SERVICE QUALITY PERCEPTION AND BEHAVIOURAL PURCHASE INTENTION IN HOTELS: A MEASUREMENT INVARIENCE OF COMPOSITE (MICOM) APPROACH

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Objective: The objective of this study is to investigate service quality perception and behavioural purchase intention in hotels by utilizing a Measurement Invariance of Composite (MICOM) approach with the aim of understanding the differences in the service quality perception among male and female guests in hotels.

Theoretical Framework: In this topic, the main concepts and theories that underpin the research are presented. The service quality theory and the theory of planned behaviour stand out, providing a solid basis for understanding the context of the investigation.

Method: The methodology adopted for this research comprises the explanation design, including a quantitative approach. A total of 751 questionnaires were completed by visitors to Ghanaian hotels.

Results and Discussion: The results obtained revealed that although male and female hotel visitors perceive service quality differently, there are no appreciable variations between the impact of service quality perception on behavioural purchase intent. In the discussion section, these results are contextualized in light of the theoretical framework, highlighting the implications and relationships identified. Possible discrepancies and limitations of the study are also considered in this section.

Research Implications: The practical and theoretical implications of this research are discussed, providing insights into how the results can be applied or influence practices in the field of marketing. These implications could encompass perceived service quality and behavioural purchase intent among hotel guests.

Originality/Value: This study contributes to the literature by contrasting the perceived service quality and behavioural purchase intentions of male and female customers among hotels utilizing the MICOM procedure. For municipal governments and service providers looking to increase behavioural purchase intention among male and female guests, this paper offers a variety of practical implications. The relevance and value of this research are evidenced by the fact that The assessment of perceived service quality may not be measurement-invariant. Therefore, when comparing the findings of a heterogeneous group, researchers should use caution.

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ABSTRACT

Keywords: Service Quality Perception; Behavioural Purchase Intention; Partial Least Square Structural Equation Modelling (PLS-SEM); Multigroup Analysis.

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PERCEPÇÃO DA QUALIDADE DO SERVIÇO E INTENÇÃO DE COMPRA COMPORTAMENTAL EM HOTÉIS: UMA ABORDAGEM DE INvariância de medida composta (MICOM)

RESUMO
Objetivo: O objetivo deste estudo é investigar a percepção da qualidade do serviço e a intenção de compra comportamental em hotéis, utilizando a abordagem Measurement Invariance of Composite (MICOM), com o intuito de compreender as diferenças na percepção da qualidade do serviço entre hóspedes do sexo masculino e feminino em hotéis.

Estrutura Teórica: Neste tópico, são apresentados os principais conceitos e teorias que sustentam a pesquisa. Destacam-se a teoria da qualidade do serviço e a teoria do comportamento planejado, que fornecem uma base sólida para o compreensão do contexto da investigação.

Método: A metodologia adotada para esta pesquisa compreende o projeto de explicação, incluindo uma abordagem quantitativa. Um total de 751 questionários foi preenchido por visitantes de hotéis de Gana.

Resultados e Discussão: Os resultados obtidos revelaram que, embora os visitantes masculinos e femininos de hotéis percebam a qualidade do serviço de forma diferente, não há variações significativas entre o impacto da percepção da qualidade do serviço sobre a intenção de compra comportamental. Na seção de discussão, esses resultados são contextualizados à luz da estrutura teórica, destacando as implicações e os relacionamentos identificados. As possíveis discrepâncias e limitações do estudo também são consideradas nessa seção.

Implicações da Pesquisa: As implicações práticas e teóricas desta pesquisa são discutidas, fornecendo insights sobre como os resultados podem ser aplicados ou influenciar as práticas no campo do marketing. Essas implicações podem abranger a qualidade do serviço percebido e a intenção de compra comportamental entre os hóspedes do hotel.

Originalidade/Valor: Este estudo contribui para a literatura ao contrastar a qualidade de serviço percebida e as intenções de compra comportamentais de clientes do sexo masculino e feminino em hotéis que utilizam o procedimento MICOM. Para governos municipais e prestadores de serviços que buscam aumentar a intenção de compra comportamental entre hóspedes do sexo masculino e feminino, este estudo oferece uma variedade de implicações práticas. A relevância e o valor desta pesquisa são evidenciados pelo fato de que a avaliação da qualidade do serviço percebida pode não ser variável em relação à medida. Portanto, ao comparar os resultados de um grupo heterogêneo, os pesquisadores devem ter cautela.


PERCEPÇÃO DE LA CALIDAD DEL SERVICIO E INTENCIÓN DE COMPRA COMPORTAMENTAL EN HOTELES: UNA ABORDAGEM DE INVARIANCIA DE MEDIDA COMPOSTA (MICOM) APPROACH

RESUMEN
Objetivo: El objetivo de este estudio es investigar la percepción de la calidad del servicio y la intención de compra conductual en hoteles utilizando un enfoque de Invarianza de la Medida Compuesta (MICOM) con el fin de comprender las diferencias en la percepción de la calidad del servicio entre clientes masculinos y femeninos en hoteles.

Marco Teórico: En este tema se presentan los principales conceptos y teorías que sustentan la investigación. Destacan la teoría del servicio y la teoría del comportamiento planificado, que proporcionan una base sólida para comprender el contexto de la investigación.

Metodología: La metodología adoptada para esta investigación comprende el diseño explicativo, incluyendo un enfoque cuantitativo. Los visitantes de los hoteles ghaneses cumplimentaron un total de 751 cuestionarios.

Resultados y Discusión: Los resultados obtenidos revelaron que, aunque los visitantes masculinos y femeninos de hoteles perciben la calidad del servicio de forma diferente, no existen variaciones apreciables entre el impacto de la percepción de la calidad del servicio sobre la intención de compra conductual. En la sección de discusión, estos resultados se contextualizan a la luz del marco teórico, destacando las implicaciones y relaciones identificadas. También se consideran en esta sección las posibles discrepancias y limitaciones del estudio.

Implicaciones de la Investigación: Se discuten las implicaciones prácticas y teóricas de esta investigación, proporcionando ideas sobre cómo pueden aplicarse los resultados o influir en las prácticas en el campo del marketing. Estas implicaciones podrían abarcar la calidad de servicio percibida y la intención de compra comportamental entre los clientes de los hoteles.

Originalidad/Valor: Este estudio contribuye a la literatura al contrastar la calidad de servicio percibida y las intenciones de compra conductuales de clientes masculinos y femeninos entre hoteles que utilizan el procedimiento MICOM. Para los gobiernos municipales y los proveedores de servicios que buscan aumentar la intención de compra comportamental entre los clientes masculinos y femeninos, este trabajo ofrece una variedad de
implicaciones prácticas. La relevancia y el valor de esta investigación se ponen de manifiesto en el hecho de que la evaluación de la calidad percibida del servicio puede no ser invariable en función de la medida. Por lo tanto, al comparar los resultados de un grupo heterogéneo, los investigadores deben actuar con cautela.

**Palabras clave:** Percepción de la Calidad del Servicio, Intención de Compra, Modelización de Ecuaciones Estructurales por Mínimos Cuadrados Parciales (PLS-SEM), Análisis Multigrupo.

## 1 INTRODUCTION

The services sector has evolved into the driving force of the total national and international economies since it generates 67.9% of worldwide gross domestic product (GDP) and employs more than 70% of the labour force globally (Deloitte, 2018; Magoti & Mtui, 2020).

Owing to Ghana's status as a popular travel destination, the hospitality sector provides the opportunity to leverage service excellence towards incorporating pleasant surprises into customer experiences (Anabila et al., 2021). Service quality is important to businesses since it contributes to competitive edge, generate revenue, market share growth, return on investment, satisfy customers and generates a favourable behavioural purchase intention (Nihayah et al., 2021).

Saleh et al. (2021) proposed that the idea of service quality is a discrepancy between consumers’ expectation of the service provider in addition to their evaluation of the services. Moreover, Behavioural purchase intention is a restricted thought for buying goods and services in future (Hosseini, & Norouzi, 2017). Researchers need a comprehensive understanding of service quality dimension to assess the consequence of service quality on behavioural purchase intention. The 22-item service quality scale, which has five dimensions is the foundation for the most of earlier study in the topic (Parasuraman et al., 1988).

The idea of service quality perception as well as its subsequent impact on travelers' behavioural purchase intentions among hotels have been the subject of numerous research (Prabowo et al., 2020; Ikhsan & Simarmata, 2021). While these study results help us understand service quality better, many times, researchers do not sufficiently assess the reliability of the service quality perception scale since they do not consider the population's diversity. It is important to emphasize that given the dissimilarities in the behavioural and psychological traits of male and female guests, some variance between male and female guests should be anticipated (Kim et al., 2017).

Male and female perceptions of service quality cannot be easily compared if measurement invariance of the population's heterogeneous characteristics is not established because prior findings, similarities and differences may reflect the study subjects' varied...
understanding as well as interpretation of the scale's items instead of a strong confirmation based support (Schlagel & Sarstedt, 2016).

Although it has long been understood that measurement invariance must be established before conducting inter group comparisons, very few studies have examined the measurement invariance of the service quality perception scale within the setting of hotels. These investigations mostly concentrated on cross-sectors and cross-cultural invariance (Mokhlis, 2012; Kwok et al., 2016; Sarande et al., 2022).

The studies listed above also used covariance-based structural equation modeling (CB-SEM), which utilizes shared factor model technique to estimate construct measures and conduct additional parametric tests in SPSS. However, recently, academics have begun to doubt the reflexive application of common component models, highlighting the fact that the compound modeling as expressed in partial least squares SEM proposes a further universal and accurate perspective to measurements (Sarstedt et al., 2016). As a consequence, PLS-SEM has become increasingly well-known in study on international business, strategic management, and marketing (Richter et al., 2016; Hair et al., 2022).

Therefore, it is both necessary and warranted to examine the measurement invariance of the service quality perception construct using a composite-based PLS-SEM (Schlagel & Sarstedt, 2016). It is important to investigate whether there is measurement invariance for the scale of service quality between male and female guests of hotels in Ghana. We scrutinize the consequence of service quality perception on the respondent's behavioural purchase intent among hotels in Ghana using Henseler et al. (2016) proposed measurement invariance of composite model (MICOM) technique. By providing an example of the MICOM procedure's application between male and female visitors in an attempt to show measurement invariance, we add to the body of PLS-SEM literature. As a result, the current study's objective is to ascertain how gender influences both perceptions of service quality as well as behavioural purchase intention.

2 THEORETICAL FRAMEWORK

2.1 SERVICE QUALITY: CONCEPT AND DIMENSION

Cronin and Taylor (1992) proposed the service performance (SERVPERF) model. The SERVPEF theorists proposed a performance-based metric and demonstrated it using the
disconfirmation model (Carman, 1990; Cronin & Taylor, 1992). Cronin and Taylor introduced the advanced model, arguing that the sole criteria that should be examined for service quality is performance. Cronin and Taylor argued that service quality is a consumer's perception of the service, and that the performance (perceived service) of the service should be the only way to measure it. They also claimed that service quality is a prelude to consumer behaviour, a claim previously made by Howard and Jagdish (1969) in their consumer behaviour theory.

The SERVPERF model was created to address the SERVQUAL model's operationalization and dimensionality limitations (Carman, 1990; Cronin & Taylor, 1992). Cronin and Taylor (1992) updated their approach to measure perceived service using the same SERVQUAL categories as before: reliability, responsiveness, assurance, tangibles, and empathy, rather than the “expectation-perception” discrepancy. Inconsistent SERVQUAL variables and a relatively precise SERVPERF assessment for service quality were discovered in the study (Cronin & Taylor, 1992).

2.2 THEORY OF PLANNED BEHAVIOUR

Planned behaviour theory (TPB) clarifies the cognitive phenomenon of human behavioural intent (Ajzen, 1991). According to the TPB, a person's conduct is greatly influenced by their behavioural purpose, which is itself greatly impacted by attitudes, subjective norms, and perception of behavioural control (Fishbein & Ajzen, 2011). This theory carefully takes into account both volitional control and non-volitional control to clarify an individual's behaviour (Soliman, 2019).

The driving force behind an individuals’ behaviour, is the person's intention or repeated intent (Abbasi et al., 2021). The TPB simulation has been extensively utilized in literature to elucidate customer behaviour in a wide range of contexts, including the acceptance of technology for self-service (Lien et al., 2019), the use of smartcards or synthetic intellect to make monetary assets, or the use of mobile payments (Belanche et al., 2019; Flavián et al., 2020). In a comparable manner, this model has been the sole source of reference in numerous research that include vacationers (Han et al., 2019).
2.3 SERVICE QUALITY PERCEPTION AND BEHAVIOURAL PURCHASE INTENTION

Guided by the model of service quality perception, Wang et al. (2021b) disclosed that perceived service quality is importantly associated to client fulfillment and there exist a positive relationship among client fulfillment and the purchase intention of guests residing in hotels. Moreover, service quality in hotels and customer satisfaction leads to favourable behavioural purchase intention which further leads to customer loyalty. Nonetheless, the authors did not take into account the overall consequence of service excellence on the behavioural purchase intention of guests in hotels. This is significant because attaining a competitive advantage is reliant on the service firm’s aptitude to forestall customer anticipations, meet their needs and deliver excellent service (Dominici & Guzzo, 2010).

However, Prabowo et al. (2020) indicated that service excellent, brand reputation and word of mouth influenced the repurchase intention of hotel guests either directly or indirectly. Moreover, Wen-Jung Chang et al. (2020) demonstrated that service quality and experiential value both productively influence re-purchase intention. The relationship involving perceived quality of service as well as behavioural purchase intention among guests of star-rated hotels is investigated in this research.

The conclusive objective of presenting service quality in hotels is to satisfy and delight customers. Consequently, this will result in favourable behavioural purchase intent. There is a rise of empirical proof that service quality remarkably influences behavioural purchase intention through customer satisfaction. However, few studies have also demonstrated that service quality directly influences behavioural purchase intention. These conclusions bear credence to the lack of consensus among academics on the relationship between service quality and behavioural purchase intent.

2.4 GENDER DIFFERENCES IN SERVICE QUALITY PERCEPTION

There is a lack of biological sex vacation study prose because most of the travel study assumes that men make up the majority of travelers. To this aim, Breathnach et al. (1994) demonstrated that gender differences between men and women are not taken into consideration in sociological research due to gender prejudice that equates feminine behaviour with that of the primarily masculine tendencies. When gender is considered in research on tourists, it typically relates to narrowly focused industry segments like solo female travelers (Fendt &
Wilson, 2012), Asian female travelers Yang et al., (2018a), as well as girlfriend excursions (Khoo-Lattimore et al., 2019).

An emergent of a number of studies is available on gender variances in recreational pursuits, travel habits, and preference for travel and experience, despite the fact that there is still a very limited body of literature specifically devoted to gender dissimilarities (Pung et al., 2019). Mostafa Rasoolimanesh et al. (2020) indicated that the impacts of attention on loyalty vary significantly, with the effect being far more pronounced for male tourists. However, the results showed that female visitors had more complex enough configurations and heterogeneity to develop high degrees of loyalty.

Bem (1981) as well as Spence (1984) provided both gender uniqueness ideas to elucidate how gender affects the consumption of services and goods. These two ideas highlight the idea of gender-based consumerism. According to Spence (1984) gender distinctiveness significantly influences gender-specific engagement patterns or behaviours with a travel place. On the other hand, Bem (1981) argues that a person's activity in or preference of activities will depend on their gender identity. The demands and wants of gendered guests by hotels must be targeted specifically, and these techniques must be matched with the preferences of a gender specific guests (Khoo-Lattimore & Yang, 2018). In order to better comprehend the disparities among male and female hotel customers' perceptions of service quality, the subsequent five research hypotheses are presented:

H1: There is a considerable dissimilarity for the impact of reliability on behavioural purchase intention amongst female and male guests in hotels.

H2: There is a considerable dissimilarity for the impact of assurance on behavioural purchase intention amongst female and male guests in hotels.

H3: There is a considerable dissimilarity for the impact of tangibles on behavioural purchase intention amongst female and male guests in hotels.

H4: There is a considerable dissimilarity for the impact of empathy on behavioural purchase intention amongst female and male guests in hotels.

H5: There is a considerable dissimilarity for the impact of responsiveness on behavioural purchase intention between female and male guests in hotels.
Figure 1

Conceptual framework (2024).

This study intends to adopt the conceptual framework in Figure 1, which highlights each construct's important determinants and suggested causal linkages among components, based on the literature evaluated. The independent variable is an antecedent to the dependent variable. The independent variable is service quality perception, the dependent variable is behavioural purchase intention, and gender have been used to moderate the relationship among service quality and behavioural purchase intention.

3 METHODOLOGY

3.1 DATA COLLECTION PROCESS

A questionnaire is the primary method of data gathering for the quantitative investigation. The question types used to assess the five aspects of perceived service quality have been modified from Parasuraman et al., (1988). Additionally, the questions used to gauge behavioural purchase intention were modified from those by Kim and Park (2013) as well as Ismail et al., (2021). The anchors for the 5-point Likert scale ranged from 1 (not at all) to 5 (very large extent). Compared to higher point scales, the 5-point Likert scale requires less time
and effort to complete. The research environment from which the data for this study was gathered is represented by the star-rated hotels in Ghana.

To ensure that each group of the population is proportionately represented within the study sample, this study used a stratified sampling approach. The guests were stratified into fifteen (15) star rated hotels in Ghana. The sample was then distributed proportionately to guarantee that the sample population are proportional to the magnitude of each stratum. These hotels are well-known both domestically and abroad for their visibility and unique accommodations. Participants were asked informally by researchers about their experiences and whether they were interested in taking part in the study. After expressing interest, those who were requested to fill out the questionnaire were asked to do so. In this study, we gathered over 751 questionnaires. For power analysis, the minimal sample size was determined by means of G* power Faul et al., (2009). A sample size of 92 was determined by power analysis to have a 0.80 statistical power. Consequently, the sample was sufficient to conduct the analysis with 751 completed surveys, filled out by both male and female respondents.

3.2 DATA ANALYSIS

The smart PLS version 4 Ringle et al. (2015) was utilized to execute the multigroup analysis to compare the influence of each guest service quality perception dimension on behavioural purchase intent. SmartPLS-SEM (version 4) was used because multi group analysis is suitable for non-parametric SEM (Hair et al., 2017). Based on gender, the data was split into two separate groups, with males making up 375 and females 376 of the total sample. To achieve measurement invariance, however, prior to the MGA, we used the measurement invariance for composite (MICOM) technique (Rasoolimanesh et al., 2017). A configural assessment, the establishment of a compositional invariance assessment, and an evaluation of equal means and variances are the three steps of the MICOM process.

3.3 RESULTS AND FINDINGS

3.3.1 Profile of respondents

Of the 751 returned surveys, 375 were accomplished by male guests (49.9%) while 376 by female guests (50.1%). More than half of the respondents were single 457 (60.9%) whereas
294 were married (39.1%). Most of the respondents were indigenous guests 714 (95.1%) leaving only 37 respondents as international guests (4.9%). In terms of age of the respondents, 278 (37.0%) belong to the age group 31 – 40 years old, 251 (33.4%) belong to 21-30 years old, 163 (21.7%) belong to 41-50 years old, 27 (3.6%) belong to 20 years and below, 20 (2.7%) belong to 51-60 years while 12 (1.6%) belong to 61 years and above. In terms of educational status, 457 (60.9%) of the respondents are postgraduates, 233 (31.0%) were college graduates, 54 (7.2%) are high school graduates, 6 (.8%) are primary school graduates, while 1 (.1%) have other qualifications such as Ph.D. and other chartered certificates.

3.3.2 Valuation of the measurement model

We evaluated the measurement and structural models for the male as well as female group guests using PLS-SEM. Six components made up the conceptual structure of this study, five of which were service quality perception aspects and one of which was behavioural purchase intention.

The construct reliability, convergent validity, in addition to discriminant validity of the six constructs for male and female visitors was evaluated in a bid to assess the measurement model (Hair et al., 2017). The composite reliability (CR) as well as rho ‘A’ ought to be higher than 0.7. Moreover, the average variance extracted (AVE) ought to be more than 0.5 in order to demonstrate construct reliability and convergent validity (Hair et al., 2017).

Table 1

Results of assessment of measurement model

<table>
<thead>
<tr>
<th>Variable</th>
<th>rho_A – Composite reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Assurance</td>
<td>0.761</td>
<td>0.772</td>
</tr>
<tr>
<td>BPI</td>
<td>0.922</td>
<td>0.934</td>
</tr>
<tr>
<td>Empathy</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.790</td>
<td>0.742</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Tangible</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Note: BPI = Behavioural purchase intention

Table 1 demonstrates that both male and female visitors had satisfactory levels of convergent validity and reliability on each of the six items utilized in this research. We used the most conservative method, the heterotrait-monotrait (HTMT) ratio, to evaluate the
discriminant validity (Henseler et al., 2015). The heterotrait-monotrait (HTMT) ratio has also recently been proven to be an improved evaluation criterion in comparison to other conventional evaluation techniques, such as the Fornell-Larcker criterion and the cross-loading criterion (Henseler et al., 2015).

### Table 2

**Discriminant validity assessment (HTMT)**

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ASS</td>
<td>BPI</td>
</tr>
<tr>
<td>BPI</td>
<td>0.796</td>
<td>0.717</td>
</tr>
<tr>
<td>Empathy</td>
<td>0.823</td>
<td>0.637</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.894</td>
<td>0.866</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>0.799</td>
<td>0.680</td>
</tr>
<tr>
<td>Tangible</td>
<td>0.783</td>
<td>0.727</td>
</tr>
</tbody>
</table>

Note: BPI = Behavioural purchase intention, ASS = Assurance; EMP = Empathy; REL = reliability; RES = Responsiveness.

To prove discriminant validity, each construct's HTMT ratio needs to be less than 0.9. (Henseler et al., 2015). The findings of HTMT as shown in Table 2, reveal that male and female guests had satisfactory discriminant validity.

### 3.3.3 Valuation of the structural model and multi group analysis

The Variance Inflated Factor (VIF) is used to assess the collinearity between latent variables. VIF ≥ 5 implies the possibility of a collinearity issue (Hair et al., 2022). The findings in Table 3 showed that because every parameter was below 5, the model did not have a collinearity issue.

### Table 3

**Collinearity Statistics (Inner VIF)**

<table>
<thead>
<tr>
<th></th>
<th>BPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASS</td>
<td>2.888</td>
</tr>
<tr>
<td>EMP</td>
<td>2.423</td>
</tr>
<tr>
<td>REL</td>
<td>2.452</td>
</tr>
<tr>
<td>RES</td>
<td>2.482</td>
</tr>
<tr>
<td>TAN</td>
<td>2.573</td>
</tr>
</tbody>
</table>
The structural model for the two groups must be evaluated before conducting the MGA in a bid to scrutinize the effect of the five characteristics of service quality on behavioural purchase intent between female and male guests and conduct hypothesis testing. The significance of the path coefficients for the two groups should be evaluated, together with the R-squared (R²) and Stone-Geisser criterion (Q²) for behavioural purchase intention, in a bid to evaluate the structural model (Hair et al., 2017). Both of these R² values are 0.640 for female visitors' behavioural purchase intention and 0.556 for male guests are regarded as high notches in the social sciences (Rasoolimanesh et al., 2017).

According to Ali et al. (2018) the value of Q² must be greater than zero to show that a structural model is predictive; in this situation, we discovered Q² values of 0.413 and 0.383 for female and male guests, correspondingly. These numbers are large, demonstrating the model’s good predictive capabilities for both the female and male categories. The bias-corrected (BCa) confidence intervals should be used to evaluate the importance of the path coefficient, according to recent literature (Ali et al., 2018). The Standard Root Mean Square Residual (SRMR) and the Normed Fit Index (NFI) were used to assess the model’s fit. The value of the SRMR was 0.054 which indicates an acceptable model fit (Hair et al., 2022). The NFI results in values between 0 and 1. The closer the value is to 1, the better the fit (Ringle et al., 2015). The value of the NFI was 0.849 (Table 4) which indicates an acceptable model fit.

Table 4
Model Fit summary

<table>
<thead>
<tr>
<th></th>
<th>Saturated Model</th>
<th>Estimated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRMR</td>
<td>0.054</td>
<td>0.054</td>
</tr>
<tr>
<td>d_ULS</td>
<td>0.304</td>
<td>0.304</td>
</tr>
<tr>
<td>d_G</td>
<td>0.244</td>
<td>0.244</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>1161.307</td>
<td>1161.307</td>
</tr>
<tr>
<td>NFI</td>
<td>0.849</td>
<td>0.849</td>
</tr>
</tbody>
</table>

For female visitors, reliability, responsiveness, and tangibles all have positive and substantial impact on behavioural purchase intention, whereas for male tourists, empathy, reliability, responsiveness, and tangibles had significant effect on behavioural purchase intention.

To perform MGA, it is essential to establish the measurement invariance for both groups of male and female visitors (Rasoolimanesh et al., 2017). According to recent literature, PLS-SEM benefits greatly from the MICOM technique (Md Noor et al., 2019). The MICOM technique consists of three steps: evaluating configural invariance; evaluating compositional...
invariance based on construct correlation; and evaluating equal means and variances (Rasoolimanesh et al., 2017; Md Noor et al., 2019).

### Table 5

*Results of measurement invariance testing using permutation*

<table>
<thead>
<tr>
<th>Construct</th>
<th>Configural Invariance (correlation = 1)</th>
<th>Equal Means Assessment</th>
<th>Equal Variance Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASS</td>
<td>Yes</td>
<td>0.999</td>
<td>[0.24, 1.000]</td>
</tr>
<tr>
<td>BPI</td>
<td>Yes</td>
<td>1.000</td>
<td>[0.198, 1.000]</td>
</tr>
<tr>
<td>EMP</td>
<td>Yes</td>
<td>1.000</td>
<td>[0.061, 1.000]</td>
</tr>
<tr>
<td>REL</td>
<td>Yes</td>
<td>0.999</td>
<td>[0.488, 1.000]</td>
</tr>
<tr>
<td>RES</td>
<td>Yes</td>
<td>1.000</td>
<td>[0.438, 1.000]</td>
</tr>
<tr>
<td>TAN</td>
<td>Yes</td>
<td>1.000</td>
<td>[0.096, 1.000]</td>
</tr>
</tbody>
</table>

In order to execute MGA, partial measurement invariance must be proven, which is done by ensuring configural and compositional invariance. Table 5 displays the MICOM outcomes, demonstrating the creation of partial measurement invariance. Consequently, MGA can be used to relate the route coefficients for both groups and evaluate the suppositions based on the findings of Table 5.

### Table 6

*Result of invariance measurement testing using permutation*

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Path Coefficients Original (MALE)</th>
<th>Path Coefficients Original (FEMALE)</th>
<th>Path Coefficients Difference (MALE - FEMALE)</th>
<th>2.5%</th>
<th>97.5%</th>
<th>Permutation p-Values</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASS -&gt; BPI</td>
<td>0.127</td>
<td>0.114</td>
<td>0.012</td>
<td>0.004</td>
<td>-0.191</td>
<td>0.186 0.913</td>
<td>No</td>
</tr>
<tr>
<td>EMP -&gt; BPI</td>
<td>0.123</td>
<td>0.059</td>
<td>0.064</td>
<td>-0.001</td>
<td>-0.160</td>
<td>0.172 0.483</td>
<td>No</td>
</tr>
<tr>
<td>REL -&gt; BPI</td>
<td>0.233</td>
<td>0.372</td>
<td>-0.139</td>
<td>-0.003</td>
<td>-0.154</td>
<td>0.157 0.080</td>
<td>No</td>
</tr>
<tr>
<td>RES -&gt; BPI</td>
<td>0.186</td>
<td>0.130</td>
<td>0.057</td>
<td>-0.003</td>
<td>-0.156</td>
<td>0.152 0.487</td>
<td>No</td>
</tr>
<tr>
<td>TAN -&gt; BPI</td>
<td>0.208</td>
<td>0.240</td>
<td>-0.031</td>
<td>0.003</td>
<td>-0.166</td>
<td>0.169 0.709</td>
<td>No</td>
</tr>
</tbody>
</table>
The outcomes of MGA and hypothesis testing are displayed in Table 6 and 7. In a bid to evaluate the impacts of perceived service quality aspects on behavioural purchase intention between male and female hotel guests, two traditional and nonparametric perspectives; MGA Henseler's utilizing bootstrapping and the permutation approach have been used. There is no discernible dissimilarity amongst male and female guests regarding their evaluation of service quality on behavioural purchase intention when Henseler's MGA as well as the permutation approach are utilized to analyze the data. As a result, the findings indicate that all the five hypotheses cannot be supported. The non-significance of the findings regarding variations in service quality perception on behavioural purchase intention among hotel guests in Ghana is supported by both techniques of MGA analysis utilized in this research. For male guests, the effect of assurance on behavioural purchase intention is favourable whereas this effect is negligible for female guests. For both groups, reliability has a significant impact on behavioural purchase intention, but the difference is not noticeable. Additionally, while the dissimilarity is not statistically significant, the impact of tangible on behavioural purchase intention is inconsequential for female guests, but considerable for male guests.

4 DISCUSSIONS

This study compares how male and female hotel guests' behavioural purchase intentions are affected by the characteristics of service quality perception. Previous research has revealed various behavioural patterns, as well as the motivations and degrees of participation of male and female guests (Collins & Tisdell, 2002). The findings of the current research do not show any appreciable variations between the effects of service quality perception and behavioural buy intention between male and female guests, despite other study suggestions to the contrary (Pawson & Banks 1993; Mokhlis, 2012; Kwok et al., 2016; Sarande et al., 2022). Moreover,
this study is inconsistent in relation to past studies that found significant differences between male and female guests in their perception of service quality in health and fitness clubs (Olya & Nia, 2021; Rumi et al., 2021). It could be that previous studies did not use the more robust and conservative multi group analysis in their study. Even if they did, the sample and hotel service characteristics may be different.

Results from PLS-SEM and MGA revealed that assurance had a larger impact on male guests’ behavioural purchase intentions compared to female guests. Inferentially, both male and female customers feel safe when they engage in various hotel service interactions and desire to feel secure while they are there (Anwar & Louis, 2017). Both male and female guests have similar perceptions of service reliability in hotels in terms of their ability to keep their promises about the level of services they deliver (Anwar & Climis, 2017).

Additionally, both male and female guests' behavioural purchase intentions were shown to be significantly impacted by tangibles. As a result, both male and female visitors believe that the dimension of tangibles is related to the cleanliness of the rooms, restaurants, wearing proper clothing, and using disposable gloves (Abdullah et al., 2018).

Moreover, male guests were shown to be significantly impacted by empathy. However, female guests’ behavioural purchase intentions were shown not to be significantly impacted by empathy. As a result, male customers believe that service providers go above and beyond during the service experience to make the customer feel appreciated and special (Bahadur et al., 2018).

Both male and female guests' behavioural purchasing intentions were found to be affected by responsiveness. In conclusion, both male and female guests believe that front-line employees in hotel receptions, waitresses, hosts, and guest relations must have extensive training in order to be attentive to their demands (Anwar & Qadir, 2017).

5 CONCLUSION

Our results emphasize the difficulties in measuring and comparing service quality across genders, which has implications for the use of service quality scales in a diverse community. As a result, the findings emphasize the significance of a thorough analysis of a measurement instrument's underlying psychometric features. Additionally, the discovery has important application implications for the hotel industry. The findings of this study show a variety of sufficient setups and prerequisites for inducing guests’ favourable behavioural purchase intentions. Both male and female hotel guests have a high level of regard for the quality of the
services they receive. The assessment of hotel service quality by male and female guests does not, however, differ significantly. In an effort to delight both male and female clients, hotel service providers might deploy their resources to improve the quality of the services they give. Hotels that actively work to improve their guests' behavioural purchase intentions may utilize the survey results to inform judgments on the best interventions to improve their service quality and, ultimately, the behavioural purchase intentions of their visitors. Such customized interventions may be more successful in enhancing service quality than typical managerial intervention programs.

5.1 IMPLICATIONS

MICOM ensures that the constructs being measured are comparable and can be meaningfully compared across various groups or contexts. In the context of service quality perception and behavioural purchase intention measurement invariance is crucial for obtaining reliable and valid results. Our results suggest that organizations should improve their recruitment efforts to test for applicants' skill in demonstrating service quality. Consequently, this offers a means to select adequate candidates for positions that require high interaction with guests.

One of the implications of studying the measurement invariance of the MICOM approach is the ability to conduct cross-gender comparisons. By ensuring measurement invariance, researchers can compare service quality perception and behavioural purchase intention across different gender contexts. This allows hotel managers to identify similarities and differences in customers' perceptions and behaviours enabling them to tailor their strategies based on specific gender preferences and expectations. This information is valuable for hotel managers in devising targeted marketing strategies and delivering personalized services to different customer segments.

The measurement invariance of the MICOM approach in studying service quality perception and behavioural purchase intention in hotels holds significant implications for the hospitality industry. Cross-gender comparisons and comparative analysis can provide valuable insights to hotel managers enabling them to enhance service quality meet customer expectations and ultimately increase customer satisfaction and loyalty.
5.2 LIMITATIONS AND RECOMMENDATIONS

Like other scientific endeavors, this study has certain constraints. For starters, the study's items have generated more questions than they have solutions. It would be beneficial to do a qualitative inquiry into the factors that influence how service quality dimensions are viewed, not only to progress theory but also to design industry strategies, enhance a favourable behavioural purchase intention and increase profitability.

Second, we recognize the challenges in analyzing consumer behaviour and perceptions of service quality. We also acknowledge that gender is a complicated subject in and of itself, made more so by the fact that the hospitality industry is a gendered sector (Khoo-Lattimore & Yang, 2018).

We were unable to further study the numerous aspects underlying each construct and the interrelationships among them because the goal of the article was to examine gender disparities for perceived service quality and behavioural purchase intention. For instance, we considered the individuals as homogenous gender groups and did not make a distinction between the male and female participants. This is so instead of focusing on the variations between male and female subgroups, the purpose of this research was to scrutinize the level of service quality perception as well as behavioural purchase intention between males and females.

In retrospect, we should have gathered more demographic information, such as the location of guests. The personality traits, culture, and ethnicity of the guests, for instance, have not been taken into consideration, despite the fact that prior studies have demonstrated that these cultural norms as well as the feeling of image-congruence might affect visitors’ behaviour.

However, we have added three demographic factors (age, education, and marital status) as controls and have statistically tested their influence on the framework. Neither of these control variables had a statistically relevant impact on our framework, proving that they had little to no influence on this study. Up order for future researchers to fill in these gaps, we have not taken into account the connections between service quality perception, behavioural purchase intention, or how men and women access their hotel experiences through social media.

5.3 FUTURE RESEARCH

The effect of each of the five service quality perception factors on the behavioural purchase intention for various visitor sub-segments might therefore be studied in future
research. The three demographic characteristics may need to be empirically tested again by future researchers (age, education, and marital status). In the same vein, another interesting research topic is how particular experiences could change how men and women perceive the quality of services and how likely they are to make purchases. When attempting to anticipate the effect of service quality perception on behavioural purchase intention, future research might also concentrate on the masculinities and femininities within the participant population in addition to studying men and women to gain a deeper knowledge of gender disparities in contemporary times.

REFERENCES


LIST OF ABBREVIATIONS:

PLS – SEM  Partial Least Square Structural Equation Modelling
MICOM  Measurement Invariance of Composites
GDP  Gross Domestic Product
CB – SEM  Covariance – Based Structural Equation Modelling
SERPERF  Service Performance
SERQUAL  Service Quality
TPB  Theory of Planned behaviour
MGA  Multi – Group Analysis
CR  Composite Reliability
AVE  Average Variance Extracted
HTMT  Heterotrait Monotrait ratio
VIF  Variance Inflated Factor