The Influence of Cultural Differences on Customer Satisfaction:
The Case of Amman Airport (QAIA)

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ABSTRACT

Cultural differences between airport employees and passengers can substantially impact how those passengers evaluate and judge the quality of services provided to them at airports. In this regard, the present study aims to investigate whether the differences in cultural backgrounds between customers and airport employees affect the customers' comfortability and satisfaction while using Amman Airport. The data was collected *via* a questionnaire to measure customer satisfaction and comfortability. In addition, demographic factors, like age, gender and education, were also taken into consideration. The study sample includes purposively selected 100 passengers. For data analysis, SPSS 22.0 software was used. While customer satisfaction and comfortability vary with education and nationality, they do not show significant differences based on gender and age. However, there is a significant impact of cultural comfortability of passengers on their satisfaction.

Keywords: Culture, Hofstede, Cultural differences, Cultural Comfortability, Customer satisfaction.

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أثر الاختلافات الثقافية على رضا الزبائن: مطار عمان كدراسة حالة

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ملخص

يمكن للاختلافات الثقافية بين موظفي المطار والمسافرين أن تؤثر على كيفية تقييم المسافرين وحكمهم على جودة الخدمات المقدمة لهم في المطارات. وفي هذا الصدد، فإن الهدف من هذه الدراسة هو التحقق مما إذا كانت الاختلافات في الخلفيات الثقافية بين العملاء والموظفين المحليين تؤثر في راحة العملاء ورضاهم، باستخدام مطار عمان (مطار الملكة علياء الدولي) مثالاً.

تم جمع البيانات من خلال استبانة لقياس رضا العملاء والراحة الثقافية. بالإضافة إلى ذلك، تم أخذ من العوامل الديموغرافية كالعمر والجنس والتعليم بعين الاعتبار. وتضمنت عينة الدراسة 100 مسافر تم اختيارهم بطريقة قصدية وغير عشوائية. وبخصوص عملية تحليل البيانات، تم استخدام برنامج SPSS 22. وبينما تشير النتائج إلى أن الراحة الثقافية ورضا العملاء تختلف باختلاف التعليم والجنسية، فهي لا تظهر اختلافات دالة على أساس الجنس والعمر. ومن ناحية أخرى، هناك تأثير كبير للراحة الثقافية للمسافرين على رضاهم.

الكلمات الدالة: ثقافة، هوفشتده، الاختلافات الثقافية، الراحة الثقافية، رضا الزبائن.

INTRODUCTION

In the last decade, a cultural study by Baker and Carson (2011) indicated that cultural diversity could noticeably reduce the hostility against ethnic minorities in different communities. Generally, being culturally diverse and aware can make people think well beyond their surroundings in a way that they break free from the chains of prejudice and stereotypes.

Many studies have examined culture as a crucial factor affecting customer satisfaction in various businesses which provide products and services to customers from different cultural backgrounds (Bleuel *et al.*, 2013; Hopkins *et al.*, 2009; Qu, 2018; Seo, 2012). The aviation industry is no exception (Al-Romaithi, 2014; Arif *et al.*, 2013; Stamolampros *et al.*, 2019). The aviation sector involves people from different countries worldwide and to successfully coordinate the functions and duties, they need to work in harmony. Having varied opinions due to different cultural backgrounds is one of the most significant challenges that company managers face at different levels. Therefore, they try to create a common culture that not only all employees should follow, but also fit with the customers' needs and expectations.

In today's competitive environment of the aviation industry, airport management, aspiring to obtain a high level of customer satisfaction, has realized that cultural differences between airport employees and passengers can substantially impact how those passengers evaluate and judge the quality of services provided to them at airports. The Airports Council International (ACI), which manages the trade association and represents airports worldwide, has recently published a research report entitled "*The Influence of Culture on Airport Passenger Experience*." According to the 2018 ACI report, between 35% and 45% of the overall customer satisfaction is decided by a person's cultural background. Furthermore, the ACI report highlighted that travelers' cultural backgrounds directly impact their expectations of the airport environment *via* the airport

management and third-party representatives (i.e., restaurants and retail shops in the duty-free zones, police, customs, … etc.). In other words, a high level of customer satisfaction in a multi-cultural environment, like an airport, results from understanding cultural differences between local employees and passengers from different regions.

It is a given fast that Queen Alia International Airport (QAIA) in Jordan faces multiple challenges in serving culturally diverse passengers and meeting their expectations of good-quality services. For instance, in conflict or problem-solving situations, like delays or cancelation of flights due to bad weather, employees have to manage multi-national passengers who already have some prior expectations on how airport employees should help them and provide them with the proper service. These prior expectations are based on their experiences from similar situations as well as from their understanding, beliefs and values acquired from their own culture. These cases become troublesome if employees solely rely on their personal views on managing them without considering individual and cultural differences. Hence, a better understanding of the relationship between culture and satisfaction can help the QAIA airport management effectively satisfy the different needs and expectations of passengers.

Objectives of the Study

This study aims to explore whether cultural differences between employees and passengers and cultural comfortability of customers impact the overall customer satisfaction at QAIA.

Since the impact of culture has rarely been studied in the Middle East region, this study partly fills the gap in understanding the relevance of culture in customer satisfaction of QAIA passengers. The most comprehensive and widely acknowledged assessments, like the Hofstede and GLOBE scores for

many Middle Eastern countries, including Jordan, are estimated and not measured in the field. Unfortunately, this makes understanding and making predictions about cultural differences very difficult, if not impossible.

Also, this study discusses the cultural comfortability of foreigners interacting with the Jordanian Arab culture. From a practical perspective, this study is of great importance, as it can significantly improve the customer-satisfaction level at QAIA by providing a clear picture of the variables affecting passengers' satisfaction levels. Therefore, the present research will attempt to answer the following questions:

- Does cultural comfortability vary based on demographic variables (gender, age, education and nationality)?
- Does customer satisfaction vary based on demographic variables (gender, age, education and nationality)?
- Does cultural comfortability affect customer satisfaction?

In the first part, an introduction to the study is given. It mainly includes the aim of the study, problem statement, limitations, research questions and hypotheses. The second part contains the conceptual and theoretical framework of the study. First, the definitions and explanations of key concepts are discussed. Then, a comprehensive examination of the influence of cultural differences and comfortability on customer satisfaction is traced in the related explored previous literature. Afterwards, the study methodology is explained and then, all relevant results of the study are presented. Finally, the conclusion and recommendations are provided in the last part of the study.

Theoretical Background and Literature Review

While the theoretical background introduces the concepts associated with the research questions to lay the foundation of the research, the literature review looks into various previous studies with similar dependent and independent variables.

The Concept of Culture

Mahatma Gandhi once said that no culture could survive if it tries to be exclusive. It is quite understandable that any community's survival depends on accepting change and interacting with various neighboring communities. Willingness and flexibility to change are among the main aspects of advancing a society.

Despite multiple efforts to adequately define the concept of culture, it is still challenging to find an unanimous definition due to its numerous interpretations and manifestations (Eelen, 2001; Scollon *et al.*, 2012). Scholars from different fields of cultural study provided the literature with various definitions. For example, the British anthropologist Tyler (Goodwin, 2000) defined culture as "the complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society." Similarly, other scholars stressed that "culture comprises patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiment in artifacts. Moreover, the essential core of culture consists of traditional (i.e., historically derived and selected) ideas, especially their attached values" (Kroeber and Kluckhohn, 1952). Hofstede (1992) defined culture as "the collective programming of the mind which distinguishes the members of one group or category of people from another. "As for other researchers, culture is defined as "a fuzzy set of elementary ideas and values, orientations to life, beliefs, policies, procedures and behavioral conventions that are shared by a group of people and that influence each member's behavior and his/her interpretations of the 'meaning' of other people's behavior" (Matsumoto, 1996).

All aforementioned definitions of culture imply that culture is a set of variables underlying human behavior. They also indicate that culture features certain aspects and characteristics that differentiate one culture from another. For this study, we will only

elucidate three key characteristics.

The first key characteristic is that culture manifests at three distinct levels: artifacts, values and assumptions (Schein, 1990). The artifacts' level includes all man-made objects, typically items of cultural or historical interest. Burkus (2014) pointed out that those observable artifacts inside an organization are objects, like furniture, dress norms and mantras. Although they are easily observed even by an outsider, sometimes they are difficult to understand, especially when someone tries to understand these cultural items superficially. The next level, the level of values, is considered a set of declared values and norms that affect how members interact and represent an organization (Burkus, 2014). It is worth mentioning that values are commonly reinforced in public declarations, like the aptly named list of core values and the common phrases and norms that individuals often repeat in their statements. The final level; i.e., the basic assumptions, is the deeply embedded beliefs and behaviors which can often go unnoticed. However, basic assumptions are the essence of culture and the plumb line that adopted values and artifacts by themselves. Basic assumptions manifest themselves in various ways. Sometimes, the basic assumptions are reflected in the adopted values and artifacts and sometimes, they are not. However, when basic assumptions do not align with values, trouble arises. If we try to understand why a certain group behaves the way it does, our understanding may depend just on our analysis of those visible and observed artifacts, leading to misinterpretation. It should be taken into consideration that artifacts and values align with the basic assumptions of the culture observed. In short, misinterpreting visible objects of a specific culture may lead to misjudge the entire culture, as those artifacts might not comply with ours. Therefore, it is essential to deeply understand other cultures to prevent misinterpretations.

The second key characteristic is that culture can affect behavior and its interpretations. We may refer to culture to explain a particular behavior. However, we do not understand why one culture considers that behavior appropriate, whereas another culture finds it inappropriate. The reason is that certain aspects of culture are visible, but their meaning is invisible to outsiders: "their cultural meaning lies precisely and only in the way these practices are interpreted by insiders" (Hofstede, 1992). In other words, any behavior, good or bad, can be understood differently based on our interpretation of that behavior. For instance, in the Arab culture, displaying the soles of the feet is not considered a good gesture. Such an action is perceived as an insult, as you can use the shoe to offend someone. The meaning of such an action is not visible to an outsider. If an outsider accidentally shows the soles of his/her feet, he/she can simply apologize. However, trouble arises when an outsider refuses to apologize for such an action that is assumed acceptable, where there is nothing wrong with doing so.

The third characteristic of culture, which is of great importance for the present study, is that culture is learned. Every culture is unique and can be learned too. When we live in a particular culture, we learn that culture by interacting with the people who live in it. Even inside the society in which we are born, we learn the culture as we grow up by observing and interacting with our parents and relatives. When we contact people of other cultures, we may be victims of the anxiety produced by our shift to another entirely different environment from where we were born. Some behaviors derived from our own culture may be acceptable or not. Whether these behaviors (such as crying, shaking hands or kissing each other) are acceptable or unacceptable stems from the explanations and interpretations obtained from our parents, relatives, teachers and the entire society in which we live. The explanations and interpretations provided by most of the society regarding what is acceptable or unacceptable behavior form the basis of culture.

Understanding culture acquired through learning could lead to greater tolerance for cultural differences

(Ferraro, 1998). The nature of culture also indicates that it is possible to learn about other cultures, since we have gained the knowledge of our own culture through learning. Finally, this leads to conclude that foreign workers can learn cultural skills when they participate in culturally relevant training programs.

Cultural Comfortability

As cultural comfortability is the independent variable of this study, it is necessary to define what cultural comfortability is. Unfortunately, only a few scholars have studied the concept of cultural comfortability till date. Cultural comfortability is defined as "the feeling of congruence and comfort of persons of different cultural backgrounds" (Panwar *et al.*, 2016). On the other hand, psychologists use the term "cultural comfort" within the concept of patient comfort in a psychotherapy session. When the psychologist is culturally different from the patient, cultural comfort refers to "those feelings that arise before, during and after culturally relevant conversations" (Watkins et al., 2019). Moreover, this study defines cultural comfortability as the degree of accepting a specific attitude based on cultural background and of being relaxed and comfortable.

Customer Satisfaction

Customer satisfaction is among the critical variables that make an organization stable and help it get through internal and external problems (Brusco *et al.*, 2019). Therefore, it has attracted massive attention among scholars, as over 900 articles and research studies on customer satisfaction were conducted between 1980 and 1990 (Perkins, 1991).

Several authors reported that customer satisfaction is an overall evaluation based on the total purchase and consumption experience of the goods or services over time (Fornell *et al.*, 1996). Customer satisfaction, a term frequently used in marketing, includes the feelings associated with the purchasing process and the atmosphere before and after the execution of purchases and delivery of services (Biesok and Wyród-Wróbel, 2011). As a result, achieving ""customer satisfaction" is more than just the simple application of reasonable logic. Moreover, it is difficult to satisfy customers' needs, as multiple companies are competing in the market for the same targeted customers.

It is worth mentioning that studying customers' behavior is essential for obtaining a high level of customer satisfaction. Customer behavior stems from decisions, like whether, what, when, where and how to purchase goods and services. Marketing aims to understand and direct these decisions. Therefore, research on customers' needs and satisfaction is of great significance.

Since customer satisfaction depends on the quality of interactions that take place between an employee and a customer during the service encounter, it is possible to improve the level of customer satisfaction in multiple ways. As highlighted by Harps (2000), companies are forced to change their management habits and send employees to several global destinations to learn about other cultures and work with people coming from different international backgrounds. This is because a clearer understanding of how cultural differences impact customer satisfaction might strongly support management.

Most of the business cycles depend on customers. Moreover, customers have the main positive or negative effect on the survival of the business, as they can influence the profit, status, image, … etc. Hence, all organizations need to meet the customers' expectations and identify their satisfaction level of their products or services (Ranaweera and Prabhu, 2003). As a result, researchers have created several types of measurement tools for customer satisfaction, which are summarized in the following parts.

Net Promoter Score (NPS) is used to calculate the customers' loyalty and overall sentiment rather than indicating one specific experience. NPS is applied in

several industries to precisely identify the detractors willing to switch to a different supplier. NPS surveys are usually sent by e-mail or text message (Temple *et al.*, 2020). Additionally, the NPS divided the respondents into three groups: Detractors were those whose results were between 0–6, passives were those whose results were between 7 and 8, while promoters were those whose results were between 9 and 10.

The customer satisfaction survey (CSAT) is used to measure satisfaction with one specific product or service. CSAT contains various product-related or service-related questions, like: "How would you rate product A?". Only customers answering "satisfied" "or "very satisfied"" were considered satisfied customers (Rotella and Chulani, 2012). The CSAT survey provides a chance for organizations to improve their product and service quality if the product is graded between 1 and 3. On the other hand, a score of 4 or 5 refers to a strong product or service (Piola and Romero, 2004).

Empirical Studies on Culture and Customer Satisfaction

Several authors tried to test the effect of culture on customer satisfaction in various contexts. One of the studies was conducted in a Greek insurance organization in two different ways. The first was to indicate the culture's relation to service quality, while the second one was to indicate the relationship between service-quality dimensions and customer satisfaction. The researchers used the descriptive-analytical analysis to find the results. The hypothesis of the research was based on the 6-D module of Hofstede. The sample size was n = 252 and the individuals were interviewed directly. The study showed a relationship between culture and service quality (Tsoukatos and Rand, 2007).

In a recent study in Australia (Huang and Crotts, 2019), the researchers conducted a survey with a sample of 39,959 respondents. The main aim of this study was to indicate the relationship between culture and tourist satisfaction using the 6-D module of Hofstede, as well as to compare the study results with those of a similar previous study from Hong Kong. The researchers focused on the tourists visiting Australia. It was conducted at the airport. First, the researchers used the incoming cards of the passengers to shortlist those who came for a vacation. Thus, they shortlisted 14,892 international holidaymaking tourists, while the second step shortlisted 7,544 international holidaymaking tourists from 28 countries. The results showed that there is a direct effect of the passengers' cultural backgrounds on their satisfaction levels.

Another study (Sunny *et al.*, 2019) aimed to discover the impact of cultural values on accepting technology. The sample included hotel employees currently working on the west coast of the United States. The survey was distributed to 421 workers to measure the effect of collectivism, long-term orientation (LTO) and masculinity on discomfort, perceived usefulness and perceived ease of use. The main result of this study was that collectivism and long-term orientation were positively related to perceived usefulness and ease of use. LTO and masculinity were negatively and positively related to discomfort, respectively.

In a different study, the researchers (Schoefer *et al.*, 2019) aimed to understand the reactions of dissatisfied customers to their cultural background. In this research, the descriptive-analytical method was used to collect data from 486 respondents in 34 different countries worldwide. In particular, data collected was 54% from Asia, 32% from Europe, 10% from North America and 4% from South America and Africa. The collected data was subjected to an SPSS-based analysis. The results showed an indirect effect of culture on behavioral responses in the case of service failure. These findings revealed significant implications for service managers. For instance, managers must acknowledge the various cultural dimensions that differentiate between responses

regarding the dissatisfaction with service. The cultural value orientation of customers (moderating), which influences their response to customer dissatisfaction, should not be ignored.

Recently, Lee *et al.* (2019) investigated the relationship between service quality and customer satisfaction. The sample of the study involved 7,652 industrial customers from 55 countries. The methodology used was structural equation modeling (SEM) for hypothesis testing. The NPS was used to measure loyalty based on cultural differences in the business-to-business (B2B) services. The study results showed a positive relationship between service quality, customer satisfaction and loyalty. However, there was a negative relationship between service quality and customer satisfaction. It is worth mentioning that individualism can positively affect the relationship between service quality and customer satisfaction. However, the effect was not significant between cultural differences and both service quality and loyalty.

Other researchers (Kokareva, 2018) aimed at finding (1) whether customers from different cultural groups evaluate the service differently, (2) how they feel about the customer service being provided and (3) identifying those differences. This study was conducted at shops, such as duty-free and sale shops operating at the Helsinki Airport, Finland. A survey was distributed to 159 passengers and the respondents were divided into five groups: Finnish, Russian, American, British and Japanese. Personal observations were also considered in this study. The results showed heterogeneous customer behaviors, showing differences between Finnish, Russian, British, American and Japanese passengers in how they evaluate the customer service.

Sabri (2010) examined Jordanian managers' leadership styles based on their cultural values. According to the results, male, young and low-educated managers tend to be more task-oriented leaders. Considering the severe competition, managers should enhance their understanding of cultural differences.

Awwad (2014) measured the direct effect of social comfort on customer satisfaction. The customer's feeling of anxiety or relaxation arising from the social interaction with an individual service employee, regardless of his/her cultural background, has an impact on customer satisfaction. Besides, the effect of social comfort was significant for older customers.

Methodology
Study Population and Sample
The population of this study covers all passengers at QAIA in Jordan. The study sample includes purposely selected 100 passengers. The participants were selected based on the following criteria: (i) being from different airline carriers, (ii) coming from various destinations, (iii) being from multiple nationalities and (iv) being tourists or residents in Jordan in the past month.

Survey Design and Measures
Figure 1 depicts the research model, including the dependent variable (culture), the independent variable (satisfaction), demographics and hypotheses. Primary data was attained by providing a unique questionnaire for this study. In addition, all aspects related to the theoretical framework and research questions were attempted to be covered.

There are two main variables in the present study, which are (i) customer satisfaction and (ii) cultural comfortability. The survey questions were obtained from previous studies (Dorris, 2013; Kokareva, 2018) and modified to meet the requirements of the present study. The first four questions aim to discover demographical information about the passengers. Questions from 5 to 15 measure customer satisfaction, while the last two questions (16-17) deal with cultural comfortability.
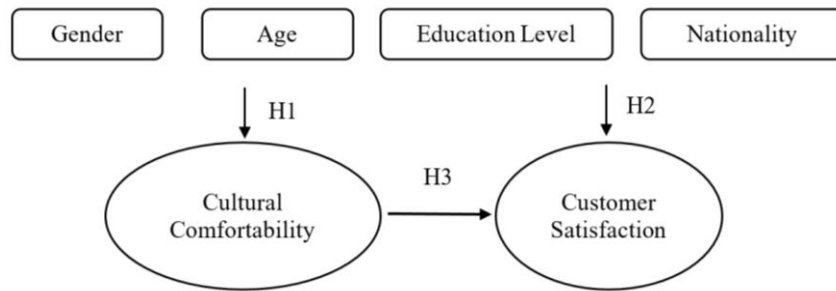
Figure (1)
Research model

The distribution of answers for the questionnaire was done according to the Likert scale, which shows the respondent's level of agreement with the questionnaire statements: (1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree.

The survey was undertaken between September and December 2019. The questionnaire forms were completed during face-to-face interviews with the participants. Each questionnaire form took approximately 10 minutes to complete. Participation in the survey was completely voluntary. Before conducting the study, the participants were informed about the purpose of the study and how the questionnaire forms would be filled.

Data Analysis

For the process of data analysis, SPSS 22.0 software was used and analyses were conducted at a 95% confidence level. In addition, the following non-parametric tests were carried out:

1. Cronbach-alpha test: It verified the degree of internal reliability and the level of stability of the paragraphs of the resolution.
2. The results of the Shapiro-Wilk normality test performed for both scales and sub-dimensions concluded that a normalized distribution could not be obtained. Accordingly, the differences in means were examined with the Mann-Whitney test. Moreover, the Kruskal–Wallis test was used for the categorical variables with

over two categories.
3. Arithmetic means of responses for each question and the whole variable in total were calculated.
4. The relationship between cultural comfortability and customer satisfaction was examined through regression analysis to reveal whether the dependent variable (satisfaction) is affected by the independent variable (culture).

Factor Analysis

While Cronbach's alpha reliability coefficients were calculated to determine the reliability, exploratory factor analysis (EFA) was performed to assess the validity of the scales being used. First, KMO and Bartlett tests were applied to determine the suitability of the scale for the EFA. It is necessary to obtain a value of ≥ 0.50 in KMO and Bartlett's sphericity test result should be statistically significant. In the present study, the KMO values for the scale were found to be > 0.7 and the Barlett test was significant.

In the factor analysis, factor loading should be the basis for matching the item to a factor or to remove it from the scale content. Factor loading is a coefficient that predicts the relationship between items and factors and is expected to be high. If the factor loading is < 0.30 or the difference between the loadings to two different factors is < 0.10, the item should be removed before continuing the analysis. Since we are expecting correlation between the

factors, we used either direct oblimin or promax. If the number of observations is high, it is suggested to use promax; otherwise, direct oblimin should be used.

The distribution of the items of cultural-comfortability and customer-satisfaction scales to the factors and the factor loadings were determined. Accordingly, item 12 in the customer-satisfaction motivation scale was removed from the study. The rest of the propositions are loaded with three different factors; i.e., satisfaction 1, satisfaction 2 and satisfaction 3, respectively.

Table 1
Exploratory factor analysis (EFA)

Scale	Factor	Proposition	Factor Loading	Cronbach's Alfa
Customer Satisfaction	Factor 1	Q8	0.422	0.741
		Q11	0.739	
		Q13	0.827	
		Q14	0.780	
		Q17	0.762	
	Factor 2	Q6	0.562	
		Q7	0.675	
		Q10	0.696	
	Factor 3	Q5	0.699	
		Q9	0.762	

The reliability of the questionnaire was tested by the Cronbach-alpha coefficient. According to several studies (Ursachi *et al.*, 2015), if the Cronbach-alpha coefficient is 60%-70%, the research data is reliable to be analyzed and interpreted. The closer the Cronbach-alpha coefficient value is to 1, the more accurate it is and *vice versa*.

Results confirmed that the safety coefficient of customer satisfaction is above 70%. However, the reliability of the cultural comfortability scale is tested by the Spearman's correlation, as it includes only two items. The results revealed the existence of inner uniformity among the passages of both groups of questions in the study.

Results and Discussion

This part contains three sub-sections. The first sub-section discusses the demographic characteristics of the study sample.

The second one introduces the descriptive statistics of the dependent and independent variables in detail. Last, sub-section three reports the statistical results and findings and discusses the three hypotheses accordingly.

Characteristics of the Study Sample

Before discussing the findings of the study, the demographic characteristics of the sample should be introduced. As presented in Table 2, almost 60% of the respondents were male passengers and most of them were bachelor-or PhD-degree holders. While 73% of the respondents were 25–55 years old, the ones in the 46-55 years range comprised 35% of the total sample. From a nationality perspective, the proportion of Arab, Asian and European passengers was 25%, 26% and 20%, respectively.

Table 2
Description of the study sample according to the demographic features

	Level / Category	Number	Percentage %
Gender	Male	59	59.0%
	Female	41	41.0%
	Total	**100**	**100%**
Age	Less than 25 years	14	14.0%
	25–35 years	26	26.0%
	36–45 years	12	12.0%
	46–55 years	35	35.0%
	56 years or more	13	13.0%
	Total	**100**	**100%**
Education	Diploma and/or less	4	4.0%
	Bachelor's degree	43	43.0%
	Master's degree	14	14.0%
	PhD degree	39	39.0%
	Total	**100**	**100%”**
Nationality	Jordanians	29	29.0%
	Arab Neighbors	25	25.0%
	Asian	26	26.0%
	European	20	20.0%
	Total	**100**	**100%”**

Descriptive Analysis of Statements

According to the results of factor analysis, it was determined that the questions measuring customer satisfaction load were attributed to three main factors:

- Factor one; including questions 5 and 9, is labeled as the "emotional touch", implemented while they were questioning the feelings of passengers during the service.
- Factor two; including questions 6, 7 and 10, is categorized as the "professional touch," as they were dealing with the professional quality of the service.
- Factor three; including questions 8, 11, 13, 16 and 17, is labeled as the "satisfaction in general" because of assessing the general satisfaction of the passengers.

Table 3 introduces the descriptive statistics of the dependent and independent variables in detail.

Table 3

Descriptive analysis of statements

	N	Minimum	Maximum	Mean	Std. Deviation
Cultural Comfortability	100	3.00	5.00	4.3850	0.44865
Emotional Touch	100	2.50	5.00	4.4400	0.46210
Professional Touch	100	3.00	5.00	4.4733	0.41891
Satisfaction in General	100	1.00	5.00	4.3980	0.52068
Customer Satisfaction	100	3.53	5.00	4.4371	0.33668

Hypothesis Tests

The hypothesis test is commonly used to evaluate the plausibility of a hypothesis using simple data. In this part of the study, the results of the first hypothesis (H1), second hypothesis (H2) and third hypothesis (H3) for the given data are discussed in detail.

Hypotheses 1 and 2

The first two hypotheses of the study argue that there were significant differences in custome-satisfaction and cultural-comfortability levels of customer groups based on demographic variables (gender, age, education and nationality). This part of the study gradually tests each sub-hypothesis.

Table 4

Customer satisfaction and cultural comfortability by gender

	Cultural Comfortability	Emotional Touch	Professional Touch	Satisfaction in General	Customer Satisfaction
Kruskal-Wallis H	0.121	0.014	1.029	1.668	1.579
df	1	1	1	1	1
Asymp. Sig.	0.728	0.905	0.310	0.197	0.209

Table 4 shows that all the significance levels were > 0.05. Therefore, the null hypothesis was accepted. There were no significant differences at the significance level ($\alpha \leq 0.05$) in the customer satisfaction and cultural comfortability which could be attributed to gender.

Table 5

Customer satisfaction and cultural comfortability by age

	Cultural Comfortability	Emotional Touch	Professional Touch	Satisfaction in General	Customer Satisfaction
Kruskal-Wallis H	6.422	.862	8.848	6.173	4.757
df	4	4	4	4	4
Asymp. Sig.	0.170	0.930	0.065	0.187	0.313

Table 5 shows that all the significance levels were > 0.05.

Therefore, the null hypothesis was accepted. There

were no significant differences at the significance level (α ≤ 0.05) in customer satisfaction and cultural comfortability

due to age.

Table 6

Customer satisfaction and cultural comfortability by level of education

	Cultural Comfortability	Emotional Touch	Professional Touch	Satisfaction in General	Customer Satisfaction
Kruskal-Wallis H	18.439	22.618	14.552	18.754	25.035
df	3	3	3	3	3
Asymp. Sig.	0.000	0.000	0.002	0.000	0.000

Table 6 shows that all the significance levels were < 0.05. Therefore, the null hypothesis was rejected and there were significant differences at the significance level (α ≤ 0.05) in cultural comfortability and satisfaction levels of passengers with different educational backgrounds according to level of education.

Specifically, the satisfaction level decreases with increasing the education level. According to the detailed non-parametric tests, the satisfaction levels of PhD holders significantly differed from those of bachelor-degree holders and high-school graduates, while master-degree holders' satisfaction levels also differed significantly from those of high-school graduates.

However, in terms of cultural comfortability, bachelor's degree holders significantly differed from both the master-and PhD-degree holders. Passengers with a bachelor degree seem to be higher in cultural comfortability.

Table 7

Customer satisfaction and cultural comfortability by nationality

	Cultural Comfortability	Emotional Touch	Professional Touch	Satisfaction in General	Customer Satisfaction
Kruskal-Wallis H	9.154	9.496	11.862	7.858	12.953
df	3	3	3	3	3
Asymp. Sig.	0.027	0.023	0.008	0.049	0.005

Table 7 shows that all the significance levels were < 0.05. Therefore, the null hypothesis was rejected and there were significant differences at the significance level (α ≤ 0.05) in cultural-comfortability and customer-satisfaction levels of passengers originating from different cultural backgrounds due to nationality.

According to the detailed non-parametric tests, the satisfaction level of European passengers significantly differed from that of Jordanians. While Jordanian people were the most satisfied ones with the airport services, European customers were the least satisfied ones. Asian and other Arab cultures were somewhere in the middle of the scale.

Furthermore, in terms of cultural comfortability, Jordanian passengers were significantly different even from the passengers coming from Arab-neighborhood countries.

To summarize the previous results, we can

conclude that:

- Customer satisfaction does not differ due to demographic variables like gender and age.
- Higher education, specifically PhD, creates significant differences in customer satisfaction.
- Cultural-differences cause differences in customer satisfaction.
- Cultural-comfortability level does not differ with demographic variables like gender and age.
- Education and cultural differences create significant differences in cultural comfortability.

Hypothesis 3

The third hypothesis studied the relationship between cultural comfortability and customer satisfaction. It argued that the higher the cultural comfortability of passengers, the higher the customer satisfaction. Before regression analysis, the correlations between customer satisfaction, including its sub-dimensions and cultural comfortability were investigated. Since variables were not normally distributed, non-parametric tests were utilized.

Table 8 indicates that cultural comfortability was highly correlated with all types of satisfaction.

Table 8
Correlation table

			1	2	3	4	5
Spearman's rho	Cultural Comfortability	Correlation Coefficient	1.000	0.430**	0.412**	0.510**	0.552**
		Sig. (2-tailed)	.	0.000	0.000	0.000	0.000
		N	100	100	100	100	100
	Emotional Touch	Correlation Coefficient	0.430**	1.000	0.320**	0.514**	0.759**
		Sig. (2-tailed)	0.000	.	0.001	0.000	0.000
		N	100	100	100	100	100
	Professional Touch	Correlation Coefficient	0.412**	0.320**	1.000	0.449**	0.688**
		Sig. (2-tailed)	0.000	0.001	.	0.000	0.000
		N	100	100	100	100	100
	Satisfaction in General	Correlation Coefficient	0.510**	0.514**	0.449**	1.000	0.843**
		Sig. (2-tailed)	0.000	0.000	0.000	.	0.000
		N	100	100	100	100	100
	Customer Satisfaction	Correlation Coefficient	0.552**	0.759**	0.688**	0.843**	1.000
		Sig. (2-tailed)	0.000	0.000	0.000	0.000	.
		N	100	100	100	100	100
**. Correlation is significant at the 0.01 level (2-tailed).							

Moreover, Table 9 implies that (R^2) is 0.35, which indicates that the model can justify 35% of the total variance, whereas the rest was due to other factors. Besides, the value of F is 52.704 and the significance degree was (0.00), thus <0.05. Therefore, the null hypothesis was rejected, meaning that cultural comfortability impacts customer satisfaction at a statistically significant level.

Table 9

Results of the regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.591[a]	0.350	0.343	0.27288
a. Predictors: (Constant), aware				
b. Dependent Variable: sat_total				

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.925	1	3.925	52.704	0.000[b]
	Residual	7.297	98	0.074		
	Total	11.222	99			
a. Dependent Variable: sat_total						
b. Predictors: (Constant), aware						

Conclusions and Discussion

Conclusions

This study aimed to investigate whether the cultural comfortability and demographic backgrounds of airline passengers affected their satisfaction with the services provided by the airline staff and third-party staff at QAIA. Table 10 summarizes the results of the hypothesis tests conducted in this study, showing whether the hypothesis was accepted (significant) or rejected (not significant).

Table 10

Results of the Hypothesis Tests

Hypothesis		Accepted	Rejected
Hypothesis (1): *(Customer satisfaction)*	H1-(a): *gender*		✓
	H1-(b): *age*		✓
	H1-(c): *education*	✓	
	H1-(d): *nationality*	✓	
Hypothesis (2): *(Cultural comfortability)*	H2-(a): *gender*		✓
	H2-(b): *age*		✓
	H2-(c): *education*	✓	
	H2-(d): *nationality*	✓	
Hypothesis (3):	H3: *customer satisfaction vs. cultural comfortability*	✓	

Based on the results presented in the previous part, conclusions can be drawn and findings can be

summarized as follows:

1. Descriptive analytical results showed a high level of cultural comfortability for travelers at QAIA, where the arithmetic mean for the variable as a whole was 4.41.

2. Descriptive-analytical results showed a high level of customer satisfaction for travelers at QAIA, where the arithmetic mean for the variable as a whole was 4.43.

3. There were no significant differences at the level ($\alpha \leq 0.05$) in (i) customer satisfaction by gender and (ii) customer satisfaction by age.

4. Customer satisfaction differs between bachelor -and PhD- degree holders.

5. There were significant differences between the European and Jordanian passengers regarding customer satisfaction.

6. There were no significant differences at the level ($\alpha \leq 0.05$) in (i) cultural comfortability by gender and (ii) cultural comfortability by age.

7. There were significant differences between high-school graduates and PhD holders regarding their cultural comfortability. It is also evident that there were significant differences between bachelor -and PhD- degree holders regarding their cultural comfortability.

8. There were significant differences at the level ($\alpha \leq 0.05$) between cultural-comfortability levels of European and Jordanian passengers.

9. There was a significant impact of cultural comfortability of passengers on customer satisfaction.

Discussion

The study results imply high cultural-comfortability and customer-satisfaction levels at QAIA. Furthermore, there is no statistically significant differences between male and female passengers' comfortability and satisfaction levels. Besides, comfortability and satisfaction were also not influenced by age. Hence, companies do not need divergent strategies for passengers of different genders and age groups.

However, the education level of a passenger affects both cultural comfortability and customer satisfaction. Decision-making authorities should carefully investigate the distribution of customers in terms of educational background. As it is out of their control area to change the distribution, they might develop alternative strategies for different groups of passengers.

Even though the differences between the European and Jordanian passengers' cultural comfortability and customer satisfaction are understandable, they should be minimized to attain sustainable growth. Airports and many other businesses have to attract and satisfy people from different cultural backgrounds. Although cultural comfortability might be out of control, if customer service is adjusted to divergent needs and expectations, this would create a robust competitive advantage.

The results of the present study are reasonable, as they are similar to those of most of the previous studies that have discussed culture within the concept of business and confirmed that an effect of cultural differences exists and could appear in many business sectors. Tsoukatos and Rand (2007) reported that cultural backgrounds and service quality were statistically correlated. However, there was a divergence between their results and Hofstede's. However, our main findings match with the results obtained by Tsoukatos and Rand regarding the effect of culture on the performance of a business, as both studies directly deal with customers.

In addition, Huang and Crotts (2009) discovered results similar to our findings. Their study showed a direct relationship between cultural background and satisfaction level. It is worth mentioning that they directly used the Hofstede 6-D model, which was not used in this study, because it contains estimated numbers for Jordan and most of the Middle Eastern countries.

The current study also showed similar results to another study (Sunny *et al*., 2019), by arguing that a direct relationship exists between some of the cultural

dimensions and the way of accepting technology. The sample investigated in the study of Sunny *et al*. (2019) consisted of hotel employees. The findings showed that cultural differences affect work efficiency in most of the business sectors. Moreover, cultural differences could influence the comfortability of customers and ease accepting goods or services.

As Kokareva (2018) mentioned, important differences could appear when customers from different cultural backgrounds evaluate the service level and satisfaction. The present study has also shown a significant relationship between cultural comfortability and customer satisfaction, as these were affected by how other cultures evaluate the present culture's (Jordanian Arab culture in this case) services, actions and reactions.

Another study (Easterbrook *et al.*, 2016) indicated that a higher educational level creates higher positive expectations with a better understanding and analysis of events. From the researchers' point of view, an individual, upon interacting with a different cultural background, could feel the safety and ease based on his/her understanding of cultural differences. Thus, education directly affects cultural comfortability; i.e., the more educated the person is, the more comfortable he/she is in dealing with different cultures.

Since the impact of 'culture' has rarely been studied in the Middle East region, this study partly fills the gap in understanding the relevance of culture in customer satisfaction of QAIA passengers, as it discusses the cultural comfortability of foreigners interacting with Jordanian Arab culture. Therefore, from a practical perspective, this study is of great importance, as it can significantly improve the customer-satisfaction level at QAIA, by providing a clear picture of the variables affecting passengers' satisfaction levels. In the long run, this study can positively impact the

QAIA by empowering it to enter new markets worldwide with a better understanding of cultural-comfortability levels of different passenger groups.

Limitations of the Study

The present study has several limitations. First, the number of cultures represented by passengers is limited. Therefore, some key findings cannot be generalized to other cultural regions not included in the study. Second, the present study confined itself by not considering how local employees perceive the effect of their culture on the quality of services. Thus, some key findings may not help QAIA employees in their attempts to adapt their service performance to the needs of customers during face-to-face interactions, because it is hard to determine what aspects of the culture should be considered when interacting with customers. Moreover, most of the previous cultural studies were conducted among the European nations, so it was difficult to find comparable examples in the Jordanian Arab culture.

Future Recommendations

The limitations of the present study will drive the researchers to recommend several subjects to be researched in the future. First, the dimensions of Hofstede and GLOBE need to be calculated in Jordan and the Arab neighboring countries to build future research upon them. Second, larger samples will give more exact results. Finally, a greater focus on the idea of cultural comfortability while comparing nations interacting with each other can provide us with a shortcut for cross-cultural studies in business.

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