

H_{13}: There is a positive relationship between the extent of teamwork and service-recovery performance (SRP)

H_{28}: There is a positive relationship between working conditions and the levels of fatigue among international flight attendants

H_{29}: There is a positive relationship between the perceptions of unreasonably demanding passengers and the levels of fatigue among international flight attendants

H_{30}: There is a positive relationship between the perceptions of cultural differences among passengers and the levels of fatigue among international flight attendants

H_{31}: There is a negative relationship between the years of job experience and the levels of fatigue among international flight attendants

H_{32}: There is a positive relationship between the years of job experience and service-recovery performance (SRP)

H_{33}: There is a negative relationship between the levels of fatigue among international flight attendants and service-recovery performance (SRP)

Figure 5.6: Empirical model 2 – Service-recovery performance (SRP)
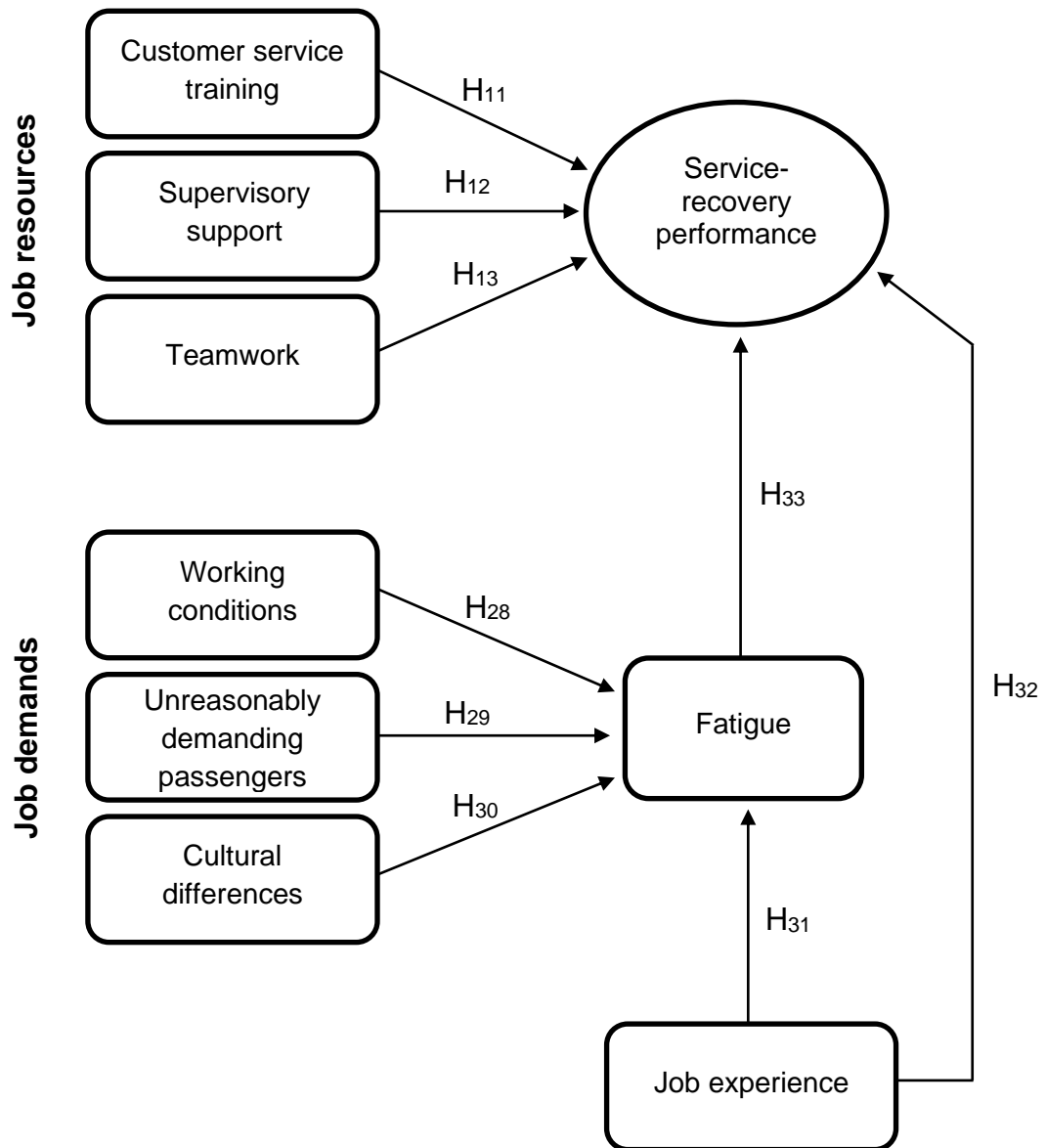
5.4.3 Structural equation modelling (SEM) analysis

As stated earlier, most multivariate techniques assess single relationships between the dependent and independent variables. However, SEM is a multivariate technique that examines the structure or interrelationships among variables by simultaneously assessing the relationships between multiple dependent and independent variables and the relationships among independent variables (Hair *et al.,* 2014). This statistical technique depends on the nature of the data in terms of its distributional properties. The assumption on the use of the maximum likelihood estimation method is that the data are normally distributed. To assess the multivariate normality of the data the following null hypothesis was addressed:

H_0: Data are normally distributed
H_1: Data are not normally distributed

The p-value for the multivariate normality test was 0.000 ($p < 0.05$). Therefore, H_0 was rejected. In other words, the data were not normally distributed. The estimation method used was therefore the Satorra-Bentler chi-square. This estimation method was robust against mild violations of multivariate normality (Hair *et al.,* 2014).

In order to assess the validity of the measurement model, the goodness-of-fit (GOF) indices had to be calculated (Hair *et al.,* 2014). First, however, the following hypotheses were assessed:

H_0: The data fit the theoretical model perfectly
H_1: The data do not fit the theoretical model perfectly

The p-value for the Satorra-Bentler chi-square test was 0.0 ($p < 0.05$). Therefore, H_0 was rejected. In other words, the data did not fit the theoretical models perfectly. Other fit indices were then considered to assess the level of fit between the sample data and the proposed theoretical models.

5.4.3.1 Fit indices of the measurement models

When assessing model fit, it is recommended that three to four fit indices have to be considered, since no single statistical significance test can identify an acceptable model (Schermelleh-Engel, Moosbrugger & Müller, 2003). The following fit indices are reported and shown in Table 5.6: normed chi-square (χ^2 / df), RMSEA, CFI, and ECVI to assess the fit of the two measurement models.

Table 5.6: Fit indices of the measurement models

	Model 1: ISDP	Model 2: SRP
Satorra-Bentler Chi-square (χ^2)	1208.681 (p = 0.0)	1376.664 (p = 0.0)
Degrees of freedom (*df*)	791	917
Normed chi-square (χ^2 / *df*)	1.53	1.50
RMSEA	0.0482	0.0470
CFI	0.970	0.968
ECVI	6.311	7.104

Acceptable normed chi-square values range from less than 2.0 (Tabachnick & Fidell, 2007) to less than 5.0 (Schumacker & Lomax, 2004; Wheaton *et al.,* 1977). However, smaller values indicate a better fit. The normed chi-square values were 1.53 (Model 1) and 1.50 (Model 2). These results suggest that the data fit the theoretical models reasonably well. In addition, the RMSEA values were 0.0482 (Model 1) and 0.0470 (Model 2). The RMSEA values of less than 0.05 indicate a good or close model fit (Browne & Cudeck, 1992). Therefore, the results indicate a good fit between the data and the theoretical models.

The CFI scores were also calculated. CFI scores range between zero (0) and one (1) with values closer to 1 indicating a better fit (Hair *et al.,* 2014). The CFI scores in this study were 0.970 (Model 1) and 0.968 (Model 2). Therefore, confirming a good (close) fit between the data and the theoretical models. The ECVI can be used when comparing fit indices between two competing models (Browne & Cudeck, 1993). The model with the smallest ECVI value indicates a better fit. In this study, the ECVI values were 6.311 (Model 1) and 7.104 (Model 2). Therefore, Model 1 had a slightly better model-data fit than Model 2.

However, both measurement models indicated a good (close) model-data fit. In addition, construct validity was confirmed since a good model fit is also an indicator of construct validity (Hair *et al.,* 2014). Based on the assessment of the measurement models, the next step in the data analysis was to assess the two empirical models.

5.4.3.2 Assessment of the empirical models

During stage five of the SEM analysis the relationships between the dependent and independent variables were specified. The path coefficients and t-values for these relationships can be seen in Table 5.7 (one-tailed tests were conducted).

Table 5.7: Path coefficients and t-values of the specified relationships

Dependent variable	Independent variable	Path coefficient	t-values
Empirical model 1: ISDP			
Interpersonal service-delivery performance (ISDP)	Customer service training	0.29	2.60**
	Supervisory support	-0.17	-1.37
	Teamwork	0.35	2.75**
	Job experience	0.04	0.44
	Fatigue	0.02	0.30
Fatigue	Working conditions	0.62	7.85****
	Unreasonably demanding passengers	0.20	2.34**
	Cultural differences	0.01	0.10
	Job experience	-0.10	-1.95*
Empirical model 2: SRP			
Service-recovery performance (SRP)	Customer service training	0.15	1.86*
	Supervisory support	0.05	0.40
	Teamwork	0.22	1.84*
	Job experience	0.06	0.63
	Fatigue	0.00	0.02
Fatigue	Working conditions	0.62	7.85****
	Unreasonably demanding passengers	0.19	2.33*
	Cultural differences	0.01	0.13
	Job experience	-0.10	-1.95*

**** = $p < 0.0001$
*** = $p < 0.001$
** = $p < 0.01$
* = $p < 0.05$

134

In accordance with Empirical model 1 (refer to Figure 5.7) the following hypotheses were assessed:

H_{19}: There is a positive relationship between the level of customer service training and interpersonal service-delivery performance (ISDP)

The relationship between the level of customer service training and interpersonal service-delivery performance (path coefficient = 0.29, t-value = 2.60) was positively related at the 1% level (Table 5.7). Therefore, hypothesis H_{19} was accepted.

H_{20}: There is a positive relationship between the level of supervisory support and interpersonal service-delivery performance (ISDP)

There was no significant relationship between the level of supervisory support and interpersonal service-delivery performance. Therefore, hypothesis H_{20} was rejected.

H_{21}: There is a positive relationship between the extent of teamwork and interpersonal service-delivery performance (ISDP)

The relationship between teamwork and interpersonal service-delivery performance (path coefficient = 0.35, t-value = 2.75) was positively related at the 1% level (Table 5.7). Therefore, hypothesis H_{21} was accepted.

H_{22}: There is a positive relationship between working conditions and the levels of fatigue among international flight attendants

The relationship between working conditions and the levels of fatigue (path coefficient = 0.62, t-value = 7.85) was positively related at the 0.01% level (Table 5.7). Therefore, hypothesis H_{22} was accepted.

H_{23}: There is a positive relationship between the perceptions of unreasonably demanding passengers and the levels of fatigue among international flight attendants

135

The relationship between unreasonably demanding passengers and the levels of fatigue (path coefficient = 0.20, t-value = 2.34) was positively related at the 1% level (again refer to Table 5.7). Therefore, hypothesis H_{23} was accepted.

H_{24}: There is a positive relationship between the perceptions of cultural differences among passengers and the levels of fatigue among international flight attendants

There was no significant relationship between cultural differences and the levels of fatigue. Therefore, hypothesis H_{24} was rejected.

H_{25}: There is a negative relationship between years of job experience and the levels of fatigue among international flight attendants

The relationship between years of job experience and the levels of fatigue (path coefficient = -0.10, t-value = -1.95) was negatively related at the 5% level (Table 5.7). Therefore, hypothesis H_{25} was accepted.

H_{26}: There is a positive relationship between years of job experience and interpersonal service-delivery performance (ISDP)

There was no significant relationship between years of job experience and interpersonal service-delivery performance. Therefore, hypothesis H_{26} was rejected.

H_{27}: There is a negative relationship between the levels of fatigue among international flight attendants and interpersonal service-delivery performance (ISDP)

There was no significant relationship between the levels of fatigue and interpersonal service-delivery performance. Therefore, hypothesis H_{27} was rejected.

Figure 5.7: The results of Empirical model 1 – Interpersonal service-delivery performance (ISDP)*
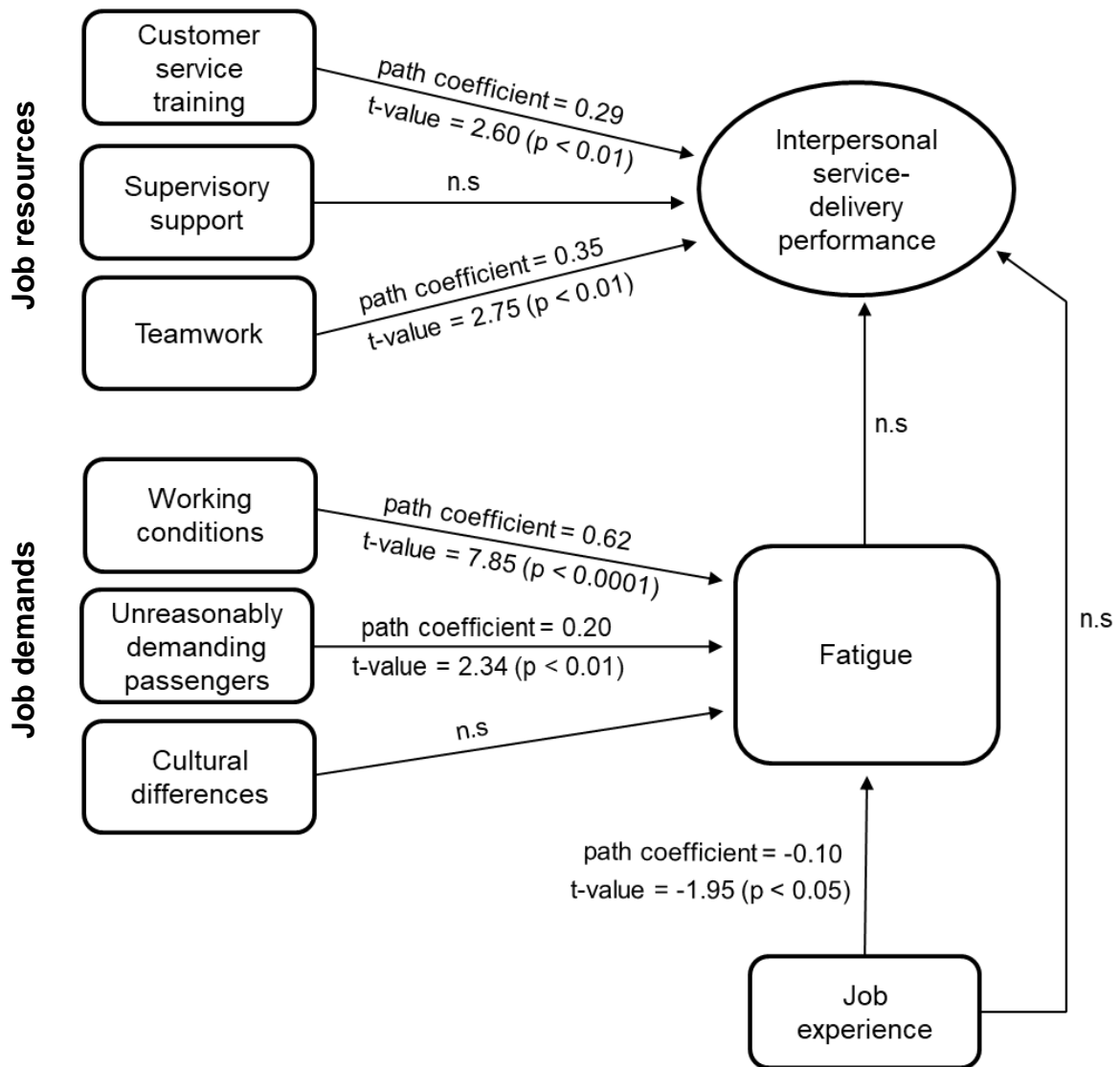
*One-tailed tests were conducted

In accordance with Empirical model 2 (refer to Figure 5.8) the following hypotheses were assessed:

H_{11}: There is a positive relationship between the level of customer service training and service-recovery performance (SRP)

The relationship between customer service training and service-recovery performance (path coefficient = 0.15, t-value = 1.86) was positively related at the 5% level (Table 5.7). Therefore, hypothesis H_{11} was accepted.

H_{12}: There is a positive relationship between the level of supervisory support and service-recovery performance (SRP)

There was no significant relationship between supervisory support and service-recovery performance. Therefore, hypothesis H_{12} was rejected.

H_{13}: There is a positive relationship between the extent of teamwork and service-recovery performance (SRP)

The relationship between teamwork and service-recovery performance (path coefficient = 0.22, t-value = 1.84) was positively related at the 5% level (Table 5.7). Therefore, hypothesis H_{13} was accepted.

H_{28}: There is a positive relationship between working conditions and the levels of fatigue among international flight attendants

The relationship between working conditions and the levels of fatigue (path coefficient = 0.62, t-value = 7.85) was positively related at the 0.01% level (Table 5.7). Therefore, hypothesis H_{28} was accepted.

H_{29}: There is a positive relationship between perceptions of unreasonably demanding passengers and the levels of fatigue among international flight attendants

The relationship between unreasonably demanding passengers and the levels of fatigue (path coefficient = 0.19, t-value = 2.33) was positively related at the 5% level (Table 5.7). Therefore, hypothesis H_{29} was accepted.

H_{30}: There is a positive relationship between the perceptions of cultural differences among passengers and the levels of fatigue among international flight attendants

There was no significant relationship between cultural differences and the levels of fatigue. Therefore, hypothesis H_{30} was rejected.

H_{31}: There is a negative relationship between years of job experience and the levels of fatigue among international flight attendants

The relationship between the years of job experience and the levels of fatigue (path coefficient = -0.10, t-value = -1.95) was negatively related at the 5% level (refer to Table 5.7). Therefore, hypothesis H_{31} was accepted.

H_{32}: There is a positive relationship between the years of job experience and service-recovery performance (SRP)

There was no significant relationship between the years of job experience and service-recovery performance. Therefore, hypothesis H_{32} was rejected.

H_{33}: There is a negative relationship between the levels of fatigue among international flight attendants and service-recovery performance (SRP)

There was no significant relationship between the levels of fatigue and service-recovery performance. Therefore, hypothesis H_{33} was rejected.

Although it was expected that fatigue and job experience would be intervening variables, this potential relationship was not statistically tested. The empirical results seem to confirm that these two variables were not intervening variables and a possible explanation for this finding is that the flight attendants who participated in this study have learned to cope with fatigue. Even with limited job experience, they are still capable of providing good services.

Figure 5.8: The results of Empirical model 2 – Service-recovery performance (SRP)*
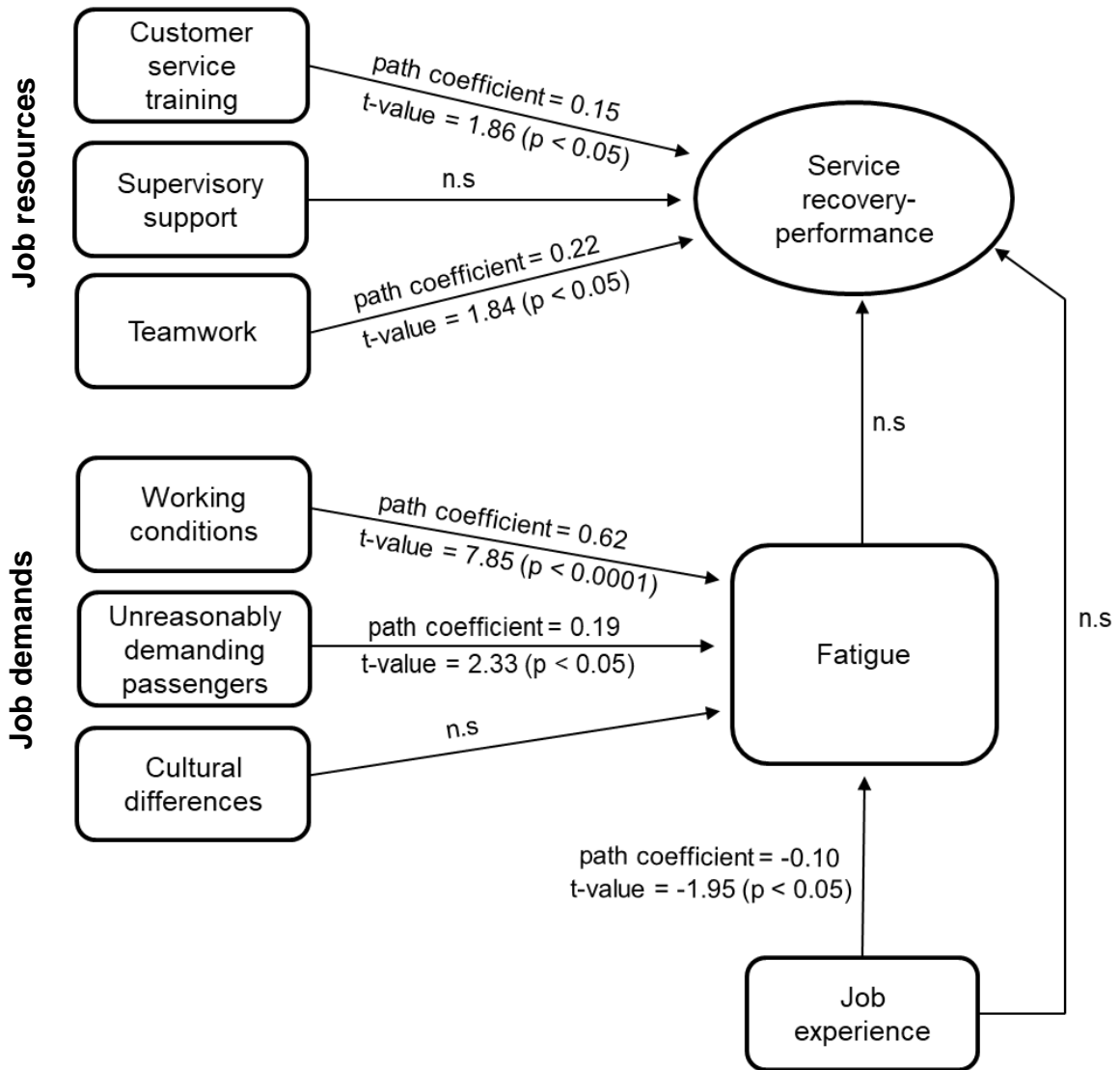
*One-tailed tests were conducted

Finally, structural model validity can be assessed by means of GOF indices (similar to measurement model validity, refer to section 5.4.3.1). The fit indices were recorded for Empirical model 1 (normed chi-square = 1.52, RMSEA = 0.0479, CFI = 0.963 and ECVI = 8.155) and Empirical model 2 (normed chi-square = 1.53, RMSEA = 0.0482, CFI = 0.962 and ECVI = 8.183). As discussed earlier, the decision rules for these fit indices include normed chi-square values of less than two (< 2), RMSEA values less than 0.05 (< 0.05), CFI values close to one (1), and smaller ECVI values when two models are compared. According to the threshold of these indices, structural model validity was confirmed, and the data fitted the theoretical models reasonably well (close fit).

A summary of the significant relationships reported in this study include the following:

Empirical model 1 (Figure 5.7):
- There is a positive relationship between customer service training and interpersonal service-delivery performance
- There is a positive relationship between teamwork and interpersonal service-delivery performance
- There is a positive relationship between working conditions and levels of fatigue
- There is a positive relationship between unreasonably demanding passengers and levels of fatigue; and
- There is a negative relationship between job experience and levels of fatigue

Empirical model 2 (Figure 5.8):
- There is a positive relationship between customer service training and service-recovery performance
- There is a positive relationship between teamwork and service-recovery performance
- There is a positive relationship between working conditions and levels of fatigue
- There is a positive relationship between unreasonably demanding passengers and levels of fatigue; and
- There is a negative relationship between job experience and levels of fatigue

5.4.3.3 The consistency between the empirical results and the theoretical basis of this study

The empirical results were largely consistent with the theories discussed in Chapter 2 of this study. Environmental psychology suggests that work environment stressors (which can be seen as job demands) negatively influence employees' job performance (Lamb & Kwok, 2016). In addition, the JD–R model of burnout suggests that job demands increase exhaustion whereas job resources decrease disengagement. The increase in exhaustion (due to job demands) increases job burnout and decreases job performance, whereas the decrease in disengagement (due to job resources) decreases job burnout and increases job performance (Chen & Kao, 2012a; Crawford *et al.,* 2010; Demerouti *et al.,* 2000). The job demands (or work environment stressors) assessed in this study, namely working conditions and unreasonably demanding passengers, increased the levels of fatigue among international flight attendants. This increase in the levels of fatigue can be associated with burnout and may affect employees' well-being and performance (as suggested by the JD–R model and the environmental psychology theory). In addition, the job resources, namely customer service training and teamwork, improved the interpersonal service-delivery and service-recovery performance of international flight attendants (as indicated by the JD–R model). Therefore, it can be concluded that the empirical results of this study are largely consistent with the JD–R model and the environmental psychology theory.

According to Hochschild (1983), flight attendants perform emotional labour, which can be associated with stress, exhaustion, and job burnout, daily. The working conditions and unreasonably demanding passengers assessed in this study were found to increase the levels of fatigue (related to exhaustion and burnout) among international flight attendants. It can therefore be concluded that the working environment of international flight attendants, which include performing emotional labour, working in physically restricted spaces, having limited time to perform duties, and dealing with unreasonably demanding passengers, is a tiring environment that increases fatigue, which in turn can lead to exhaustion and burnout. Against this background, the results of this study were consistent with Hochschilds' emotional labour theory.

Finally, the Rawls' theory of justice suggests that customers evaluate service-recovery performance according to their perceptions of procedural justice, interactional justice, and distributive justice (Migacz *et al.,* 2018; Rawls, 1971; Siu, Zhang & Yau, 2013). These dimensions of justice form part of the principles that are taught during the customer service training sessions for international flight attendants. For example, international flight attendants are trained on how to perform certain service recovery procedures (procedural justice), how to interact with passengers (interactional justice), and when/how to offer compensation (distributive justice). Since the results of this study suggest a significant relationship between international flight attendants' level of customer service training and service-recovery performance, it can be argued that the empirical results of this study are consistent with the Rawls' theory of justice.

5.5 CONCLUSIONS

This chapter included the descriptive and inferential data analysis conducted in this study. Concerning the descriptive analysis, the realised sample consisted of 228 former and current international flight attendants. Of these respondents, 60.96 per cent were *former* international flight attendants and 39.04 per cent were *current* international flight attendants. Regarding their age, 137 respondents were aged between 18 and 29, 69 respondents were aged between 30 and 35, and 22 respondents were aged 36 or above. The sample consisted of 14.91 per cent male and 85.09 per cent female flight attendants. Furthermore, 114 respondents had less than three years of job experience as an international flight attendant, 65 respondents had four to six years of experience and 49 respondents had seven or more years of job experience as an international flight attendant.

Pertaining to their nationality, 113 of the respondents were South African citizens while 115 respondents were non-South African citizens. In total, 46 different nationalities were recorded. The respondents were former and current international flight attendants employed by or formerly employed by a number of four- and five-star airlines.

The statistical programs SPSS 26.0 and LISREL 8.80 were used for inferential data analysis. The KMO score and Bartlett's test of sphericity were calculated in SPSS and the data adequacy was assessed. In addition, EFA was conducted, and evidence of discriminant and convergent validity was established. Based on the EFA results and modification indices in LISREL the original theoretical models had to be reconfigured and new hypotheses were formulated.

The empirical results reported in this chapter indicated that customer service training and teamwork significantly influence the interpersonal service-delivery and service-recovery performance of international flight attendants. In addition, the working conditions (company service delivery expectations, limited physical space and limited time/time pressure); unreasonably demanding passengers; and job experience significantly influence the levels of fatigue among international flight attendants. In the following concluding chapter, the conclusions, recommendations, and limitations of the study are offered.

CHAPTER 6
CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The focus of this study was on the confined working environment of international flight attendants and the factors that influence their service-delivery and service-recovery performance. Two theoretical models were presented in Chapter 3 of this study. These models were reconfigured owing to the EFA results in SPSS and the modification indices in LISREL and were then empirically assessed. The outcome of these assessments was reported in Chapter 5.

This chapter summarises the conclusions, recommendations, and the limitations of this study, and provides background for future research. The conclusions are discussed first and are based on the adjusted hypotheses presented in Chapter 5. Following the conclusions, the intricate process of becoming an international flight attendant is explained. Thereafter, recommendations are offered regarding customer service training, teamwork, the role of fatigue, and the overall health and well-being of air crew. The recommendations include practical guidelines for high-end airlines to increase international flight attendants' performance and in turn increase their own performance and competitive advantage. The limitations explore the characteristics of the sample that was used in this study, which consisted of international flight attendants employed by four- and five-star full-service airlines. Furthermore, future research areas are offered, which include a thorough assessment of crew members' work schedules and its influence on the levels of fatigue as well as a further investigation into their physical working environment. Finally, this chapter concludes with an epilogue summarising the key findings of the study.

6.2 CONCLUSIONS

The primary objective of this study was to empirically assess the validity of the reconfigured models, more specifically the influence of international flight attendants' working environment on their interpersonal service-delivery performance, service-recovery performance, and their levels of fatigue.

Objectives 1.1 to 1.9 aligned with hypotheses H_{19} to H_{27}, which specifically addressed Empirical model 1, whereas objectives 2.1 to 2.9 aligned with hypotheses H_{11} to H_{13} and again with H_{28} to H_{33}, which specifically addressed Empirical model 2.

6.2.1 Objective 1.1: To assess the influence of customer service training on interpersonal service-delivery performance (H_{19})

It can be argued that well-trained employees perform more effectively than untrained employees or those with inadequate training (Yavas *et al.,* 2010). In addition, training improves employees' task-related and behavioural skills and helps them to deal with varying customer needs (Yavas & Babakus, 2010). According to the literature, there is a significant positive relationship between customer service training and job performance among frontline employees (Karatzas *et al.,* 2020; Mpofu & Hlatywayo, 2015; Yavas *et al.,* 2010). Also, the international flight attendants who were interviewed during the exploratory research phase of this study indicated that customer service training enhanced their service delivery, making it easier for them to perform the required services well (Feedback from informal discussions, 2020).

The empirical results of this study are consistent with the literature in that a significant positive relationship was found between customer service training and international flight attendants' interpersonal service-delivery performance. In addition, the results are consistent with the JD–R model of burnout since customer service training is a job resource that improves job performance (refer to Chapter 2, section 2.2). It can be concluded that customer service training is essential in the aviation industry, specifically among flight attendants. Four- and five-star airlines should therefore provide adequate and continuous (annual) customer service training to crew members that should include skills development regarding interpersonal service-delivery as well as service-recovery performance (discussed in section 6.3.1). Customer service training should include training on how to provide high-quality services, and how to deal with complaining passengers and/or passenger problems. Not only can customer service training improve the performance of international flight attendants, but it can also increase the success of the airline as well-trained employees enhance service firms' competitive advantage (Yavas *et al.,* 2010).

Furthermore, it can be argued that other forms of training such as emotional intelligence training, crew resource management (CRM) and training on how to resolve crew and passenger conflict might also enhance flight attendants' service-delivery performance. Therefore, high-end airlines should not only focus on customer services training, but should also include a broad range of other types of training programmes, which will be discussed in more detail in section 6.4.1.

6.2.2 Objective 1.2: To assess the influence of supervisory support on interpersonal service-delivery performance (H_{20})

Supervisory support can be classified as a job resource, which is a working condition that is both functional in realising work goals and helps employees to grow and develop their skills (Demerouti *et al.,* 2001). According to previous literature, there is an indirect positive relationship between supervisory support and job performance (Babin & Boles, 1996) as well as a direct positive relationship between social support (a broader spectrum of support that include the support of colleagues) and service-delivery performance (Chen & Kao, 2014). In addition, former and current international flight attendants who were interviewed in the exploratory research phase of this study suggested that supervisory support is a key factor in ensuring excellent service delivery (Feedback from informal discussions, 2020).

The empirical results of this study, however, revealed a non-significant relationship between supervisory support and international flight attendants' interpersonal service-delivery performance. In other words, receiving performance feedback from supervisors, receiving credit when accomplishing something substantial on the job, and supervisors' level of care and support does not affect flight attendants' performance levels. This unexpected non-significant relationship can be explained by the following scenario: on most of their flights, international flight attendants work as part of a new team (or new set of crew). In other words, they do not have the same supervisors for every flight. The inconsistency regarding on-board supervisors may be the reason that flight attendants and their performance levels are not affected by supervisory support, because the level of support varies.

In addition, the variety of on-board supervisors could influence the ability of crew members to accurately assess the level of support they receive, also explaining why a non-significant relationship was found between supervisory support and interpersonal service-delivery performance. It can also be argued that, owing to the high volumes of work (refer to company service delivery expectations, Chapter 3, section 3.4.1), many flight attendants have learned to cope with little or no support. In conclusion, if on-board supervisors were consistent (i.e., the same supervisors on each flight), the influence of supervisory support on flight attendants' interpersonal service-delivery performance might be more significant.

6.2.3 Objective 1.3: To assess the influence of teamwork on interpersonal service-delivery performance (H$_{21}$)

Teamwork is essential among flight attendants as they often assist each other during service delivery when offering meals and beverages to passengers. According to the literature, teamwork has a positive effect on organisational performance (Ardahan, 2007) as well as on employee performance (Kelemba *et al.,* 2017). Kelemba *et al.* (2017) further observe that frontline employees such as flight attendants enhance their skills, knowledge, abilities, and job performance by working in teams. According to the former and current international flight attendants interviewed during the exploratory research phase of this study, teamwork makes it easier for the crew to perform their service delivery duties (Feedback from informal discussions, 2020).

The empirical results in this study concur with this contention by revealing a significant positive relationship between teamwork and interpersonal service-delivery performance. These results are consistent with the JD–R model of burnout (refer to Chapter 2, section 2.2) given that teamwork is a job resource that influences job performance, similar to customer service training. It can be concluded that the management of the world's four- and five-star airlines should promote teamwork among flight attendants, which include co-operation, working together effectively, encouraging one another, and helping each other with tasks. To make this possible, airlines should facilitate teambuilding events, integrate teamwork in their corporate culture, and lead their teams by example. Supervisors should be the first to assist/help other team members with tasks.

Finally, in addition to improving job performance, teamwork may also help to minimise the workload. By working together effectively, international flight attendants can relieve the pressure associated with the long list of formal and informal duties and responsibilities that international flight attendants have.

6.2.4 Objective 1.4: To assess the influence of working conditions on the levels of fatigue among international flight attendants (H$_{22}$)

As reported in Chapter 5, the working conditions (which include high company service delivery expectations, limited physical space, and limited time/time pressure) were found to have a significant influence on the levels of fatigue among international flight attendants. This relationship is consistent with MacDonald *et al.* (2003) and McNeely *et al.* (2014) who report that high levels of fatigue are common among flight attendants as a result of their work schedule and working environment. As noted earlier, four- and five-star airlines have high expectations regarding flight attendants' service quality. In addition, international flight attendants have limited time and limited physical space inside aircraft cabins to perform their duties and responsibilities.

According to the JD–R model of burnout, discussed in Chapter 2, all three dimensions of working conditions are job demands that can be associated with exhaustion (similar to fatigue), burnout and a decrease in employees' job performance. In addition, Chen and Chen (2014) propose that working in a confined space (limited physical space) and under time constraints (limited time/time pressure) are some of the working environment factors that international flight attendants specifically face (Demerouti *et al.,* 2001). Alongside the JD–R model, the environmental psychology theory posits that certain environmental stressors (in other words, job demands) in the working environment can decrease job performance and reduce employee well-being (refer to Chapter 2, section 2.5). Since the empirical results of this study revealed that working conditions increase levels of fatigue, potentially affecting employees' well-being, it can be concluded that these results are consistent with the theories of both the JD–R model of burnout and environmental psychology.

6.2.5 Objective 1.5: To assess the influence of unreasonably demanding passengers on levels of fatigue among international flight attendants (H$_{23}$)

According to Chen and Kao (2012), frontline employees such as flight attendants often have to deal with unreasonably demanding or even insulting customers. Several studies report a significant positive relationship between unreasonably demanding customers and frontline employees' job performance, suggesting that they adjust or improve their service performance in response to the demands of customers (Itani *et al.,* 2020; Jaramillo *et al.,* 2013). In addition, Zhou *et al.* (2007) argue that there is an indirect positive relationship between demanding customers and organisational performance. Based on the reconfigured models presented in Chapter 5, the empirical results of this study reveal a significant positive relationship between unreasonably demanding passengers and international flight attendants' levels of fatigue. In other words, when passengers have high expectations that are unreachable or unrealistic, are very demanding about service quality, and require a perfect fit between their needs and crew members' services, it has a negative impact on flight attendants; that is, as their levels of fatigue rise.

In addition, the flight attendants who were interviewed agreed that it is mentally and physically draining to deal with unreasonably demanding passengers as they will never really be satisfied with their service levels (Feedback from informal discussions, 2020). One way in which airlines can try to manage unreasonably high passenger expectations is by effective communication (refer to section 6.4.3). For example, airlines can display the meal and beverage service times on passengers' in-flight entertainment (IFE) screens so that they are aware of the service procedures and offerings. Finally, unreasonably demanding passengers can be classified as a job demand or an environmental stressor. Therefore, the significant positive relationship between unreasonably demanding passengers and the levels of fatigue reported in this study is consistent with the JD–R model of burnout and the environmental psychology theory.

6.2.6 Objective 1.6: To assess the influence of cultural differences among passengers on levels of fatigue among international flight attendants (H$_{24}$)

International flight attendants serve meals and beverages to passengers from countries all over the world. The literature suggests that the cultural differences among these passengers may influence their expectations and perceptions of service quality (Karami *et al.,* 2016; Moufakkir & Alnajem, 2017). Former and current international flight attendants who were interviewed during the exploratory research phase of this study confirmed that cultural differences among passengers exist and potentially influence the outcome or performance of the service delivery encounter (Feedback from informal discussions, 2020). However, the empirical results of this study revealed a non-significant relationship between cultural differences among passengers and the levels of fatigue among the international flight attendants. This non-significant relationship can be explained by the fact that international flight attendants are trained to be aware of cultural differences among passengers. It can also be argued that international flight attendants have become accustomed to serving passengers from all corners of the world, and therefore differences in cultural backgrounds do not affect their levels of fatigue or tiredness. Nonetheless, cultural differences among passengers do exist and further research should be conducted to investigate its influence on flight attendants as frontline employees.

6.2.7 Objective 1.7: To assess the influence of job experience on the levels of fatigue among international flight attendants (H$_{25}$)

Job experience and fatigue were originally assessed as intervening variables in this study. However, based on the reconfigured models presented in Chapter 5, a significant negative relationship was revealed between years of job experience and fatigue among international flight attendants. This negative relationship means that international flight attendants with more job experience have found ways to cope with their stressful working environment, which can be associated with increased levels of fatigue or tiredness. Therefore, four- and five-star airlines are encouraged to exert their best efforts to retain existing crew members given that experienced flight attendants manage fatigue better, potentially increasing their overall well-being.

In addition, the negative effect of job demands such as working conditions and unreasonably demanding passengers on the levels of fatigue among flight attendants can be mitigated by the positive influence of job experience. Since only 60 per cent of new flight attendants pass their initial training and merely 50 per cent make it through their first year of flying (E-zine, 2014; Pilot, attendant and mechanic turnover in airline industry, 2021), four- and five-star airlines should value and take care of their existing flight attendants. They should create opportunities for career development, give them more ownership in their duties, mentor them, and increase performance incentives by rewarding hard work. They should also offer emotional support for flight attendants such as the option to speak to a psychiatrist or join group counselling sessions. In this way, high-end airlines can increase their flight attendants' job motivation and well-being and decrease the high turnover rates.

6.2.8 Objective 1.8: To assess the influence of job experience on interpersonal service-delivery performance (H_{26})

Both indirect and direct relationships between job experience and employee performance have been reported in the literature. According to Hunter and Thatcher (2007), job experience moderates the relationship between affective organisational commitment and job performance, suggesting that employees with more job experience produce higher levels of performance. Yilmaz (2015) reports a direct positive relationship between job experience and job performance among frontline employees. Moreover, Chen and Kao (2012b) argue that job experience moderates the relationship between job burnout and job performance, suggesting that the negative effect of burnout on job performance is less severe among experienced flight attendants.

In addition, according to the international flight attendants interviewed during the exploratory phase of this study, job experience makes their service delivery easier, which could lead to improved service-delivery performance (Feedback from informal discussions, 2020). The empirical results of this study, however, revealed a non-significant relationship between years of job experience as international flight attendant and interpersonal service-delivery performance.

152

This unexpected non-significant relationship can be explained by the fact that interpersonal service-delivery performance in this study was measured from the flight attendants' perspective and that they assessed their own performance. It can be argued that years of job experience might have had a more significant impact on performance if the flight attendants' performance were measured or assessed by supervisors or passengers. Furthermore, it can be argued that the customer service training that international flight attendants receive prepares them adequately to be able to deliver excellent service quality. Therefore, experienced flight attendants' performance is not necessarily better than the performance of less experienced ones.

6.2.9 Objective 1.9: To assess the influence of the levels of fatigue on interpersonal service-delivery performance (H$_{27}$)

Fatigue may result in reduced mental capacity, inattentiveness, weariness, and feeling lethargic (CCOHS, 2021). Therefore, it can be argued that high levels of fatigue may influence the performance of frontline employees (Bendak & Rashid, 2020; Ng *et al.,* 2011) who are expected to be fast and efficient when executing tasks but also to be friendly and helpful at the same time when dealing with customers (Wirtz *et al.,* 2008). Former and current international flight attendants interviewed during the exploratory phase of this study also commented that fatigue has a negative effect on their service-delivery performance as feeling fatigued influences their emotions and willingness to perform tasks (Feedback from informal discussions, 2020).

However, the empirical results of this study showed a non-significant relationship between the levels of fatigue and international flight attendants' interpersonal service-delivery performance. It can be argued that flight attendants have learned to cope with the long working hours, frequent time zone changes, and limited time to rest, which can be associated with high levels of fatigue. Therefore, it can be concluded that feeling extremely tired or exhausted (feeling fatigued) does not have a significant influence on flight attendants' performance. This does not mean that flight attendants are not at all affected by fatigue. Fatigue can lead to depression, a loss of memory, and a lack of motivation, and can affect individuals' communication skills and abilities to handle stress (CCOHS, 2021).

Consequently, job-related fatigue is associated with employee health and well-being and, if not treated, can lead to job burnout. Ways in which airlines can reduce the levels of fatigue among international flight attendants are discussed in section 6.4.3.

6.2.10 Objective 2.1: To assess the influence of customer service training on service-recovery performance (H$_{11}$)

The relationship between customer service training and service-recovery performance was empirically assessed because of the inconsistent results reported in the literature. Some studies suggest a non-significant relationship between customer service training and service-recovery performance (Boshoff & Allen, 2000; Yavas *et al.,* 2003; Ashill *et al.,* 2004, 2005), whereas others report a significant positive relationship (Ardahan, 2007; Yavas *et al.,* 2010; Crawford & Riscinto-Kozub, 2011; Piaralal *et al.,* 2016; Costers *et al.,* 2019). Former and current international flight attendants interviewed the exploratory phase of this study, suggest that customer service training is essential in aviation as they are trained exactly how to offer services and perform service recovery in case of a service failure (Feedback from informal discussions, 2021).

According to the empirical results of the current study, there is a significant positive relationship between customer service training and international flight attendants' service-recovery performance. This positive relationship is consistent with the JD–R model of burnout given that customer service training is a job resource that increases employees' job performance (refer to Chapter 2, section 2.2). The results are also consistent with Rawls' theory of justice as international flight attendants' customer service training programmes can be associated with the three principles of this theory, which are procedural, interactional, and distributive justice (refer to Chapter 2, section 2.4). Based on the positive relationship found between customer service training and service-recovery performance, it is recommended that high-end airlines provide extensive customer service training that involves training in how to serve passengers better, how to provide high-quality services, and how to deal with passenger complaints or problems. It is also recommended that airlines include a variety of other training programmes such as training in social and/or soft skills and in etiquette to improve the overall performance of flight attendants (refer to section 6.3.1).

154

6.2.11 Objective 2.2: To assess the influence of supervisory support on service-recovery performance (H$_{12}$)

International flight attendants generally have two supervisors on board a flight, namely the CS (acting as supervisor in the economy class cabin) and the CSD (acting as supervisor in the business class cabin). In this study, the relationship between support from these supervisors and flight attendants' service-recovery performance was assessed. According to the former and current international flight attendants interviewed in the exploratory phase of this study, supervisory support is a key determinant of customer satisfaction with service delivery (Feedback from informal discussions, 2021). The literature indicates that supervisory support is a job resource that potentially improves employees' overall job performance (Babin & Boles, 1996; Demerouti *et al.,* 2001; Chen & Kao, 2012b). Furthermore, Yavas *et al.* (2010) conclude that supervisory support specifically increases the service-recovery performance of frontline employees. However, according to the empirical results of this study, a non-significant relationship was found between supervisory support and service-recovery performance. It can be argued that international flight attendants experience on-board supervisors as a source of stress rather than a source of support (Kickul & Posig, 2001; Wilk & Moynihan, 2005) and therefore largely disregard the supervisors' support in order to cope with the already stressful and demanding job of a frontline employee (Chen & Kao, 2012; Wirtz *et al.,* 2008). In addition, as stated earlier, international flight attendants working for major airlines do not always have the same supervisors on all their flights. Therefore, the non-significant relationship can be attributed to the inconsistency regarding on-board supervisors and their levels of support.

6.2.12 Objective 2.3: To assess the influence of teamwork on service-recovery performance (H$_{13}$)

The relationship between teamwork and service-recovery performance was investigated due to the inconsistent results reported in the literature. Crawford and Riscinto-Kozub (2011), Boshoff and Allen (2000) and Yavas *et al.* (2003), for instance, all report a non-significant relationship between teamwork and service-recovery performance, whereas Ashill *et al.* (2005) and Ardahan (2007) report a significant positive relationship.

The empirical results of this study concur with those of Ashill *et al.* (2005) and Ardahan (2007) by revealing a significant positive relationship between teamwork and service-recovery performance. In other words, teamwork among flight attendants increases their levels of service-recovery performance. These results are also consistent with the JD–R model of burnout since teamwork is a job resource that may improve job performance (refer to Chapter 2, section 2.2).

Against this background, it can be suggested that four- and five-star airlines striving for service excellence should encourage teamwork among international flight attendants including co-operation, working together effectively, and encouraging each other. High-end airlines should furthermore facilitate team-building events during which crew members can socialise with one another, meet more of their colleagues informally, and foster trust while taking part in team-building activities. Furthermore, teamwork should be modelled by on-board supervisors to their subordinates by assisting team members with their tasks and responsibilities, especially helping new crew. In this way, airlines can create a culture of teamwork.

6.2.13 Objective 2.4: To assess the influence of working conditions on the levels of fatigue among international flight attendants (H$_{28}$)

According to the literature, high levels of fatigue are common among international flight attendants given their work schedule and working environment (MacDonald *et al.,* 2003; McNeely *et al.,* 2014). The empirical results of this study are consistent with the literature in that a significant positive relationship was found between flight attendants' working conditions and their levels of fatigue. As stated earlier, working conditions consist of three dimensions, namely company service delivery expectations, limited physical space, and limited time/time pressure. It is argued in this study that the company service delivery expectations of four- and five-star airlines are considerably high and thus very demanding (refer to company service delivery expectations, Chapter 3, section 3.4.1). Working in a confined space (limited physical space) and under time constraints (limited time/time pressure) are some of the job demands or environmental stressors that international flight attendants specifically face.

Moreover, since job demands and environmental stressors are related to exhaustion (similar to fatigue), burnout, and a decrease in job performance and well-being, it can be concluded that the results of this study are consistent with the JD–R model of burnout and the environmental psychology theory (refer to Chapter 2).

6.2.14 Objective 2.5: To assess the influence of unreasonably demanding passengers on the levels of fatigue among international flight attendants (H$_{29}$)

International flight attendants are each responsible for the service delivery and potential service recovery of up to 50 passengers per flight. Therefore, it can be argued that satisfying the needs and expectations of unreasonably demanding passengers who require a prolonged and complex response from crew, can be quite challenging as it adds to the 'already stressful and tiring' job of an international flight attendant. As stated earlier, the literature reveals a significant positive relationship between demanding customers and job performance, suggesting that frontline employees such as flight attendants adjust or improve their service performance in response to the demands of customers (Itani *et al.,* 2020; Jaramillo *et al.,* 2013).

However, according to the empirical results of this study, a significant positive relationship was found between dealing with unreasonably demanding passengers and international flight attendants experiencing high levels of fatigue. In other words, passengers with high expectations and who are unreasonably demanding when it comes to service quality, increase the levels of fatigue among international flight attendants. Moreover, similar to working conditions, unreasonably demanding passengers can be classified as a job demand or environmental stressor, as it is associated with exhaustion, burnout, and a decrease in job performance and well-being (Demerouti *et al.,* 2001). Once again, it can be concluded that the empirical results in this study concur with the JD–R model of burnout and the theory of environmental psychology (refer to Chapter 2).

6.2.15 Objective 2.6: To assess the influence of cultural differences among passengers on the levels of fatigue among international flight attendants (H$_{30}$)

As stated earlier, cultural differences among airline passengers exist and can influence the success of the service delivery experience or encounter. According to the literature, cultural differences among customers specifically affect the effectiveness of frontline employees' service recovery strategies, especially their service-recovery performance (Mattila & Patterson, 2004; Wong, 2004). Wong (2004), for example, found that compensation (a service recovery strategy) significantly increases positive WOM and the repurchase intention among American customers, whereas providing an apology (also a service recovery strategy) increases positive WOM and the repurchase intention specifically among Australian customers. Therefore, service-recovery performance is affected by the nationality of customers, notably their culture.

However, the empirical results in this study revealed a non-significant relationship between cultural differences among passengers and the levels of fatigue among international flight attendants. It can be argued that because international flight attendants engage with hundreds of passengers per flight, they do not experience or view people with different cultural backgrounds as different from one another but rather view all passengers alike. It can also be argued that they have adapted to serving passengers from all around the world, given the adaptable and flexible nature of this understudied occupation group (Maszczynski, 2019).

6.2.16 Objective 2.7: To assess the influence of job experience on the levels of fatigue among international flight attendants (H$_{31}$)

Job experience and levels of fatigue were originally investigated as intervening variables in the working environment of international flight attendants. However, based on the reconfigured models illustrated in Chapter 5, a significant negative relationship was recorded between these variables. In other words, international flight attendants with more job experience express lower levels of fatigue compared to those with less experience who report high levels of fatigue and exhaustion.

The negative relationship between years of job experience and levels of fatigue is reasonable given that experienced employees have a better understanding of their working environment (Penrose, 2020) and find it easier to deal with unreasonably demanding passengers (Feedback from informal discussions, 2020). It can be argued that over the years flight attendants have found ways to cope with the negative effects of fatigue since the impact of reduced sleep and circadian rhythm disruptions appear to be less among those who are experienced. In addition, given that fatigue affects alertness, levels of concentration, reaction times, risk assessment, and memory (Curcio *et al.,* 2001; Dawson *et al.,* 2011; Lim & Dinges, 2010; Zuehlke, 2004) and can be associated with accidents in civil aviation due to crew and pilot error (Moore, 2012), high-end airlines should focus on decreasing the levels of fatigue among flight attendants and retaining as far as possible crew members with experience (refer to section 6.3.2).

6.2.17 Objective 2.8: To assess the influence of job experience on service-recovery performance (H$_{32}$)

According to the literature, years of job experience increases employees' job performance (Quiñones *et al.,* 1995; Rozi & Sunarsi, 2020; Uppal *et al.,* 2014; Yilmaz, 2015). In addition, Karatepe and Talebzadeh (2016) contend that more experienced flight attendants manage passenger complaints better and therefore demonstrate higher service-recovery performance levels. However, according to the empirical results of this study, a non-significant relationship was found between years of job experience and flight attendants' service-recovery performance. This non-significant relationship can be explained by the extensive customer service training that international flight attendants receive before they come into contact with passengers (refer to customer service training, Chapter 3, section 3.4.2). It can thus be concluded that the customer service training provided by four- and five-star airlines is sufficient and enables international flight attendants to offer excellent service-recovery performance, regardless of the years of experience that they have. In addition, as outlined earlier, service-recovery performance in this study was assessed from the flight attendants' perspective. Therefore, it can be argued that the effect of job experience might have been more significant if service-recovery performance were measured from the perspective of supervisors or passengers.

6.2.18 Objective 2.9: To assess the influence of the levels of fatigue on service-recovery performance (H$_{33}$)

Fatigue may influence international flight attendants' level of alertness, perceptual skills, and flexible thinking, which in turn might affect their ability to perform according to the service delivery expectations of the airline (Curcio *et al.,* 2001; Dawson *et al.,* 2011; Lim & Dinges, 2010). In addition, Rudin-Brown (2015) suggests that fatigue may affect employees' service-recovery performance since people who are fatigued easily get distracted, may take longer to solve problems, and tend to make more mistakes than they might have made otherwise. However, the empirical results of this study revealed a non-significant relationship between the levels of fatigue and the service-recovery performance of international flight attendants. This unexpected non-significant relationship can be explained by the fact that fatigue is a common occurrence among flight attendants due to their working environment (MacDonald *et al.,* 2003). Against this background, it can be assumed that crew members have learned to cope with reduced sleeping patterns, long working and/or flying hours, and circadian rhythm abnormalities associated with the job of being an international flight attendant and therefore fatigue does not affect their service-recovery performance.

The following section involves an overview of the road to becoming an international flight attendant including the recruitment process, extensive training, the first few months of flying and the effect thereof on physical and mental well-being.

6.3 BECOMING AN INTERNATIONAL FLIGHT ATTENDANT

Imagine if your week's plans include breakfast in Amsterdam, a stroll in Central Park New York, a Broadway show, and a dinner at a yacht club in the Seychelles. Think about island hopping in the Maldives, shopping in France, staying in luxurious hotels, and sunbathing in Phuket. Or visiting the Great Wall of China, walking in the streets of Venice or standing in front of the Colosseum in Italy. After all, that is what the life of an international flight attendant involves. However, the road to becoming an international crew member is a very intricate and cumbersome process and not many are able to make a career out of it.

6.3.1 The open day

It all starts with an *open day* which is a three- to four-day event during which high-end airlines such as Qatar Airways and Emirates invite aspiring flight attendants to cities across the world for interviews. Open days are normally held at hotels or conference venues in capital cities such as Johannesburg, Prague, Brisbane, Delhi and Kiev, to name but a few. Thousands of men and women arrive at these open days hoping that their childhood dreams of becoming an international flight attendant will come true. In cities such as Johannesburg, South Africa, the average number of people that arrive at an open day can be as many as 1 000, whereas in cities such as Beijing and Bangkok up to 5 000 individuals could turn up.

The first stage in the recruitment process consists of 30-second interviews during which applicants are asked a few questions about themselves. If the applicant receives a letter inviting them to the next day's round, the applicant has advanced to stage two. Those who do not receive a letter can assume that they have not passed the first round (only 20–25 per cent of all applicants advance to stage two). The second stage of the recruitment process involves multiple rounds of elimination. Applicants have to write a mathematics and literature test. Thereafter, their height is measured as flight attendants generally have to be at least 160 cm tall (having to demonstrate that they are able to reach 212 cm while standing on their toes). Finally, aspiring crew members have to take part in a group activity during which their participation and teamwork skills are assessed. Those that pass all three rounds of elimination are invited to the third stage of the recruitment process, which involves 15-minute one-on-one interviews.

Applicants who are successful in their final interviews are then asked to provide professional photographs of themselves dressed in formal attire for the airline's top management to approve. In addition, applicants have to undergo medical tests and get vaccinated as certain vaccinations are required for international travel before the position can be offered by the airline, and before applicants can relocate to the respective country they are assigned to. All flight attendants are required to relocate to the country where the particular airline's headquarters are situated. For example, Qatar Airways' crew have to relocate to Doha, Qatar, whereas Emirates crew have to relocate to Dubai in the United Arab Emirates (UAE).

6.3.2 The extensive training

As soon as new flight attendants arrive in a particular country, they are enrolled to complete six to eight weeks of training that includes training on the different aircraft types, emergency equipment and procedures, first aid, fire fighting, handling of passenger and crew conflict, physical health and appearance training, and customer service training. During their first few days in the respective country they are told how to wear their hair, their make-up, and their nails. They are also told how to sit, walk, and talk, and are advised on all the do's and don'ts of the airline industry. Furthermore, they are measured for tailor-fitted uniforms, weighed (to monitor their weight), and they have to follow strict curfew times that regulate their movements, i.e., when they are allowed to be in and out of their apartment buildings.

Prospective flight attendants are trained to know every bit of detail regarding the safety, security and service delivery standards and procedures of the airline, and if a trainer were to call a trainee flight attendant at 02:00 am in the morning and ask them to repeat an emergency drill, they should be able to do so as they are trained to know all procedures off by heart. International crew members are also trained how to deliver a baby, how to do cardiopulmonary resuscitation (CPR), how to deal with difficult passengers, how to restrain unruly (disruptive) passengers, and how to handle an aircraft hijacking situation. Furthermore, they are trained how to deliver excellent services, how to address passengers (e.g., how to conduct passenger announcements), and how to calm passengers' nerves. The duration in customer service training is on average 10 to 15 days, whereas safety and security training can last up to six weeks considering the fact that safety and security are the main responsibilities of flight attendants.

It can be argued that the training that international flight attendants receive is rigorous and almost military-like, with the end results that produce a highly skilled and disciplined group of people who function as a unit and adhere to strict rules and regulations without asking questions. Flight attendants rarely step 'out of line' or disobey the instructions of their superiors. Moreover, four- and five-star airlines are highly organised and structured firms, and if new crew members did not have a disciplined life before they joined one of the worlds' most prestigious airlines, they will certainly be disciplined after the successful completion of their training.

6.3.3 The first months of flying

Once their training is completed, the new flight attendants receive their very first monthly roster or flying schedule. Receiving this roster is one of the highlights of being an international flight attendant as one is then able to view the list of countries that one will be visiting over the following month. Seeing world cities such as Paris, London, and New York on the flight schedule fills new flight attendants with joy and reminds them why they have joined the aviation industry in the first place. The first few weeks of being an international flight attendant are truly everything that one could hope for and more. One travels the world, explore different cities, take hundreds of photos, and make everlasting memories.

Not only does one see places that one once dreamt of, but one also meets people from all over the world, and experience different cultures as well as food. At the same time, one also sleeps very little, works hard, and eventually gets extremely homesick. However, these are the difficulties that are less talked about: the countless nights a flight attendant will spend alone in their apartment or hotel room, the jetlag, the fatigue (physical and mental exhaustion), and the fact that when one visits the Great Wall of China or the Louvre in France, it will be an experience on your own. No one tells a flight attendant that they will be surrounded with hundreds of people (daily) without really knowing anyone. No one speaks about the fact that on each flight a flight attendant will have to work with a new set of crew members or new team. Therefore, flight attendants rarely have the opportunity to familiarise themselves with colleagues or to make friends for that matter.

No one tells a flight attendant about the weight they will gain because of the irregular working hours and the effect it might have on their self-confidence when they are told to obtain a bigger uniform. No one tells a flight attendant that they will become so tired that they will struggle to recall even simple things, such as remembering the city's name to which they are flying while speaking to a passenger. Or how fatigue will influence their concentration levels and emotions such that they will master the skill of falling asleep in an upright position. No one speaks about the possibility that a flight attendant might not realise what day of the week it is, and that they might feel as if they were in a constant daze or dream; unable to think or react properly.

Flight attendants are not informed about these things, and soon the excitement of the new monthly roster fades and the working environment takes its toll on their health and well-being. As stated earlier, only 50 per cent of flight attendants make it through their first year of flying (E-zine, 2014; Pilot, attendant and mechanic turnover in airline industry, 2021). The remainder simply resign after a few months. The crew members who make a successful career in aviation are the ones that are able to cope with three to four hours of sleep, long shifts, jetlag, high levels of fatigue, symptoms of depression due to fatigue, pain in their back and legs due to physical labour, insomnia, feeling alone, and not being able to see family or friends for months. In order to cope with being an international flight attendant, one must thus be resilient. Moreover, one has to possess intrinsic (personal satisfaction or enjoyment) and extrinsic (rewards or money) motivation to continue flying. Some airlines only hire crew from third-world countries where the currency in which they are paid are worth up to 20 times more than the currency they would receive in their own country. Therefore, some of the most common benefits of becoming an international crew member are free travelling and relatively high remuneration.

Against this background, being an international flight attendant is not just simply being a so-called 'waitress in the sky'. It is a rather taxing job, and few people are able to cope with the strenuous working environment that air crew face. However, most individuals merely associate the job of being an international flight attendant with travelling the world and serving meals without really considering the full scope of the job and the potential stress factors that they might face. In the light of what has been written here, a more holistic view of what it is truly like to be a flight attendant for one of the worlds' best airlines has been provided.

6.4 RECOMMENDATIONS

The recommendations offered here are based on the findings of this study and includes recommendations regarding customer service training, teamwork, the role of fatigue, and the overall health and well-being of crew members. Although the study found that fatigue did not have a significant influence on the service-delivery and service-recovery performance of international flight attendants, the effect of fatigue cannot be ignored or conducive for crew, both mentally and physically. Therefore, the health and well-being of flight attendants were considered in this study.

6.4.1 Recommendations regarding customer service training

The success of service firms depends strongly on the service performance of frontline employees (Wilson *et al.,* 2012). Therefore, competitive firms wishing to improve their performance should focus on enhancing the performance of their frontline staff. In the context of this study, it was established that customer service training and teamwork were the most prominent factors that enhance the interpersonal service-delivery and service-recovery performance of international flight attendants. Therefore, it is recommended that high-end airlines focus on providing adequate customer service training and on promoting teamwork among flight attendants.

In this study, customer service training refers to continuous training on how to successfully serve passengers, provide high-quality services, and deal with passenger complaints and problems. It is recommended that four- and five-star airlines wanting to improve the international flight attendants' performance levels provide them with customer service training, which can include practical guidelines on how to conduct both service delivery and service recovery.

As far as service delivery is concerned, it is suggested that flight attendants are trained effectively in the following: how to welcome passengers on board an aircraft, how to serve meals and beverages, how to push and pull service carts or trolleys, and how to attend to exceptional requests. In addition, flight attendants should receive soft-skills training that include the development of interpersonal skills, leadership, adaptability, and effective communication in order to provide excellent service delivery. Alongside soft-skills training, flight attendants should receive training in etiquette such as being considerate, kind, polite, and having overall good manners when offering services to passengers. International flight attendants should also have excellent product knowledge and be trained on how to present wine to passengers, handle dishes and glassware, and deal with demanding situations such as conflict among passengers. Furthermore, crew members should receive training in emotional intelligence as they interact with hundreds of passengers daily.

Emotional intelligence training can help flight attendants to understand and manage their own emotions and behaviour, which in turn can increase their ability to relieve stress, empathise with passengers, enhance their own performance, and achieve personal or career goals. Concerning personal development, it is advisable that airlines facilitate workshops for flight attendants to maintain a balanced lifestyle, which can include guidelines on healthy eating, regular exercise, and spending time with friends and family.

Finally, with reference to service recovery, it is recommended that high-end airlines train international flight attendants in how to manage service failures. They should be trained in how to return dissatisfied passengers to a state of satisfaction by using or implementing service recovery strategies such as assistance or problem-solving, offering an apology, offering compensation, providing an explanation, prompt handling of the service failure, and being courteous (see Chapter 3, section 3.3.2). Moreover, flight attendants should know how to anticipate and understand the needs of passengers and adjust or increase their service performance levels to meet passenger expectations.

6.4.2 Recommendations regarding teamwork

The empirical results in this study revealed that effective teamwork improves the interpersonal service-delivery and service-recovery performance of international flight attendants. Teamwork includes co-operation, a strong team spirit, working together effectively, helping each other, and encouraging one another. Four- and five-star airlines are recommended to promote teamwork among their flight attendants by incorporating teamwork in their organisational culture. For example, one of Qatar Airways' corporate values is 'one team', referring to the shared vision of the airline and its employees (QAS, 2017). Teamwork can also be advanced by facilitating team-building events for crew members during which they can meet colleagues, socialise, and take part in activities that can contribute towards a strong team spirit. Moreover, airlines can provide crew resource management (CRM) training for pilots and flight attendants since CRM training includes team-building activities and information-transfer in order to develop knowledge and skills (ICAO, 2013). In this respect, flight attendants should be trained to manage conflict among themselves because conflict might hamper the effectiveness of the team.

Furthermore, teamwork should be promoted by supervisors during flight briefings. These briefings are 10–20-minute meetings scheduled before each flight during which team members are introduced to one another and discuss the flight details such as the aircraft type in which they will be flying (Boeing 777, Airbus 380 etc.), flight duration, and service procedures. During both these briefings and during the flight itself, supervisors should encourage teamwork among flight attendants by being the first to assist them with their duties and responsibilities.

Another way in which high-end airlines can increase teamwork among crew members is by scheduling their flight attendants to work in the same groups or teams of crew on multiple flights. By working in the same groups or teams, teamwork among crew members can be maximised in that flight attendants will then have the opportunity to develop relationships and get to know each other better. In summary, improving teamwork can lead to enhanced interpersonal service-delivery and service-recovery performance as well as improved overall firm performance.

6.4.3 Recommendations regarding fatigue

The significant role of fatigue in the working environment of international flight attendants was highlighted in this study. The empirical results showed that working conditions (such as company service delivery expectations, limited physical space, and limited time/time pressure), and unreasonably demanding passengers increase the levels of fatigue among international flight attendants. Concerning company service delivery expectations, it can be recommended that four- and five-star airlines facilitate support workshops during which crew members can discuss the challenges that they face regarding the stress associated with the job of being an international flight attendant and receive advice regarding these challenges. These workshops can be facilitated by senior crew members and should include providing accurate information regarding the increased workload of flight attendants in order to manage the expectations of new or inexperienced crew (refer to high company service delivery expectations, Chapter 3, section 3.4.1). Furthermore, fewer hours within the confined space of an aircraft cabin may reduce the high levels of fatigue among international flight attendants. Therefore, airlines can mitigate the effect of spatial limitations on fatigue by adapting crew members' work schedules.

167

However, as stated by Caldwell (2005), few changes have been made to crew schedules regarding extended duty hours and sleep deprivation, which is related to fatigue and international flight attendants' performance levels. In other words, the occurence of fatigue among international flight attendants is not a 'new' phenomenon in the aviation industry, but rather a matter that has not yet been addressed properly. Therefore, it is recommended that high-end airlines adapt the work schedules of international flight attendants by reducing their maximum number of monthly working hours and increasing their resting times to ensure optimal performance.

Although aviation authorities such as the International Civil Aviation Organisation (ICAO) regulate crew schedules in terms of maximum flying hours and minimum resting times (refer to Chapter 3, section 3.5.1), airlines have different ways of calculating and implementing these standards. Therefore, this study suggests that airlines should take the liberty, but not misuse the liberty, to determine flight attendants' work schedules. More specifically, airlines could consider scheduling the majority of flights during the day, as night-time departures, which involve flight attendants working night shifts increase the levels of fatigue among crew. It is argued that flight attendants would be much less sleep-deprived if their working hours were similar to a normal working day, that is, from 07:00 am to 18:00 pm.

However, the aviation industry is a fast-paced industry where time is a luxury. According to Damos *et al.* (2013), international flight attendants often do not have enough time to complete their safety and security duties owing to too many other service-related duties. Therefore, it is recommended that high-end airlines reduce the number of in-flight services on selected flights so that international flight attendants have more time to successfully complete their safety and security duties (which are their primary duties) and, secondly, to provide the high-quality services expected of them. For example, on a seven-hour flight, international flight attendants typically have to offer up to three in-flight services including a beverage service, a three-course meal service, and a light snack service. For every service offered, they have to prepare the carts or service trolleys (by heating the meals and organising the meal trays and beverages inside the cart), serve up to 50 passengers per crew member, and collect the empty containers/wastage after the passengers have finished the meal.

Considering the fact that the first 20 minutes and the last 45 minutes of the flight time are dedicated to taxi (movement of an aircraft while it's on the ground), take-off, and preparation for landing, international flight attendants are rushed to complete all their in-flight services in good time. By reducing the service-related duties, for example, removing the beverage or light meal service, the impact of fatigue on international flight attendants can be reduced.

The empirical results also revealed that unreasonably demanding passengers significantly increase the levels of fatigue among international flight attendants. The impact of unreasonably demanding passengers on fatigue can be mitigated by means of adequate customer service training (as mentioned in section 6.3.1). Airlines should equip international flight attendants to be able to deal with these difficult situations. Customer service training also leads to increased interpersonal service-delivery and service-recovery performance and therefore it is a key consideration in the working environment of international crew members that should not be underestimated by management. Furthermore, airlines can try to reduce the unreasonably high demands of passengers by providing them with more information regarding the on-board services offered by the airline. The airline should communicate the service procedures or schedule, alongside the time of each service, on the IFE screens by displaying messages on the screen. In this way, passengers will know when to expect certain services such as three-course meals, beverages, and/or duty-free services. High-end airlines can thus manage passengers' expectations and in this way reduce potential dissatisfaction.

According to the results of this study, years of job experience reduce the high levels of fatigue among international flight attendants. It can therefore be argued that crew members with more experience cope better with fatigue than those with less experience. This is a significant finding considering the high turnover rate among flight attendants across the world (Chen & Kao, 2012a). It is therefore recommended that four- and five-star airlines exert their best efforts to retain existing flight attendants with experience given that the benefits of retaining crew do not merely involve reduced levels of fatigue among flight attendants but may also include increased firm performance thanks to the years of experience and the reduction in recruitment costs.

High-end airlines can reduce the high turnover rates among flight attendants by increasing job satisfaction by means of improved working conditions and organisational support (Kim & Back, 2012; Lee *et al.,* 2012). In summary, the working environment of international flight attendants is a tiring environment. Although it was found in this study that the increase in fatigue does not influence crew members' interpersonal service-delivery and service-recovery performance directly, it may affect their well-being given that individual well-being is influenced by the way in which people cope with stressful and demanding situations (Edwards, 1988). It can thus be argued that international flight attendants have learned to cope with their working environment. In other words, they have learned to 'manage the demands' of being an international flight attendant (Taylor & Stanton, 2007).

Coping can be categorised as problem- or emotion-focussed coping. Problem-focussed coping involves addressing the source of stress whereas emotion-focussed coping refers to targeting one's negative emotions (Lazarus & Folkman, 1984; Teoh, Wang & Kwek, 2019). According to Pearlin and Schooler (1978), coping takes the form of one of three coping behaviours, namely eliminating or modifying the conditions that cause the stress-related problems, controlling one's experience to try neutralising the problem, or managing the potential emotional consequences of the problematic situation. International flight attendants might use any one of these coping behaviours to deal with their demanding and tiring working environment.

However, 'having to cope' is not a long-term working solution. Therefore, it is recommended in this study that four- and five-star airlines improve the work schedules and working environment of international flight attendants by facilitating crew support workshops, decreasing monthly working/flying hours, increasing resting times, limiting in-flight service-related duties, providing adequate customer service training, and retaining crew with job experience.

6.4.4 Recommendations regarding flight attendants' well-being

This study recommends that airlines attend to the overall health and well-being of international flight attendants in order to improve both their performance and the airline's performance.

Employee well-being can be described as "the overall quality of an employee's experience and functioning at work" (Grant, Christianson & Price, 2007) and involves all aspects of an employee's work life, such as daily tasks and responsibilities, stress levels, work schedules, physical working environment, and interaction with customers and colleagues. High-end airlines can increase the overall health and well-being of crew members by means of (1) learning and development, (2) employee voice and involvement, (3) workplace health and safety, and (4) increased perceived organisational support (Clarke & Hill, 2012; Rhoades & Eisenberger, 2002).

First, with regard to learning and development, airlines should focus not only on job-specific training such as service delivery, safety, and security training, but should also encourage personal development training among crew members. For example, airlines should promote physical training (regular exercise), mental wellness programmes, planning and budgeting courses, and healthy eating guidelines or workshops. Secondly, airlines should provide an internal communication platform for flight attendants to have a voice in the firm so that they can raise their concerns, make suggestions regarding the airlines' operations, and provide feedback from passengers given that international flight attendants work directly with customers and are thus 'client-facing'.

Thirdly, regarding workplace health and safety, international flight attendants offer services in the confined space of a commercial aircraft cabin. Four- and five-star airlines therefore have to ensure that their aircraft including on-board facilities and equipment are properly maintained. Moreover, in the cabin environment itself, the air quality, noise and vibration, thermal conditions, and lighting have to be well managed. Workplace safety also involves crew members knowing the exact locations of equipment and being aware of all emergency procedures to ensure the safety and security of passengers and crew on board. For this reason, sufficient physical rest (as recommended in section 6.4.3) is essential for international flight attendants to be able to be alert and react quickly in the case of a potential emergency. Finally, airlines can improve the overall health and well-being of international flight attendants by enhancing perceived organisational support (POS). As stated by Rhoades and Eisenberger (2002), organisational support can be provided in the form of fairness, supervisory support, and organisational rewards.

171

Pertaining to fairness, airlines should treat their employees – in this case flight attendants – with dignity and respect and provide them with the resources that they need, be it physical resources or access to information. High-end airlines should also provide sufficient on-board support to flight attendants, especially to inexperienced crew, in the form of supervisory support, as recorded in this study. With regard to organisational rewards, airlines should implement and maintain rewards and recognition programmes such as a 'Best flight attendant of the month' award as well as promotions and career development/advancement opportunities in order to enhance perceived organisational support.

Furthermore, perceived organisational support can be increased by providing the crew with job security, encouraging job autonomy, involving them in decision-making, and promoting a healthy work–life balance (Allen, Shore, & Griffeth, 2003; Lew, 2008). Owing to the high demand for jobs in the airline industry, job security is very low, and employees often fear that they will lose their job because of errors made in the workplace. It is recommended that airlines provide employees with more job security by cultivating a working environment that is less driven by fear of getting laid off or fired and more driven by loyalty, motivation, hard work, and performance. Airlines should also communicate their expectations of employees in a clear manner and keep them informed about any changes that may affect them.

With regard to job autonomy and involving employees in decision-making, airlines should provide crew members with more room to take initiative and be creative in their role and responsibilities. To give employees a voice and getting them involved, airlines can encourage flight attendants to provide strategic input for the firm as the insights gained from them as frontline employees can be very useful for airlines owing to their direct contact with passengers. In addition, airlines should encourage job crafting, which involves employees' taking initiative in redesigning their tasks and responsibilities in such a way that they can experience more autonomy, challenges, and self-development. Flight attendants who can craft or design their own jobs feel more valued and are inclined to work for airlines for longer periods of time (Retaining flight attendants and the importance of job crafting, 2021). As far as a healthy work–life balance is concerned, it is recommended that airlines arrange relaxing activities for crew members, such as sightseeing tours, spa treatments or yoga classes in the different cities that they travel to.

In this way, international flight attendants will experience less stress when they prepare to fly to a new city or country; they will thus be more relaxed with the knowledge that their needs are taken care of. In conclusion, by enhancing flight attendants' overall health and well-being airlines can retain existing crew, enhance their performance, and increase the performance and profitability of the airline.

6.5 LIMITATIONS AND FUTURE RESEARCH

This study was conducted among international flight attendants employed or formerly employed by full-service airlines with four- and five-star Skytrax ratings. Therefore, the empirical results are specific to high-end airlines. Future research should include an in-depth assessment of flight attendants' work schedules (including working hours and resting times) and its influence on fatigue. In addition, future research can include an assessment of the working environment of flight attendants employed or formerly employed by low-cost and/or domestic airlines with, for example, three-star Skytrax ratings.

Since flight attendants employed by low-cost airlines do not provide the same type or range of services compared to those of full-service airlines, the results of the factors influencing their service delivery and service recovery may differ. Moreover, the role of fatigue may also be different among flight attendants working for domestic airlines as their work schedule does not necessarily involve long or ultra-haul flights (that is, flights of more than five or six hours). Therefore, they are not as exposed to sleep deprivation and circadian rhythm disruptions compared to international flight attendants. Finally, three-star airlines do not provide the same level of service quality compared to four- and five-star airlines. Therefore, further research should be conducted on the working environment of flight attendants employed by airlines with three-star Skytrax ratings.

Another limitation of this study was the fact that the international flight attendants had assessed their own performance levels. It can be argued that the relationships between the independent and dependent variables might have been different if their service-delivery and service-recovery performance were measured by on-board supervisors or passengers.

6.6 EPILOGUE

The empirical results of this study revealed that customer service training and teamwork significantly increase the service-delivery and service-recovery performance of international flight attendants. Therefore, it is recommended that high-end airlines provide adequate customer service training including service delivery and service recovery training and encourage teamwork among their flight attendants by incorporating teamwork in their organisational culture, facilitating team-building events, and scheduling flight attendants to work in the same sets of teams on multiple flights. In addition, the role of fatigue was particularly relevant in this study given that working conditions (including company service delivery expectations, limited time/time pressure and limited physical space) and unreasonably demanding passengers increase the already high levels of fatigue among international crew members. To mitigate the negative effect of fatigue, it is recommended that airlines adjust the working environment of flight attendants by decreasing their flying hours, increasing resting times, facilitating support workshops, managing the expectations of crew, reducing certain in-flight services, and exerting their best efforts to retain experienced crew members.

It is also recommended that high-end airlines focus on the overall health and well-being, both mentally and physically, of international flight attendants. As mentioned earlier, a crew's well-being can be increased by means of learning and development, employee voice and employee involvement, workplace health and safety, organisational support, job security and job autonomy, involving employees in decision-making processes, and promoting a healthy work–life balance. By placing the health and well-being of international crew members first, high-end airlines can increase flight attendants' interpersonal service-delivery and service-recovery performance, increase their own profitability and performance, and reduce the high crew turnover rates. In conclusion, four- and five-star airlines should prioritise international flight attendants as frontline employees, because *they are the service, the brand, the firm, and the marketer*, representing airlines on both airports and on-board flights across the world.

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APPENDICES

APPENDIX A: EXPLORATORY RESEARCH

To refine the research objectives of this study exploratory research was conducted by means of informal discussions with one (1) former and three (3) current international flight attendants. The flight attendants were asked the following questions and their answers were recorded by the researcher.

1. What makes service delivery difficult?
2. What makes service delivery easy?
3. What makes customer complaints difficult to deal with?
4. What makes customer complaints easy to deal with?

APPENDIX B: CONSENT FORM

CONSENT TO PARTICIPATE IN RESEARCH
Dear Prospective Participant, My name is Claudia van Blommestein, a researcher from the Business Management Department at Stellenbosch University. I would like to invite you to take part in a survey of which the results will contribute to a research project in order to complete my Master's degree in Business Management. Please take some time to read the information presented here, which will explain the details of the survey. Your participation is entirely voluntary. You are free to withdraw from the study at any point, even if you did agree to take part. The purpose of this study is to investigate the services that international flight attendants provide to passengers. The questionnaire will take approximately 10 minutes to complete and contains a combination of questions covering customer service training that flight attendants receive, teamwork among flight attendants, support from supervisors and the physical working environment inside an aircraft. **RIGHTS OF RESEARCH PARTICIPANTS:** You have the right to decline answering any questions and you can exit the survey at any time without giving a reason. You are not waiving any legal claims, rights or remedies due to your participation. If you have questions regarding your rights as a research participant, contact Mrs Maléne Fouché [mfouche@sun.ac.za; +27 21 808 4622] at the Division for Research Development at Stellenbosch University in Stellenbosch, South Africa. Your information and response to this survey will be protected by coding data without personal information of individual respondents. In other words, your personal data will not be connected to your answers. If you withdraw from this study any data captured form your response will be automatically destroyed. If you have any questions or concerns about the research project, please feel free to contact me, Claudia van Blommestein [claudiavanblom@gmail.com; +27 84 525 4170] or my Supervisor, Prof. C. Boshoff [+27 21 808 2735]. If you would like to save a copy of this page, you can 'click to download' the document below.

Please answer by indicating with an "X".		
I confirm that I have read and understood the information provided for the current study.	☐ YES	☐ NO
I agree to take part in this survey.	☐ YES	☐ NO

APPENDIX C: ELECTRONIC QUESTIONNAIRE

S1	Are you currently employed as an international flight attendant?	☐ Yes		☐ No	
S2	Have you previously been employed as an international flight attendant?	☐ Yes		☐ No	
S3	Please indicate your nationality.	☐ South African		☐ Other. Please specify: _____	
S4	Please indicate your gender.	☐ Male	☐ Female		
S5	Please indicate your age in years.	☐ 18-23	☐ 24-29	☐ 30-35	☐ 36+
S6	Please indicate the names of the airline(s) that you have been/are employed by (You may select more than one option)	☐ Emirates	☐ Qatar Airways	☐ Other. Please specify: _____	
S7	How many years' experience do you have as an international flight attendant?	☐ Less than one (1) year	☐ 1-3 years	☐ 4-6 years ☐ 7-9 years	☐ 10+ years
S8	Have you worked in Economy or Business class or in both?	☐ Economy	☐ Business	☐ Both Economy and Business	

Questions		Strongly disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly agree
Q1	I always follow up on passengers' requests	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q2	I receive continuous training to provide a high quality of service	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q3	My in-flight supervisors care about whether I achieve my career goals	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q4	I am efficient in my service delivery	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q5	Passengers often expect me to deliver unreachably high levels of service quality	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q6	I often feel fatigued when I get up in the morning and have to face another day at work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q7	The aisles in an aircraft are too narrow for me to work efficiently	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q8	Satisfying complaining passengers delights me	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q9	The amount of work I usually have prevents me from doing my job to the best of my ability	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q10	Considering all the things I do, I handle dissatisfied passengers quite well	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q11	I follow through in a conscientious (diligent) manner on promises to passengers	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q12	Often, the aircraft feels very cramped inside	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q13	I have received training on how to serve passengers better	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7

Q14	I am not given enough time to do what is expected of me in my job	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q15	The performance standards on my job are very high	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q16	No passenger I deal with leaves the aircraft with problems unresolved	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q17	My in-flight supervisors usually give me helpful feedback about my performance	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q18	I don't mind dealing with complaining passengers	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q19	My in-flight supervisors make sure I get the credit when I accomplish something significant on the job	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q20	I find that the time allocated to perform certain services is very limited	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q21	Most times flight attendants in my workgroup work together effectively	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q22	Certain cultural groups are more pleasant to serve than others	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q23	There is usually a strong team spirit in my workgroup	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q24	I have received training on dealing with passenger problems	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q25	I often feel embarrassed for not having the meal or beverage option a passenger requests	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q26	Usually, the flight attendants in my workgroup help each other with tasks	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q27	Some cultural groups I serve are friendlier than other cultural groups	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q28	As flight attendant, I often feel burned out from my work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q29	My in-flight supervisors take the time to learn about my career goals	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q30	Passengers from some countries complain more than others	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q31	As flight attendant, I cannot always satisfy my passengers' needs because of the limited resources we have inside the aircraft	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q32	Regardless of circumstances, I am courteous (polite, respectful) to passengers	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q33	Sometimes passengers are unreasonably demanding with regards to service quality	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q34	I have received training on how to deal with complaining passengers	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q35	I feel high levels of time pressure at work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q36	I enjoy serving passengers from some countries more than others	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q37	Some passengers are very demanding about the quality of the services they expect	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7

Q38	Inside the aircraft, I do not always have enough space to perform my duties	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q39	Dissatisfied passengers I deal with always leave the aircraft satisfied	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q40	Some passengers have unreasonably high expectations in terms of service	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q41	The limited space inside an aircraft is sometimes a problem	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q42	I often run out of meal options when serving passengers	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q43	As flight attendant, I often feel physically exhausted	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q44	There should be more space in the galley for flight attendants to work better	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q45	I always feel rushed during work hours	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q46	There is usually a lot of co-operation in my workgroup	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q47	As flight attendant, I feel very busy at work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q48	The flight attendants in my workgroup always encourage each other to work as a team	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q49	As flight attendant, I deliver excellent service quality to passengers	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q50	Airlines should provide flight attendants with more resources on-board such as sufficient meals, beverages, snacks and complementary items	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q51	Sometimes I have to apologise to passengers because I do not have their preferred meal or beverage in my cart	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q52	Certain cultural groups are less demanding than other cultural groups	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q53	I often have too much work for one person to do	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q54	As flight attendant, I often feel emotionally drained from my work	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q55	The passengers I serve require a perfect fit between their needs and my services	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q56	I often do not have sufficient time to finish my work properly	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q57	I received adequate customer service training before I came into contact with passengers	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q58	As flight attendant, I often feel mentally exhausted	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q59	I can do a better job if I have more time available	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7
Q60	My in-flight supervisors support me in times of difficulty	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6	☐ 7

We thank you for your time spent taking this survey.

Your response has been recorded.