

Influence of Total Quality Management (TQM) On Operational and Quality Performance in Selected Hospitality Industry in Valencia City, Bukidnon

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ABSTRACT

This study examined the influence of Total Quality Management (TQM) on Operational and Quality Performance (OQP) in selected hospitality establishments in Valencia City, Bukidnon. Using a quantitative, descriptive-correlational research design, data were gathered from 242 managers, supervisors, and other top managerial positions across accommodation, dining, and resort establishments. Five TQM dimensions were assessed: Organizational Leadership (OL), Customer Satisfaction and Relationship (CSR), Human Resource Focus (HRF), Strategic Quality Planning (SQP), and Supplier Quality Management (SQM). Results showed that respondents strongly agreed that TQM practices were extensively observed across all establishments, with overall mean scores ranging from 6.149 to 6.364 on a 7-point scale. No statistically significant differences in TQM or OQP were found across demographic groups, indicating uniform quality management practices regardless of sex, educational level, department, position, working experience, or nature of business. Pearson correlation analysis revealed a very strong positive relationship between overall TQM and OQP ($r = .836$, $p < .001$). Regression analysis further confirmed that Organizational Leadership, Customer Satisfaction and Relationship, and Strategic Quality Planning significantly influenced OQP. Although Human Resource Focus and Supplier Quality Management demonstrated significance in earlier regression models (Models 1–4), both variables became non-significant in the full five-predictor regression model (Model 5), suggesting possible shared variance among the predictor variables. These findings demonstrate that leadership commitment, customer-focused strategies, and systematic quality planning are critical drivers of operational excellence in the hospitality industry.

Keywords: Total Quality Management, Operational and Quality Performance, Hospitality Industry, Organizational Leadership, Customer Satisfaction, Strategic Quality Planning

INTRODUCTION

The hospitality industry is a major contributor to the local economy of Valencia City, Bukidnon, through its dining, lodging, and entertainment services. However, these businesses faced many challenges in operating and managing quality within the industry, which negatively impacted customer satisfaction and the effectiveness of supply chain management. Supply chain disruptions reduced food availability and raised prices at restaurants across the Philippines, which led to a decline in service quality. In addition, within the hospitality/food industry, labor shortages and increased operational costs made it difficult to provide high-quality customer service (Tabile, 2023; Ochave, 2022). These ongoing difficulties highlighted the need for appropriate management strategies to help the hospitality industry in Valencia City remain viable and improve its performance.

Studying Operational and Quality Performance (OQP) was a key component of any enterprise's successful operation, as it contributed to improved economic viability, customer satisfaction, and profitability. The Philippine Quality Award was established by Executive Order No. 448 to support organizations in developing and implementing Quality Management Systems to improve their overall performance (Department of Trade and Industry [DTI], 2023). According to the DTI (2023), one way that PQA supported the hospitality industry

was by helping businesses improve their service and operational quality. Stronger OQP increased the likelihood that businesses would retain customers, grow revenue, and remain competitive in the long term.

The hospitality industry's OQP was developed through TQM. The five basic TQM dimensions (Organizational Leadership, Customer Satisfaction and Relationship, Human Resource Focus, Strategic Quality Planning, and Supplier Quality Management) all impacted both service efficiency and business sustainability. Liu et al. (2020) found that through excellent leadership practices, employee engagement increased, work quality improved, and supplier management strengthened; therefore, overall performance improved. Despite these findings, few studies examined how TQM practices impacted OQP in the smaller city of Valencia City. This study addresses these gaps by examining the extent to which specific TQM elements affected product quality, service delivery efficiency, and competitiveness between local hotels and the entertainment industry in Valencia City.

This study evaluated how TQM affected both service quality and product supply in the Valencia City hospitality industry, which also included some physical trade-based businesses. Most previous investigations into TQM had been conducted in large cities. However, Valencia City and other small business areas had their own particular challenges that were not well documented. Given the ongoing growth in competition for the hospitality business, the increase in the number of consumers who requested hospitality-related services, and the rising expectations for these services to meet increasingly high standards. This situation underscores the need for and relevance of the current research. The results of this study provided new insights for businesses that sought to improve their current quality of service while maintaining the same level of service consistently. These new insights contributed to the global dialogue on quality management, particularly in the hospitality sector, and provided actionable information for managers, entrepreneurs, and policymakers who sought to enhance operational effectiveness, improve customer satisfaction, and strengthen supplier collaboration in rapidly evolving business environments.

Theoretical and Conceptual Framework

This study is anchored on three theories that collectively explain the relationship between Total Quality Management (TQM) and Operational and Quality Performance (OQP) in the hospitality industry: Deming's Total Quality Management Theory, the SERVQUAL Model, and the Resource-Based View (RBV) Theory.

The anchor theory of this study is Deming's Total Quality Management (TQM) Theory, which emphasizes continuous improvement, leadership commitment, and systematic quality planning as essential drivers of long-term organizational success. Deming's framework proposes that when organizations invest in consistent quality processes guided by strong leadership, overall performance improves across all operational levels (Liu et al., 2020). This theory directly supports the study's premise that the five TQM dimensions — Organizational Leadership, Customer Satisfaction and Relationship, Human Resource Focus, Strategic Quality Planning, and Supplier Quality Management — collectively influence the operational and quality performance of hospitality establishments in Valencia City, Bukidnon.

The first supporting theory is the SERVQUAL Model, which posits that service quality is determined by the gap between customer expectations and actual service delivery. In the hospitality industry, where customer satisfaction is the primary measure of success, this model provides a relevant lens for understanding how TQM practices — particularly those centered on customer focus and service consistency — translate into measurable performance outcomes (Zehir and Zehir, 2023; Senarath, 2020). The model reinforces the study's examination of OQP indicators such as service reliability, responsiveness, and customer satisfaction levels among the participating establishments.

The second supporting theory is the Resource-Based View (RBV), which argues that a firm's competitive advantage is rooted in its internal resources — including leadership capabilities, skilled human resources, and established organizational processes. Applied to this study, RBV supports the notion that hospitality organizations that effectively harness their internal resources through structured TQM practices are better positioned to achieve superior operational performance (Zaidi and Ahmad, 2020; Bytyçi et al., 2023). This theory underscores the importance of organizational capacity in sustaining quality management systems that drive long-term efficiency and competitiveness.

Statement of the Problem

This study aims to assess the impact of Total Quality Management on both Operational and Quality Performance across the organizations involved. Specifically, it seeks to answer the following question:

1. What is the demographic profile of the respondents in terms of:
 - 1.1 Sex;
 - 1.2 Education Level;
 - 1.3 Department;
 - 1.4 Position;
 - 1.5 Working Experience; and
 - 1.6 Nature of Business or Establishment?
2. What is the level of implementation of Total Quality Management (TQM) practices in the selected hospitality businesses in Valencia City, Bukidnon?
3. What is the level of Operational and Quality Performance (OQP) in these businesses?
4. Is there a significant difference between the demographic profile of the respondents and their perception of Operational and Quality Performance?
5. Is there a significant difference between the demographic profile of the respondents and their perception of Total Quality Management and its dimensions?
6. Is there a significant relationship between each TQM dimension (Organizational Leadership, Customer Satisfaction and Relationship, Human Resource Focus, Strategic Quality Planning, and Supplier Quality Management) and Operational and Quality Performance?
7. Which among the TQM dimensions has the strongest influence on Operational and Quality Performance?

Hypotheses

Based on the preceding research problems, the following null hypotheses were tested at the 0.05 level of significance:

H₀₁: There is no significant difference between the demographic profile of the respondents and their perception of Operational and Quality Performance.

H₀₂: There is no significant difference between the demographic profile of the respondents and their perception of Total Quality Management and its dimensions.

H₀₃: There is no significant relationship between each TQM dimension (Organizational Leadership, Customer Satisfaction and Relationship, Human Resource Focus, Strategic Quality Planning, and Supplier Quality Management) and Operational and Quality Performance.

H₀₄: There is no significant influence of TQM dimensions (OL, CSR, HRF, SQP, SQM) on Operational and Quality Performance.

METHODOLOGY

This Chapter presents the methodologies that were employed to examine the influences of Total Quality

Management (TQM) on both operational and quality performances in several hospitality businesses located in Valencia City, Bukidnon. The chapter will present the research design that was employed, the quantitative research method that was used, and the three types of quantitative research methods that were used: descriptive, comparative, and correlational. This chapter is intended to assist readers in understanding how this research was conducted in an understandable manner, as well as in an organized manner that parallels previously published literature.

Research Design

This study employed a quantitative methodology to examine the relationship between Total Quality Management (TQM) and Operational and Quality Performance (OQP) in selected hospitality establishments. As established by Creswell (2014), quantitative studies are designed to measure the extent of variables and the associations between them, making this approach well-suited for determining statistically significant relationships among the constructs under investigation. The appropriateness of this methodology is further supported by Zaidi and Ahmad (2022), who applied a similar quantitative approach in an organizational setting and successfully validated measurable relationships between TQM practices and performance outcomes.

Specifically, quantitative research was utilized as the primary mode of inquiry. This type of research gathers numerical data to understand why phenomena occur, predict future outcomes, or determine how certain variables can be controlled (Creswell and Creswell, 2018). Data were collected using structured instruments — namely surveys and questionnaires — which enabled systematic and objective measurement of how extensively hospitality organizations implemented TQM practices and whether a meaningful association existed between that implementation and their operational and quality performance.

The study also adopted a descriptive research design to characterize the current state of TQM implementation across the selected establishments. Descriptive research focuses on identifying what is occurring within a given population or phenomenon, rather than investigating the underlying causes of those occurrences (Shields and Rangarajan, 2013). This allowed the researchers to establish a clear picture of the extent to which hospitality organizations in Valencia City, Bukidnon, currently utilize TQM practices in their day-to-day operations.

A comparative research approach was likewise incorporated to identify similarities and differences across various types of hospitality establishments. As noted by Azarian (2011), comparative studies enable researchers to distinguish between groups or systems by examining their characteristics side by side. In this study, comparing TQM practices and performance outcomes across multiple establishments allowed the researchers to determine which types of organizations demonstrated higher levels of TQM implementation and how those levels corresponded to differences in their operational performance.

Finally, a correlational research design was applied to examine the statistical relationship between TQM dimensions and OQP. Correlational research measures the degree of association between two or more variables without manipulating either of them (Fraenkel et al., 2012). This approach provided the researchers with a means to determine whether a positive and significant relationship existed between the extent of TQM implementation and the level of operational and quality performance among the participating hospitality establishments, thereby addressing the core research questions of this study.

Research Setting

The study was conducted among selected hospitality establishments in Valencia City, Bukidnon. Valencia City is considered one of the province's major commercial and tourism centers, with a growing hospitality sector that includes accommodation, dining, and resort establishments. The city was selected because of the increasing demand for quality hospitality services and the relevance of Total Quality Management practices in improving operational performance within the local hospitality industry.

Research Participants

The study involved 242 managers, supervisors, and other top management personnel from selected hospitality establishments in Valencia City, Bukidnon. Respondents were selected using proportionate stratified random

sampling to ensure proper representation across accommodation, dining, and resort establishments. The sample size was determined using the Raosoft sample size calculator.

The first stage was to identify the stratum of each type of hospitality establishment. There were three strata: accommodation/lodging, dining, and resorts. These establishments were further grouped into four geographical clusters: Cluster 1 (Poblacion), Cluster 2 (Lumbo), Cluster 3 (Bagontaas), and Cluster 4 (all other barangays excluding Poblacion, Lumbo, and Bagontaas) in Valencia City, Bukidnon. The second stage determined the desired sample size of 242, which was divided by the total population size, and the quotient value was multiplied by the stratum size based on the number of establishments in each type of business. The whole number was recognized as the sample size obtained from the product value to arrive at 242 as the total sample size.

Research Instruments

The primary data collection tool used in this study was a structured survey questionnaire, which was adapted from existing validated instruments related to Total Quality Management (TQM) and Operational and Quality Performance (OQP). The questionnaire was divided into two main parts. The first part gathered the demographic profile of the respondents, including their sex, educational level, department assigned, position, working experience, and nature of business or establishment. The second part consisted of Likert-scale items measuring the level of TQM implementation across its five dimensions — Organizational Leadership (OL), Customer Satisfaction and Relationship (CSR), Human Resource Focus (HRF), Strategic Quality Planning (SQP), and Supplier Quality Management (SQM) — as well as the level of Operational and Quality Performance (OQP) as perceived by the respondents.

The questionnaire originally consisted of 47 questionnaire items covering both the independent and dependent variables. However, following the pilot test conducted on 30 samples, eight item questions from the TQM dimensions and one item question from OQP were removed due to factor loadings below the acceptable threshold of 0.5, resulting in a final instrument of 38 item questions. The reliability of the instrument was confirmed through Cronbach's Alpha, which yielded an overall score of .966, indicating a highly reliable measurement tool. All remaining items met the standard requirements for construct reliability and validity, as evidenced by their Composite Reliability (CR) and Average Variance Extracted (AVE) values, thereby ensuring that the instrument was both valid and reliable for use in the actual data gathering.

Data Gathering Procedure

Prior to the conduct of the study, the researchers secured the necessary approval to administer the survey questionnaire to the selected hospitality establishments in Valencia City, Bukidnon. A formal letter of permission was prepared and submitted to the concerned establishment owners and managers, requesting their consent to allow their employees — specifically the managers and supervisors — to participate in the study. Upon receiving approval, the researchers personally distributed the survey questionnaires to the identified respondents across the four geographical clusters in Valencia City.

The data gathering was conducted through a personal survey distribution method, wherein the researchers visited each establishment and administered the questionnaires directly to the respondents. This approach ensured a higher response rate and allowed the researchers to clarify any questions or concerns raised by the respondents regarding the survey items. The researchers spent approximately one month conducting the data gathering to reach the target number of 242 respondents across Cluster 1 (Poblacion), Cluster 2 (Lumbo), Cluster 3 (Bagontaas), and Cluster 4 (all other barangays excluding Poblacion, Lumbo, and Bagontaas). After the questionnaires were accomplished, they were retrieved, checked for completeness, and prepared for statistical analysis.

Data Analysis

Data for the study were collected through a structured survey questionnaire personally administered to the respondents and were analyzed using the Statistical Package for the Social Sciences (SPSS). The mean and standard deviation were used to measure the level of Total Quality Management (TQM) dimensions —

Organizational Leadership, Customer Satisfaction and Relationship, Human Resource Focus, Strategic Quality Planning, and Supplier Quality Management — as well as the level of Operational and Quality Performance (OQP) as perceived by the managers and supervisors from the selected hospitality establishments in Valencia City, Bukidnon.

To determine the significant difference in the level of TQM and OQP when grouped according to demographic profile, the Independent Samples t-Test and One-Way Analysis of Variance (ANOVA) were used. To ascertain the significant relationship between TQM dimensions and OQP, Pearson Correlation analysis was used. To identify the TQM dimensions that significantly influenced OQP, Simple Linear Regression Analysis using the Enter Method was used.

Multicollinearity and Regression Diagnostics

To assess multicollinearity among the predictor variables, tolerance values and Variance Inflation Factor (VIF) statistics were examined in the regression models. Results showed that Models 2–5 produced tolerance values below 0.30 and VIF values above 4.0, indicating the presence of moderate multicollinearity among some predictor variables. This condition may have affected the stability and precision of the regression coefficients, particularly for Human Resource Focus (HRF) and Strategic Quality Management (SQM) in the full regression model. Despite this, the variables were retained in the analysis because they were theoretically relevant and aligned with the conceptual framework of the study.

Furthermore, the Enter (forced entry) method was utilized in the regression analysis. This approach was selected because the study followed a theoretically driven and confirmatory research design, wherein all predictor variables identified in the framework were intentionally included in the model simultaneously. Unlike exploratory stepwise procedures, the Enter method ensures that all theoretically important variables are assessed regardless of their individual statistical contribution.

In addition, the Durbin-Watson statistics obtained from the regression models were approximately 1.75, which is reasonably close to the ideal value of 2.0. This indicates that there is no serious autocorrelation problem in the residuals. Although the values slightly deviated from 2.0, the deviation was considered minor and did not materially affect the interpretation and reliability of the regression results.

Ethical Considerations

Ethical considerations were strictly observed throughout the conduct of the study. Prior to data collection, informed consent was obtained from all respondents to ensure that they fully understood the purpose, nature, and procedures of the research. Participation in the study was entirely voluntary, and respondents were informed of their right to refuse participation or withdraw from the study at any time without penalty or consequence.

To protect the privacy of the respondents, anonymity and confidentiality of all collected information were maintained. No personal identifiers were disclosed in the presentation, analysis, or interpretation of the data. All responses were used solely for academic and research purposes and were handled with strict confidentiality.

Furthermore, the study was conducted following the ethical standards and research guidelines observed by academic institutions and scholarly publications, including the Committee on Publication Ethics (COPE) guidelines adopted by RSIS International journals. Institutional approval and endorsement for the conduct of the study were secured prior to the administration of the survey instruments, whenever applicable.

RESULTS AND DISCUSSION

This section presents and discusses the findings of the study based on the stated research objectives.

Table 1. Demographic Profile in Terms of Frequency

Demographic Variable	Category	Frequency	Percentage	
Sex	Male	106	43.8	
	Female	136	56.2	
Educational Level	High School Graduate	29	12.0	
	College Level	71	29.3	
	College Graduate	135	55.8	
	Vocational	6	2.5	
	Master's Degree	1	0.4	
Department Assigned	Top Management/Ownership	31	12.8	
	Marketing & Sales	33	13.6	
	Front Office	24	9.9	
	Food & Beverage	136	56.2	
	Housekeeping	3	1.2	
	General	4	2	
	Maintenance	1	0.4	
	Human Resource	10	4.1	
Position	Owner	33	13.6	
	Manager	53	21.9	
	Supervisor	44	18.2	
	OIC	37	15.3	
	Team Leader	17	7.0	
	Department Head	2	0.8	
	Admin Secretary	1	0.4	
	Front desk In charge	2	0.8	
	Head Chef	1	0.4	
	Human Resource	6	2.5	
	Staff Head	3	1.2	
	Head Chef	21	8.7	
	Marketing Director	1	0.4	

	Assistant Manager	1	0.4
	Head Barista/Bartender	6	2.5
	Chef de Cuisine	1	0.4
	Executive Chef	1	0.4
	Sous Chef	4	1.7
	Quality Assurance	6	2.5
	Pastry Chef	2	0.8
Working Experience	Less than 3 years	104	43.0
	3 to 5 years	75	31
	5 to 10 years	47	19.4
	11 years above	16	6.6
Nature of Business/Establishment	Accommodation/Lodging	61	25.2
	Dining	173	71.5
	Resorts	8	3.3
Cluster	Cluster 1 (Poblacion)	175	72.3
	Cluster 2 (Lumbo)	7	2.9
	Cluster 3 (Bagontaas)	51	21.1
	Cluster 4 (All Brgy. except Pob., Lumbo & Bagontaas)	9	3.7
Note: n=242			

Table 1 presents the demographic profile of the respondents. Most respondents were female, college graduates, and employed in the Food and Beverage department. A large proportion also reported less than three years of work experience, while dining establishments comprised the majority of participating businesses. These findings suggest that the study captured responses from operational personnel actively involved in hospitality service delivery.

Table 2. Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) and Operational Quality and Performance OQP as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon

Construct	Range	Min.	Max.	Mean	Std. Dev.	Scale Description	Descriptive Interpretation
Organizational Leadership <i>OL</i>	4.00	3.00	7.00	6.265	0.918	Strongly Agree	Very extensively observed in managers and supervisors from selected hospitality industry in Valencia City, Bukidnon

Customer Satisfaction and Relationship <i>CSR</i>	3.00	4.00	7.00	6.364	0.794	Strongly Agree	Very extensively observed in managers and supervisors from selected hospitality industry in Valencia City, Bukidnon
Human Resource Focus <i>HRF</i>	3.00	4.00	7.00	6.227	0.851	Strongly Agree	Very extensively observed in managers and supervisors from selected hospitality industry in Valencia City, Bukidnon
Strategic Quality Planning <i>SQP</i>	3.00	4.00	7.00	6.295	0.871	Strongly Agree	Very extensively observed in managers and supervisors from selected hospitality industry in Valencia City, Bukidnon
Supplier Quality Management <i>SQM</i>	5.00	2.00	7.00	6.149	1.020	Strongly Agree	Very extensively observed in managers and supervisors from selected hospitality industry in Valencia City, Bukidnon
Overall Total Quality Management	3.00	4.00	7.00	6.277	0.826	Strongly Agree	Very extensively observed in managers and supervisors from selected hospitality industry in Valencia City, Bukidnon
Operational Quality and Performance <i>OQP</i>	4.00	3.00	7.00	6.182	0.938	Strongly Agree	Very extensively observed in managers and supervisors from selected hospitality industry in Valencia City, Bukidnon
<i>Note: n = 242</i>							

Table 2 shows that all TQM dimensions and OQP obtained high mean scores, indicating strong implementation of quality management practices among the participating hospitality establishments. Customer Satisfaction and Relationship recorded the highest mean score, while Supplier Quality Management obtained the lowest among the TQM dimensions. Overall, the findings indicate that respondents perceived TQM practices and operational performance to be extensively implemented within their organizations.

Operational Quality and Performance OQP compared to Variable Sex

Table 3. The Differences in Level of Operational Quality and Performance OQP Between Male and Female Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon

Variable/Construct Compared to Operational Quality and Performance OQP	<i>Levene's Test (0.863) Homogeneity of Variance Assumed</i>				Hypothesis Decision
	t	df	Sig. (2-tailed) or P-value*	Mean Difference	
Level of Operational Quality and Performance OQP Between Male and	0.644	240.000	0.520	0.068	H ₀ 1 Accepted

Female Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon					
*There was no significant difference between the sex of the respondents and the level of OQP between male and female managers and supervisors in the selected hospitality industry in Valencia City, Bukidnon, with p-value = 0.520.					

Table 3 displays the results of the independent samples t-test to test if there is a statistically significant difference in Operational and Quality Performance (OQP) among the different demographic categories. Table 3 provides the means of OQP, t-value, df, p-value, and mean difference for each category. These values are used to determine whether to accept or reject H_0 at the .05 level of significance. If the p-value is $>.05$, it can be concluded that the OQP does not differ significantly between the two categories; however, if the p-value is $<.05$, then a statistical difference exists between the OQP for both categories.

Operational Quality and Performance OQP compared to Variable Educational Level, Department Assigned, and Position

Table 4. The Differences in Level of Operational Quality and Performance OQP as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Educational Level, Department Assigned, and Position

Level of Operational Quality and Performance OQP as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Educational Level, Department Assigned, and Position	P-value	Hypothesis Decision
Educational Level	0.277	H_0 1 Accepted
Department Assigned	0.288	H_0 1 Accepted
Position	0.877	H_0 1 Accepted
*There was no significant difference between the educational level group, department assigned, and, position of the respondents and the level of OQP as perceived by the managers and supervisor in the selected hospitality industry in Valencia City, Bukidnon with p-value >0.277 .		

A statistical analysis was conducted to assess the presence of a significant difference in Operational Quality and Performance (OQP) that exists based upon at least three categories of demographic variables. The data presented in Table 4 include the calculated F-statistic, Degrees of freedom, and the associated Sig. (p-value). These values are used to make an initial determination regarding whether the group differences mean OQP are statistically different from one another. The determination to either reject or fail to reject the null hypothesis is based upon the use of the .05 level of significance. When the p-value is $>.05$, it indicates that there is no statistically significant difference in OQP among the groups. Conversely, when the p-value $<.05$, it suggests a statistically significant difference in OQP among the groups.

Operational Quality and Performance OQP compared to Variable Working Experience

Table 5. The Differences in Level of Operational Quality and Performance as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Working Experience

Level of Operational Quality and Performance as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City,	Working Experience Grouped	Working Experience	Std. Error	Sig. (2-tailed) or P-	Hypothesis Decision
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Bukidnon, when Grouped According to Working Experience				value*	
<i>Operational Quality and Performance: Levene's Test (0.286) Homogeneity of Variance Assumed (Tukey)</i>	Less than 3 years	3 to 5 years	0.124	0.950	H ₀ 1 Accepted
		5 to 10 years	0.144	0.994	
		11 years above	0.220	0.986	
	3 to 5 years	Less than 3 years	0.124	0.950	
		5 to 10 years	0.152	0.998	
		11 years above	0.225	0.921	
	5 to 10 years	Less than 3 years	0.144	0.994	
		3 to 5 years	0.152	0.998	
		11 years above	0.237	0.963	
	11 years above	Less than 3 years	0.220	0.986	
		3 to 5 years	0.225	0.921	
		5 to 10 years	0.237	0.963	

**There was no significant difference between the working experience group of the respondents and the level of OQP as perceived by the managers and supervisors in selected hospitality industry in Valencia City, Bukidnon, with p-value>0.921.*

The One-Way ANOVA test was used to assess if there is a statistical difference in Operational Quality and Performance (OQP), by grouping it based on the selected demographic variable that has multiple categories. Table 5 shows the results of the One-Way ANOVA test. The results show the F-statistic value, the number of degrees of freedom associated with that F-statistic, and the significance (Sig.) or probability level (p-value). This determines whether there is a statistical difference in the means of the groups. If the p-value is above .05 then the null-hypothesis cannot be rejected (i.e., no statistically significant difference exists), and if it is below .05, it can be rejected.

Operational Quality and Performance OQP compared to the Variable Nature of Business/Establishment

Table 6. The Differences in Level of Operational Quality and Performance as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Nature of Business/Establishment

Level of Operational Quality and Performance as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when	Nature of Business/Estabishment Grouped	Nature of Business/Estabishment	Std. Error	Sig. (2-tailed) or P-value*	Hypothesis Decision
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Grouped According to Nature of Business/Establishment					
<i>Operational Quality and Performance: Levene's Test (0.688) Homogeneity of Variance Assumed (Tukey)</i>	Accommodation/Lodging	Dining	0.121	0.961	H ₀₁ Accepted
		Resorts	0.307	0.459	
	Dining	Accommodation/Lodging	0.121	0.961	
		Resorts	0.295	0.497	
	Resorts	Accommodation/Lodging	0.307	0.459	
		Dining	0.295	0.497	

**There was no significant difference between the nature of business/establishment group of the respondents and the level of OQP as perceived by the managers and supervisors in the selected hospitality industry in Valencia City, Bukidnon, with p-value > 0.459.*

Table 6 represents the results from a one-way Analysis of Variance (ANOVA) to determine if there is a statistically significant difference in Operational Quality and Performance (OQP) based on the demographic variables listed by type. It displays the calculated F value, degrees of freedom, and Sig. (p-value). These values represent the basis upon which hypotheses are tested. When the p-value exceeds 0.05, it indicates that the null hypothesis is true; therefore, there exists no statistically significant difference among the groupings. Conversely, when the p-value is less than or equal to 0.05, the null hypothesis is false; thus, there does exist a statistically significant difference among the groupings. The Mean Score for each grouping is also evaluated utilizing Level of Agreement Interpretations for Scale Descriptions and Interpretations. This scale categorizes responses into descriptive label descriptions, such as "Strongly Agree" and corresponding interpretations of examples like "very extensively observed." Therefore, through comparing the mean score of all groupings, an understanding can be gained as to how the respondents within the various groupings view OQP.

Significant Difference (between socio-demographic profile to Total Quality Management) – Using Compare Means > Independent Samples t-Test, One Way ANOVA

Independent Samples t-Test

Total Quality Management (OL, CSR, HRF, SQP, and SQM) compared to Variable Sex

Table 7. The Differences in Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) Between Male and Female Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon

Variable/Construct Compared to <i>Organizational Leadership OL</i> Between Sex	<i>Levene's Test (0.485) Homogeneity of Variance Assumed</i>				<i>Hypothesis Decision</i>
	t	df	Sig. (2-tailed) or P-value*	Mean Difference	
Level of Operational Quality and Performance OQP Between Male and Female Managers and Supervisors in Selected Hospitality Industry in Valencia	-0.170	240.000	0.865	-0.018	H ₀₂ Accepted

City, Bukidnon					
Variable/Construct Compared to Customer Satisfaction and Relationship CSR	<i>^aLevene's Test (0.202) Homogeneity of Variance Assumed</i>				Hypothesis Decision
	t	df	Sig. (2-tailed) or P-value*	Mean Difference	
Level of Operational Quality and Performance OQP Between Male and Female Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon	-0.290	240.000	0.772	-0.028	H ₀₂ Accepted
Variable/Construct Compared to Human Resource Focus HRF	<i>^aLevene's Test (0.880) Homogeneity of Variance Assumed</i>				Hypothesis Decision
	t	df	Sig. (2-tailed) or P-value*	Mean Difference	
Level of Operational Quality and Performance OQP Between Male and Female Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon	0.061	240.000	0.951	0.006	H ₀₂ Accepted
Variable/Construct Compared to Strategic Quality Planning SQP	<i>^aLevene's Test (0.564) Homogeneity of Variance Assumed</i>				Hypothesis Decision
	t	df	Sig. (2-tailed) or P-value*	Mean Difference	
Level of Operational Quality and Performance OQP Between Male and Female Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon	-0.192	240.000	0.848	-0.022	H ₀₂ Accepted
Variable/Construct Compared to Supplier Quality Management SQM	<i>^aLevene's Test (0.250) Homogeneity of Variance Assumed</i>				Hypothesis Decision
	t	df	Sig. (2-tailed) or P-value*	Mean Difference	
Level of Operational Quality and Performance OQP Between Male and Female Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon	-0.025	240.000	0.980	-0.003	H ₀₂ Accepted
Variable/Construct Compared to Overall Total Quality Management (OL+CSR+HRF+SQP+SQM)	<i>^aLevene's Test (0.317) Homogeneity of Variance Assumed</i>				Hypothesis Decision
	t	df	Sig. (2-tailed) or P-value*	Mean Difference	
Level of Operational Quality and Performance OQP Between Male and Female Managers and Supervisors in Selected Hospitality Industry in Valencia	-0.136	240.000	0.892	-0.013	H ₀₂ Accepted

City, Bukidnon					
*There was no significant difference between the sex of the respondents and the level of Total Quality Management (OL; CSR; HRF; SQP; and, SQM) between male and female managers and supervisors in selected hospitality industry in Valencia City, Bukidnon with p-value >0.772.					

Table 7 illustrates the findings from testing whether there was a statistically significant difference within the five different TQM dimensions – Organizational Leadership, Customer Satisfaction and Relationship, Human Resource Focus, Strategic Quality Planning, and Supplier Quality Management — when categorized by the three demographic variables. The table contains the p-value along with an explanation of what the p-value means for each of the TQM dimensions, as well as for total TQM. The decision to reject the Null Hypothesis that there are no differences in perceived TQM levels across the categories for the selected demographic variable(s) is made at a 95% confidence interval using alpha = .05. If the calculated p-Value > .05, there were no statistically significant differences; if p < .05, then there were statistically significant differences.

One-Way ANOVA

Total Quality Management (OL, CSR, HRF, SQP, and SQM) compared to Variable Educational Level

Table 8. The Differences in Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Educational Level

Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Educational Level	P-value	Hypothesis Decision
Organizational Leadership <i>OL</i>	0.622	H ₀ 2 Accepted
Customer Satisfaction and Relationship <i>CSR</i>	0.599	H ₀ 2 Accepted
Human Resource Focus <i>HRF</i>	0.611	H ₀ 2 Accepted
Strategic Quality Planning <i>SQP</i>	0.504	H ₀ 2 Accepted
Supplier Quality Management <i>SQM</i>	0.126	H ₀ 2 Accepted
Overall Total Quality Management (<i>OL+CSR+HRF+SQP+SQM</i>)	0.394	H ₀ 2 Accepted

*There was no significant difference between the educational level group of the respondents and the level of Total Quality Management (OL; CSR; HRF; SQP; and SQM) as perceived by the managers and supervisors in the selected hospitality industry in Valencia City, Bukidnon, with p-value >0.126.

Table 8 contains the results of the statistical test concerning whether the TQM dimensions (the Organizational Leadership (OL), Customer Satisfaction and Relationship (CSR), Human Resource Focus (HRF), Strategic Quality Planning (SQP), and Supplier Quality Management (SQM)) differ significantly based upon respondents' educational status. The results also include p-values and a hypothesis decision for each TQM dimension, as well as an overall decision for total TQM. As shown by the data presented in the table, all p-values are greater than .05; therefore, it can be concluded that there is no statistically significant difference among the levels of TQM when respondents' responses were aggregated into educational status. Thus, the null-hypothesis was accepted for all TQM dimensions, as well as for total TQM. Therefore, this indicates that respondents from different educational backgrounds perceive the use of TQM in their respective organizations similarly. In addition, the results indicate consistency in how TQM is perceived across the different educational categories.

Total Quality Management (OL, CSR, HRF, SQP, and SQM) compared to Variable Department Assigned

Table 9. The Differences in Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Department Assigned

Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Department Assigned	P-value	Hypothesis Decision
Organizational Leadership <i>OL</i>	0.595	H ₀ 2 Accepted
Customer Satisfaction and Relationship <i>CSR</i>	0.207	H ₀ 2 Accepted
Human Resource Focus <i>HRF</i>	0.196	H ₀ 2 Accepted
Strategic Quality Planning <i>SQP</i>	0.060	H ₀ 2 Accepted
Supplier Quality Management <i>SQM</i>	0.407	H ₀ 2 Accepted
Overall Total Quality Management (<i>OL+CSR+HRF+SQP+SQM</i>)	0.216	H ₀ 2 Accepted
*There was no significant difference between the department assigned group of the respondents and the level of Total Quality Management (OL, CSR; HRF; SQP; and SQM) as perceived by the managers and supervisor in the selected hospitality industry in Valencia City, Bukidnon, with p-value >0.060.		

The following results of the analysis of whether or not the different departments at this facility have a significantly different level of Total Quality Management (TQM) dimensions — Organizational Leadership (OL), Customer Satisfaction and Relationship (CSR), Human Resource Focus (HRF), Strategic Quality Planning (SQP), and Supplier Quality Management (SQM) — are presented in Table 9. The table provides the p-value and the corresponding decision on the hypotheses for each of the five TQM dimensions as well as for overall TQM. Since all p-values were found to exceed 0.05, it was concluded that there is no statistically significant difference in perceived levels of TQM among the various departments. Therefore, since the p-values exceeded the threshold value, the null hypothesis is supported for all TQM dimensions and for overall TQM. This supports the conclusion that the respondents from the different departments perceive similarly with respect to the extent to which TQM is practiced. These findings indicate uniformity in how quality management practices are implemented and evaluated, regardless of an employee's departmental assignment.

Total Quality Management (OL, CSR, HRF, SQP, and SQM) compared to Variable Position

Table 10. The Differences in Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Position

Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Position	P-value	Hypothesis Decision
Organizational Leadership <i>OL</i>	0.395	H ₀ 2 Accepted
Customer Satisfaction and Relationship <i>CSR</i>	0.709	H ₀ 2 Accepted

Human Resource Focus <i>HRF</i>	0.691	H ₀ 2 Accepted
Strategic Quality Planning <i>SQP</i>	0.870	H ₀ 2 Accepted
Supplier Quality Management <i>SQM</i>	0.701	H ₀ 2 Accepted
Overall Total Quality Management (<i>OL+CSR+HRF+SQP+SQM</i>)	0.761	H ₀ 2 Accepted
*There was no significant difference between the position group of the respondents and the level of Total Quality Management (<i>OL, CSR; HRF; SQP; and SQM</i>) as perceived by the managers and supervisors in the selected hospitality industry in Valencia City, Bukidnon, with <i>p</i> -value >0.395.		

Table 10 lists the data from the study that examined whether or not a difference exists in the level of total quality management (TQM) characteristics when grouped by position. Included with this information are the respective P values associated with each TQM characteristic, as well as the hypothesis test decision for each TQM characteristic and overall TQM. Concerning P values for each of the TQM dimensions and for overall TQM, all P values were found to exceed .05 levels of significance. Thus, based on these results, there were no statistically significant differences in the perception of the level of TQM amongst those holding different positions. As such, the null hypothesis can be said to have been supported for all dimensions and overall TQM. These findings suggest that owners, managers, supervisors, and others who hold varying positions within an organization possess similar views concerning their organizations' implementation of TQM principles. In addition, the findings support that there is consistency in the assessments of quality management practices by various roles within an organization.

Total Quality Management (*OL, CSR, HRF, SQP, and SQM*) compared to Variable Working Experience

Table 11. The Differences in Level of Total Quality Management (*OL, CSR, HRF, SQP, and SQM*) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Working Experience

Level of Total Quality Management (<i>OL, CSR, HRF, SQP, and SQM</i>) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Working Experience	Working Experience Grouped	Working Experience	Std. Error	Sig. (2-tailed) or P-value*	Hypothesis Decision
<i>Organizational Leadership OL: Levene's Test (0.381) Homogeneity of Variance Assumed (Tukey)</i>	Less than 3 years	3 to 5 years	0.123	0.985	H ₀ 2 Accepted
		5 to 10 years	0.143	0.733	
		11 years above	0.218	0.992	
	3 to 5 years	Less than 3 years	0.123	0.985	
		5 to 10 years	0.151	0.902	
		11 years above	0.223	1.000	

	5 to 10 years	Less than 3 years	0.143	0.733	
		3 to 5 years	0.151	0.902	
		11 years above	0.235	0.984	
	11 years above	Less than 3 years	0.218	0.992	
		3 to 5 years	0.223	1.000	
		5 to 10 years	0.235	0.984	
Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Working Experience	Working Experience Grouped	Working Experience	Std. Error	Sig. (2-tailed) or P-value*	Hypothesis Decision
<i>Customer Satisfaction and Relationship CSR: Levene's Test (0.303) Homogeneity of Variance Assumed (Tukey)</i>	Less than 3 years	3 to 5 years	0.112	0.533	H ₀ 2 Accepted
		5 to 10 years	0.129	0.382	
		11 years above	0.198	0.715	
	3 to 5 years	Less than 3 years	0.112	0.533	
		5 to 10 years	0.137	0.976	
		11 years above	0.203	0.992	
	5 to 10 years	Less than 3 years	0.129	0.382	
		3 to 5 years	0.137	0.976	
		11 years above	0.213	1.000	
	11 years above	Less than 3 years	0.198	0.715	
		3 to 5 years	0.203	0.992	
		5 to 10 years	0.213	1.000	
Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) as Perceived by the Managers and Supervisors in Selected	Working Experience Grouped	Working Experience	Std. Error	Sig. (2-tailed) or P-value*	Hypothesis Decision

Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Working Experience					
<i>Human Resource Focus HRF: Levene's Test (0.582) Homogeneity of Variance Assumed (Tukey)</i>	Less than 3 years	3 to 5 years	0.115	0.913	H ₀ 2 Accepted
		5 to 10 years	0.133	0.798	
		11 years above	0.203	0.945	
	3 to 5 years	Less than 3 years	0.115	0.913	
		5 to 10 years	0.141	0.988	
		11 years above	0.208	0.998	
	5 to 10 years	Less than 3 years	0.133	0.798	
		3 to 5 years	0.141	0.988	
		11 years above	0.219	1.000	
	11 years above	Less than 3 years	0.203	0.945	
		3 to 5 years	0.208	0.998	
		5 to 10 years	0.219	1.000	
Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Working Experience	Working Experience Grouped	Working Experience	Std. Error	Sig. (2-tailed) or P-value*	
<i>Strategic Quality Planning SQP: Levene's Test (0.445) Homogeneity of Variance Assumed (Tukey)</i>	Less than 3 years	3 to 5 years	0.132	0.893	H ₀ 2 Accepted
		5 to 10 years	0.153	0.988	
		11 years above	0.234	0.992	
	3 to 5 years	Less than 3 years	0.132	0.893	
		5 to 10 years	0.162	0.993	

		11 years above	0.240	0.999	
	5 to 10 years	Less than 3 years	0.153	0.988	
		3 to 5 years	0.162	0.993	
		11 years above	0.253	1.000	
	11 years above	Less than 3 years	0.234	0.992	
		3 to 5 years	0.240	0.999	
		5 to 10 years	0.253	1.000	
Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Working Experience	Working Experience Grouped	Working Experience	Std. Error	Sig. (2-tailed) or P-value*	Hypothesis Decision
<i>Supplier Quality Management SQM: Levene's Test (0.211) Homogeneity of Variance Assumed (Tukey)</i>	Less than 3 years	3 to 5 years	0.145	1.000	H ₀₂ Accepted
		5 to 10 years	0.168	0.908	
		11 years above	0.257	0.956	
	3 to 5 years	Less than 3 years	0.145	1.000	
		5 to 10 years	0.178	0.890	
		11 years above	0.264	0.944	
	5 to 10 years	Less than 3 years	0.168	0.908	
		3 to 5 years	0.178	0.890	
		11 years above	0.277	1.000	
	11 years above	Less than 3 years	0.257	0.956	
		3 to 5 years	0.264	0.944	
		5 to 10 years	0.277	1.000	
Level of Total Quality Management (OL, CSR, HRF, SQP, and SQM) as Perceived	Working Experience	Working Experience	Std. Error	Sig. (2-tailed) or P-	Hypothesis Decision

by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Working Experience	Grouped			value*	
<i>Overall Total Quality Management (OL+CSR+HRF+SQP+SQM): Levene's Test (0.474) Homogeneity of Variance Assumed (Tukey)</i>	Less than 3 years	3 to 5 years	0.111	0.904	H ₀ 2 Accepted
		5 to 10 years	0.129	0.918	
		11 years above	0.196	0.988	
	3 to 5 years	Less than 3 years	0.111	0.904	
		5 to 10 years	0.136	1.000	
		11 years above	0.201	1.000	
	5 to 10 years	Less than 3 years	0.129	0.918	
		3 to 5 years	0.136	1.000	
		11 years above	0.212	1.000	
	11 years above	Less than 3 years	0.196	0.988	
		3 to 5 years	0.201	1.000	
		5 to 10 years	0.212	1.000	

*There was no significant difference between the working experience group of the respondents and the level of Total Quality Management (OL; CSR; HRF; SQP; and, SQM) as perceived by the managers and supervisors in selected hospitality industry in Valencia City, Bukidnon, with $p\text{-value} > 0.382$.

Table 11 provides an overview of the data that was analyzed using statistical methods for the examination of a possible difference in the five TQM dimensions (i.e., Organizational Leadership [OL], Customer Satisfaction & Relationship [CSR], Human Resource Focus [HRF], Strategic Quality Planning [SQP] and Supplier Quality Management [SQM]) based on whether the type of organization/establishment was either manufacturing or service. The table lists the corresponding p-values along with the decision for each hypothesis tested. As reported in the table, all p-values were found to be greater than 0.05 level of significance, which indicates that there is no statistically significant difference in perceived total quality management levels between the different types of organizations. Thus, the null-hypothesis is accepted. In other words, it appears that managers/supervisors perceive similar levels of TQM across their respective industries/businesses. These findings also indicate that the industry type has little impact on the assessment of TQM practices by managers, supervisors, and other top management positions.

Total Quality Management (OL, CSR, HRF, SQP, and SQM) compared to Variable Nature of Business/Establishment

Table 12. The Differences in Level of Total Quality Management (OL; CSR; HRF; SQP; and, SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Nature of Business/Establishment

Level of Total Quality Management (OL; CSR; HRF; SQP; and, SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Nature of Business/Establishment	Nature of Business/Establishment Grouped	Nature of Business/Establishment	Std. Error	Sig. (2-tailed) or P-value*	Hypothesis Decision
<i>Organizational Leadership OL: Levene's Test (0.246) Homogeneity of Variance Assumed (Tukey)</i>	Accommodation/Lodging	Dining	0.120	0.471	H ₀₂ Accepted
		Resorts	0.302	0.425	
	Dining	Accommodation/Lodging	0.120	0.471	
		Resorts	0.291	0.178	
	Resorts	Accommodation/Lodging	0.302	0.425	
		Dining	0.291	0.178	
Level of Total Quality Management (OL; CSR; HRF; SQP; and, SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Nature of Business/Establishment	Nature of Business/Establishment Grouped	Nature of Business/Establishment	Std. Error	Sig. (2-tailed) or P-value*	Hypothesis Decision
<i>Customer Satisfaction and Relationship CSR: Levene's Test (0.095) Homogeneity of Variance Assumed (Tukey)</i>	Accommodation/Lodging	Dining	0.110	0.974	H ₀₂ Accepted
		Resorts	0.277	0.347	
	Dining	Accommodation/Lodging	0.110	0.974	

		Resorts	0.266	0.275	
	Resorts	Accommodation/ Lodging	0.277	0.347	
		Dining	0.266	0.275	
Level of Total Quality Management (OL; CSR; HRF; SQP; and, SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Nature of Business/Establishment	Nature of Business/Establishment Grouped	Nature of Business/Establishment	Std. Error	Sig. (2-tailed) or P-value*	Hypothesis Decision
<i>Human Resource Focus HRF: Levene's Test (0.504) Homogeneity of Variance Assumed (Tukey)</i>	Accommodation/Lodging	Dining	0.112	0.547	H ₀₂ Accepted
		Resorts	0.283	0.526	
	Dining	Accommodation/ Lodging	0.112	0.547	
		Resorts	0.272	0.267	
	Resorts	Accommodation/ Lodging	0.283	0.526	
		Dining	0.272	0.267	
Level of Total Quality Management (OL; CSR; HRF; SQP; and, SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Nature of Business/Establishment	Nature of Business/Establishment Grouped	Nature of Business/Establishment	Std. Error	Sig. (2-tailed) or P-value*	Hypothesis Decision
<i>Strategic Quality Planning SQP: Levene's Test (0.231) Homogeneity of Variance Assumed (Tukey)</i>	Accommodation/Lodging	Dining	0.129	0.807	H ₀₂ Accepted
		Resorts	0.325	0.216	
	Dining	Accommodation/ Lodging	0.129	0.807	

		Resorts	0.313	0.114	
	Resorts	Accommodation/ Lodging	0.325	0.216	
		Dining	0.313	0.114	
Level of Total Quality Management (OL; CSR; HRF; SQP; and, SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Nature of Business/Establishment	Nature of Business/Establishment Grouped	Nature of Business/Establishment	Std. Error	Sig. (2-tailed) or P-value*	Hypothesis Decision
<i>Supplier Quality Management SQM: Levene's Test (0.285) Homogeneity of Variance Assumed (Tukey)</i>	Accommodation/Lodging	Dining	0.141	0.884	H ₀₂ Accepted
		Resorts	0.357	0.233	
	Dining	Accommodation/ Lodging	0.141	0.884	
		Resorts	0.344	0.142	
	Resorts	Accommodation/ Lodging	0.357	0.233	
		Dining	0.344	0.142	
Level of Total Quality Management (OL; CSR; HRF; SQP; and, SQM) as Perceived by the Managers and Supervisors in Selected Hospitality Industry in Valencia City, Bukidnon, when Grouped According to Nature of Business/Establishment	Nature of Business/Establishment Grouped	Nature of Business/Establishment	Std. Error	Sig. (2-tailed) or P-value*	Hypothesis Decision
<i>Overall Total Quality Management (OL+CSR+HRF+SQP+SQM): Levene's Test (0.191) Homogeneity of Variance Assumed (Tukey)</i>	Accommodation/Lodging	Dining	0.108	0.706	H ₀₂ Accepted
		Resorts	0.272	0.242	
	Dining	Accommodation/ Lodging	0.108	0.706	

		Lodging		
		Resorts	0.262	0.113
	Resorts	Accommodation/ Lodging	0.272	0.242
		Dining	0.262	0.113
*There was no significant difference between the nature of business/establishment group of the respondents and the level of Total Quality Management (OL; CSR; HRF; SQP; and, SQM) as perceived by the managers and supervisors in selected hospitality industry in Valencia City, Bukidnon, with p-value>0.113.				

Results of the Statistical Analysis Table 12 illustrates the results of the statistical comparison of the degree of Total Quality Management (TQM) dimensions when categorized by years of work experience: Organizational Leadership (OL), Customer Satisfaction and Relationship (CSR), Human Resource Focus (HRF), Strategic Quality Planning (SQP), and Supplier Quality Management (SQM). The table contains the associated p-values and a decision regarding the hypotheses for each TQM dimension and Overall TQM. The decision whether to accept or reject the null hypothesis was made using the 0.05 alpha level of significance. Given that the reported p-value is larger than 0.05, it can be concluded that there is no statistically significant variation in respondents' perception of the degree of TQM among the various groupings of years of work experience. Therefore, since the null hypothesis is accepted for all TQM dimensions and Overall TQM, this suggests that respondents with varying degrees of work experience generally hold consistent views toward the extent to which quality management practices are implemented. The data illustrate consistency in how quality management practices are viewed from one degree of work experience to another.

Significant Relationship – Using Correlate > Bivariate Technique > Pearson R Coefficient

Table 13. The Relationship Between Overall Total Quality Management and Operational Quality and Performance Among Managers and Supervisors Respondents in Selected Hospitality Industry in Valencia City, Bukidnon

Construct	Mean	Std. Deviation	(1)	(2)	Interpretation DV to IV (1)		Remarks
					According to Hair et al. (2013)	According to Cohen (1988), ^a	
(1) Operational Quality and Performance OQP (DV)	5.978	0.814	(0.905)				
(2) Overall Total Quality Management (OL+CSR+HRF+SQP+SQM) (IV)	6.040	0.728	.836**	(0.954)	Very Strong Positive Correlation	Large Positive Relationship	H₀₃ Not Accepted
**. Correlation is significant at the 0.01 level (2-tailed).							
^a Direction and Strength of the variables' relationship							
Values in the diagonal with parentheses are the Cronbach's Alpha							
n=242							

Table 13 lists the Pearson correlation test outcomes for the assessment of the connection between overall total

quality management (TQM) and operational quality and performance (OQP) of managers/supervisors from select hospitality businesses in Valencia City, Bukidnon. In this table, it was found that the average and standard deviations of each variable are shown along with the calculated Pearson r value. As indicated by the correlation coefficient (.836), there exists an extremely strong positive correlation between overall TQM and OQP. Therefore, higher levels of TQM implementation correlate to higher levels of OQP. A probability value of < .01 (two-tailed) or ** signifies that the observed relationship is significantly different from chance. Thus, based upon the description included within the table, the described relationship has been identified as being characterized by a "very strong positive correlation" and/or a "large positive relationship". Since the null hypothesis, which states that no significant relationship exists between overall TQM and OQP, has not been supported by these findings, the above-stated conclusions describe the nature of the relationships between the described variables and provide a summary of the strength/direction of associations between them.

Table 14. The Relationship Between Total Quality Management Dimensions (OL, CSR, HRF, SQP and SQM) and Operational Quality and Performance OQP Among Managers and Supervisors Respondents in Selected Hospitality Industry in Valencia City, Bukidnon

Construct	Mean	Std. Dev.	(1)	(2)	(3)	(4)	(5)	(6)	Interpretation DV to IV (1)		Remarks
									According Hair et al. (2013)	According to Cohen (1988) ^a	
(1) Operational Quality and Performance OQP (DV)	5.978	0.814	(0.905)								
(2) Organizational Leadership OL (IV) ^b	6.016	0.808	.805**	(0.815)					Strong Positive Correlation	Large Positive Relationship	H ₀₃ Not Accepted
(3) Customer Satisfaction and Relationship CSR (IV)	6.057	0.737	.798**	.837**	(0.838)				Strong Positive Correlation	Large Positive Relationship	H ₀₃ Not Accepted
(4) Human Resource Focus HRF (IV)	6.076	0.754	.789**	.849**	.831**	(0.835)			Strong Positive Correlation	Large Positive Relationship	H ₀₃ Not Accepted
(5) Strategic Quality Planning SQP (IV)	6.064	0.869	.710**	.694**	.756**	.778**	(0.823)		Strong Positive Correlation	Large Positive Relationship	H ₀₃ Not Accepted
(6) Supplier Quality Management SQM (IV)	5.988	0.953	.621**	.638**	.638**	.747**	.579**	(0.751)	Strong Positive Correlation	Large Positive Relationship	H ₀₃ Not Accepted

**.	Correlation is significant at the 0.01 level (2-tailed).
^a	Direction and Strength of the variables' relationship
	Values in the diagonal with parenthesis are the Cronbach's Alpha
	n=242
^b	Organizational Leadership OL obtained the highest correlation (<i>Pearson R Coefficient = 0.805 and p-value < 0.001</i>) to Operational Quality and Performance <i>OQP</i> . Followed by Customer Satisfaction and Relationship CSR (<i>Pearson R Coefficient = 0.798 and p-value < 0.001</i>). Then, Human Resource Focus HRF (<i>Pearson R Coefficient = 0.789 and p-value < 0.001</i>). And, Strategic Quality Planning SQP (<i>Pearson R Coefficient = 0.710 and p-value < 0.001</i>). Lastly, Supplier Quality Management SQM (<i>Pearson R Coefficient = 0.621 and p-value < 0.001</i>). Overall Total Quality Management (OL+CSR+HRF+SQP_SQM) had a very strong positive correlation and large positive relationship to OQP as perceived by the respondents from selected hospitality industry in Valencia City, Bukidnon.

Table 14 illustrates the results of the Pearson correlation analysis testing for a relationship between each of the five Total Quality Management (TQM) dimensions-Organizational Leadership (OL), Customer Satisfaction and Relationship (CSR), Human Resource Focus (HRF), Strategic Quality Planning (SQP) and Supplier Quality Management (SQM)-and Operational and Quality Performance (OQP) for managers, supervisors, and other top management positions in selected hospitality industries within Valencia City, Bukidnon. The table shows the means and standard deviations of all constructs, including the corresponding Pearson r coefficients. Each TQM dimension has a very high positive correlation to OQP; therefore, improving on each of those specific dimensions will correspond to an improvement in operational quality/performance. Additionally, the significance level of 0.01 for a two-tailed test is represented in the table by **. Therefore, based on the interpretation contained within the table, these are considered to be very high positive correlations with a large positive relationship. Since the null hypothesis was rejected, which states that none of the TQM Dimensions are significantly related to OQP, the findings represent the association strength/direction of each TQM Dimension and OQP.

Significant Influence – Using Regression > Linear Technique > Beta (β) Coefficient

Table 15. Simple Linear Regression (Enter Method) Analysis on Significant Predictors of Variables: Total Quality Management to Operational Quality and Performance

Model	R	R ²	Adjusted R ²	Durbin Watson*
1	.805a	0.648	0.646	
2	.836b	0.699	0.697	
3	.844c	0.713	0.709	
4	.848d	0.720	0.715	
5	.849e	0.721	0.715	1.770

Note: n = 242

a Predictors: (Constant), Organizational_Leadership_Mean

b Predictors: (Constant), Organizational_Leadership_Mean, Customer_Satisfaction_and_Relationship_Mean

c Predictors: (Constant), Organizational_Leadership_Mean, Customer_Satisfaction_and_Relationship_Mean, Human_Resource_Focus_Mean

d Predictors: (Constant), Organizational_Leadership_Mean, Customer_Satisfaction_and_Relationship_Mean,

Human_Resource_Focus_Mean, Strategic_Quality_Planning_Mean
e Predictors: (Constant), Organizational_Leadership_Mean, Customer_Satisfaction_and_Relationship_Mean, Human_Resource_Focus_Mean, Strategic_Quality_Planning_Mean, Strategic_Quality_Management_Mean
Constant to all Models. Dependent Variable: Operational Quality and Performance
*Autocorrelation issue - check the Durbin-Watson value, which should be between 2 and 4. In this case, there was a slight autocorrelation issue (the Durbin-Watson value was 1.770).
*The R-Square value tells how much of the variance in the DV was explained by the model. In this case, the value was between 0.648 and 0.721 means between 64.80% to 72.10% of the variance in the Total Quality Management concept most likely influenced the Operational Quality and Performance of respondents from the selected hospitality industry in Valencia City, Bukidnon. In other words, this study's findings, which ranged from 64.80% to 72.10%, highly fit the whole model used in the research. All the predictor variables, SPSS identified ALL variables as included because its contribution to the model was statistically significant after controlling for the other predictors. These indicated that these variables did uniquely explain variation in the dependent variable.

Table 15 presents the regression analysis examining the influence of TQM dimensions on OQP. The results indicate that Organizational Leadership, Customer Satisfaction and Relationship, and Strategic Quality Planning significantly predicted OQP. The regression model explained approximately 72.1% of the variance in operational and quality performance, indicating that TQM dimensions substantially contribute to organizational performance within hospitality establishments.

Table 16. Simple Linear Regression (Enter Method) Analysis on Significant Predictor of Variables Total Quality Management Concept (Dimensions: OL, CSR, HRF, SQP, and SQM) to Operational Quality and Performance

Model	Variables	Standardized Coefficients (β)**	t	p-value	Collinearity Tolerance*	VIF*	Hypothesis Decision	Remarks
1	(Constant): Operational Quality and Performance OQP (DV)							
	Organizational Leadership OL (IV)	0.805	20.998	<.001	1.000	1.000	H₀4 NOT Accepted	Significantly influence Operational Quality and Performance
2	(Constant): Operational Quality and Performance OQP (DV)							
	Organizational Leadership OL (IV)	0.457	7.049	<.001	0.300	3.335	H₀4 NOT Accepted	Significantly influence Operational Quality and Performance
	Customer Satisfaction and Relationship CSR (IV)	0.416	6.424	<.001	0.300	3.335	H₀4 NOT Accepted	Significantly influence Operational Quality and Performance
3								

	(Constant): Operational Quality and Performance <i>OQP</i> (DV)							
	Organizational Leadership <i>OL</i> (IV)	0.334	4.542	<.001	0.224	4.471	<i>H₀4 NOT Accepted</i>	<i>Significantly influence Operational Quality and Performance</i>
	Customer Satisfaction and Relationship <i>CSR</i> (IV)	0.319	4.573	<.001	0.248	4.040	<i>H₀4 NOT Accepted</i>	<i>Significantly influence Operational Quality and Performance</i>
	Human Resource Focus <i>HRF</i> (IV)	0.240	3.318	0.001	0.231	4.336	<i>H₀4 NOT Accepted</i>	<i>Significantly influence Operational Quality and Performance</i>
4								
	(Constant): Operational Quality and Performance <i>OQP</i> (DV)							
	Organizational Leadership <i>OL</i> (IV)	0.342	4.695	<.001	0.223	4.481	<i>H₀4 NOT Accepted</i>	<i>Significantly influence Operational Quality and Performance</i>
	Customer Satisfaction and Relationship <i>CSR</i> (IV)	0.266	3.669	<.001	0.225	4.445	<i>H₀4 NOT Accepted</i>	<i>Significantly influence Operational Quality and Performance</i>
	Human Resource Focus <i>HRF</i> (IV)	0.168	2.173	0.031	0.197	5.072	<i>H₀4 NOT Accepted</i>	<i>Significantly influence Operational Quality and Performance</i>
	Strategic Quality Planning <i>SQP</i> (IV)	0.140	2.436	0.016	0.355	2.813	<i>H₀4 NOT Accepted</i>	<i>Significantly influence Operational Quality and Performance</i>
5								
	(Constant): Operational Quality and Performance <i>OQP</i> (DV)							
	Organizational Leadership <i>OL</i> (IV)**	0.343	4.714	<.001	0.223	4.482	<i>H₀4 NOT Accepted</i>	<i>Significantly influence Operational Quality and Performance</i>
	Customer Satisfaction and Relationship <i>CSR</i> (IV)	0.262	3.608	<.001	0.224	4.456	<i>H₀4 NOT Accepted</i>	<i>Significantly influence Operational Quality and Performance</i>
	Human Resource Focus <i>HRF</i> (IV)	0.124	1.448	0.149	0.160	6.258	<i>H₀4 Accepted</i>	<i>Did not significantly influence Operational Quality and Performance</i>
	Strategic Quality Planning <i>SQP</i> (IV)	0.142	2.462	0.015	0.355	2.814	<i>H₀4 NOT Accepted</i>	<i>Significantly influence Operational Quality and Performance</i>
	Supplier Quality	0.061	1.170	0.243	0.440	2.271	<i>H₀4 Accepted</i>	<i>Did not significantly influence Operational Quality and</i>

Management SQM (IV)							Performance
<p><i>Note: n = 242; All the predictor variables, SPSS identified ALL variables as included because its contribution to the model was statistically significant after controlling for the other predictors. These indicated that these variables did uniquely explain variation in the dependent variable.</i></p>							
<p><i>Constant to all Models. Dependent Variable: Operational Quality and Performance OQP</i></p>							
<p><i>*Multi-collinearity issue - check Tolerance value should be more than 0.3 and VIF value should be less than 4. In this case, there was a multi-collinearity issue especially in Model 2 to 5 (Tolerance value was less than 0.3 and VIF values was more than 4.)</i></p>							
<p><i>**As to Model 5, the highest predictor factor influencing Operational Quality and Performance OQP was Organizational Leadership OL ($\beta=0.343$ and $p\text{-value} < 0.001$) and followed by Customer Satisfaction and Relationship CSR ($\beta=0.262$ and $p\text{-value} < 0.001$) as a significant predictor of OQP. Lastly, Strategic Quality Planning SQP ($\beta=0.142$ and $p\text{-value}=0.015$). Although, the variable Human Resource Focus HRF showed as a significant predictor to OQP in Model 1 to 4, but in Model 5 it did not shown any significance when Supplier Quality Management was added in the model. Likewise, Supplier Quality Management SQM showed no significant predictor to OQP in Model 5 as perceived by the managers and supervisors from selected hospitality industry in Valencia City, Bukidnon.</i></p>							

Table 16 provides the results from a linear regression analysis that assessed how individual Total Quality Management (TQM) dimensions impact Operational and Quality Performance (OQP) separately. In addition to the unstandardized B values for each predictor, the table reports the standard beta coefficients for each predictor, t-values, and associated p-values (Sig.). The standard beta value reflects both the magnitude and direction of the relationship among the TQM dimensions and OQP while controlling for all other variables within the model. The t-value examines whether or not each predictor makes a unique contribution to the regression equation. To determine if a predictor has an independent influence on OQP, a researcher compares the p-value reported with the .05 level of significance. A p-value equal to or less than .05 suggests that the predictor independently influences OQP, whereas a p-value greater than .05 does not suggest statistical independence. Therefore, the table illustrates those TQM dimensions that have independent relationships with OQP. Overall, the findings reflect the relative contribution of each TQM dimension toward explaining variation in OQP.

Table 17. Regression Model Summary of Overall Total Quality Management and Operational Quality Performance

Model	R	R ²	Adjusted R ²	Durbin Watson*
1	.836a	0.698	0.697	1.746
<p><i>Note: n = 242</i></p>				
<p>a Predictors: (Constant), Overall_Total_Quality_Management_Mean</p>				
<p><i>Constant to all Models. Dependent Variable: Operational Quality and Performance OQP</i></p>				
<p><i>*Autocorrelation issue - check the Durbin-Watson value, which should be between 2 and 4. In this case, there was a slightly autocorrelation issue (the Durbin-Watson value was 1.746)</i></p>				
<p><i>*The R-Square value tells how much of the variance in the DV was explained by the model. In this case, the value was 0.698, which means 69.80% of the variance in the Total Quality Management (as overall) influenced the Operational Quality and Performance OQP as perceived by the managers and supervisors' respondents of the selected Hospitality Industry in Valencia City, Bukidnon. In other words, this study's findings, which ranged of 69.80%, most likely fit the whole model used in the research. All the predictor variables, SPSS identified ALL variables as included because its contribution to the model was statistically significant after controlling for the other predictors. These indicated that these variables did uniquely explain variation in the dependent variable.</i></p>				

Table 17 presents the regression model summary showing the relationship between Overall Total Quality

Management (TQM) and Operational Quality Performance (OQP). The table includes the R value, R², Adjusted R², and Durbin-Watson statistic, which indicate the explanatory power and fitness of the regression model. The results reveal the extent to which Overall TQM explains the variation in OQP and determine whether the regression model is appropriate and reliable for the study.

Table 18. Regression Coefficients of Overall Total Quality Management as Predictor of Operational Quality Performance

Model	Variables	Standardized Coefficients (β)**	t	p-value	Collinearity Tolerance*	VIF*	Hypothesis Decision	Remarks
1								
	(Constant): Operational Quality and Performance OQP (DV)							
	Overall Total Quality Management (OL+CSR+HRF+SQP+SQM) (IV)**	0.836	23.556	<.001	1.000	1.000	<i>H₀₄ NOT Accepted</i>	<i>Significantly influence Operational Quality and Performance</i>

Note: n = 242

Constant to all Models. Dependent Variable: Operational Quality and Performance OQP

*Multi-collinearity issue - check the Tolerance value should be more than 0.3 and VIF value should be less than 4. In this case, there was no multicollinearity issue (Tolerance value was more than 0.3 and VIF values were less than 4.)

**The total mean of five dimensions under Total Quality Management concepts (OL+CSR+HRF+SQP+SQM) showed that there was a significant influence on Operational Quality and Performance OQP (p-value <.001).

Table 18 presents the regression coefficients analysis of Overall Total Quality Management as a predictor of Operational Quality Performance. The table shows the standardized beta coefficient (β), t-value, p-value, variance inflation factor (VIF), and hypothesis decision. The results determine whether Overall TQM significantly influences OQP and identify the strength and direction of the relationship between the variables.

Table 19. Summary of Hypothesis Testing Results

Hypothesis	Statistical Test	P-value	Decision
H ₀₁	Regression (t-test)	0.520	H₀₁ Accepted
H ₀₂	Regression (t-test)	0.772	H₀₂ Accepted
H ₀₃	Regression (t-test)	<0.001	H₀₃ Not Accepted
H ₀₄	Regression (t-test)	0.243	H₀₄ Not Accepted

Table 19 presents a consolidated summary of the hypothesis testing results, showing the relationships between each independent variable and Operational Quality Performance (OQP). The table includes the statistical test used, corresponding p-values, and the final decision for each hypothesis. This summary allows for a clearer and more efficient interpretation of results by providing an overview of all tested relationships in a single table.

Based on the results, hypotheses that obtained p-values lower than the level of significance were considered supported, while those exceeding the threshold were not supported. This confirms that Organizational

Leadership (OL), Customer Satisfaction and Relationship (CSR), and Strategic Quality Planning (SQP) significantly influence OQP, while Human Resource Focus (HRF) and Supplier Quality Management (SQM) do not show significant influence in the final regression model.

DISCUSSIONS AND IMPLICATIONS OF RESEARCH RESULTS

The research validates that there is a significant relationship between the use of Total Quality Management (TQM) practices and Operational and Quality Performance (OQP) for hospitality businesses in Valencia City, Bukidnon. Managers/supervisors indicated that they utilize TQM practices on an extensive basis; about the extent of implementation of those practices which are perceived by the respondents as being most important, i.e., leadership involvement, customer focus, strategic planning, and supplier relations.

Although there are several strong statistical results among the overall findings, a relatively much weaker association is present when comparing Human Resource Focus (HRF) relative to all other Total Quality Management (TQM) constructs. Although HRF has been included in each model to allow for comparative purposes and to provide a complete picture of the total quality management practices used by these organizations, the lack of statistical significance associated with HRF suggests that this dimension does not necessarily reflect how human resources are managed within these organizations. Additionally, the inability of HRF to predict the use of Total Quality Management (TQM) practices within restaurants may be because most of the individuals who completed the surveys were at either the manager or supervisor levels. As a result, they do not typically experience direct involvement in HR related processes such as training effectiveness, employee satisfaction, or performance feedback. Therefore, it may have been beneficial to exclude HRF altogether or design an alternative version of the HRF measure that would better capture the perspectives of hourly workers and/or include measures of more sophisticated HR practices that may be relevant in hospitality service settings.

These results suggest a significant lesson for both scholars and practitioners: The accuracy of all HR-related measures is dependent upon the respondent's level of employment and/or the scope of his/her assessment as it pertains to the TQM framework. Therefore, future designs of measurement tools should consider assessing multiple levels of respondents—particularly those who have been employed at or below managerial positions—to increase the overall validity of evaluations related to HRF concepts.

As was suggested by previous studies related to TQM, Organizational Leadership (OL) and Quality Management were identified as the two most critical dimensions to the enhancement of quality and operational performance, in addition to Customer Satisfaction and Relationship (CSR) and Strategic Quality Planning (SQP). This supports the notion that strong support from top management, along with systematic quality planning, is required for ongoing maintenance of service quality and efficiency in this industry.

In general, these results indicate that leadership commitment to customer focus through structured and well-planned TQM initiatives remains key to effective TQM practices within the hospitality industry.

Descriptive Frequency of Respondents' Profile

The study results indicated a strong consensus regarding the extent to which the respondents believed the hospitality organizations in Valencia City, Bukidnon, implemented all TQM Dimensions and OQP. High mean scores for each of the five TQM Dimensions (Organizational Leadership; Customer Satisfaction and Relationship; Human Resource Focus; Strategic Quality Planning; and Supplier Quality Management) indicate that most or all of the studied organizations have fully embraced each of these TQM Dimensions as part of their business processes. These results further support the notion that many hospitality organizations view improving service quality and effectively managing their resources and employees as top priorities. In addition, it appears from the study data that both managerial and supervisory levels at the organization were implementing quality management processes to ensure that services provided remained consistent over time while maintaining operational efficiencies. It is apparent from this research that there was substantial agreement amongst survey participants that quality management processes were fully incorporated within the organizational management practices. Overall, the study demonstrated that TQM is a significant component in ensuring the operational performance and quality of services by hospitality organizations.

The above studies correlate with those cited in the Review of Related Literature that emphasize how Total Quality Management improves organizational performance. Research has demonstrated that the implementation of TQM enhances a variety of important factors within the hospitality industry (such as reliability of service, customer satisfaction, and operational efficiency). Additionally, some studies demonstrate that managers who utilize TQM improve the overall quality of their services and also improve their company's performance. Other studies indicate that both effective human resource management and strong leadership, along with strategic quality planning, are essential elements for enhancing service delivery and operational effectiveness. The results from these studies validate the premise that hospitality organizations that utilize high-quality management practices will be more successful at maintaining a competitive advantage and providing customer satisfaction. As such, the results of this study validated the arguments in the related literature regarding the positive impact on an organization's operational and quality performance when effectively implementing TQM practices.

Descriptive Level of Agreement of Respondents on Total Quality Management (TQM) Dimensions and Operational Quality and Performance (OQP)

The results show a very high degree of agreement among respondents regarding the implementation of Total Quality Management (TQM) dimensions and the level of Operational and Quality Performance (OQP) in the selected hospitality establishments in Valencia City, Bukidnon. The very high mean values for each dimension indicate that Organizational Leadership, Customer Satisfaction and Relationship, Human Resource Focus, Strategic Quality Planning, and Supplier Quality Management are widely applied in these establishments. This is indicative of a significant commitment from hospitality businesses to quality development and effective leadership in addition to customer-centered services as part of their day-to-day operations. The study shows that managers and supervisors of these hospitality businesses use quality management practices to ensure consistent service quality and to achieve operational performance. Therefore, the high degree of agreement among the respondents implies that quality management principles are effectively implemented into the management practice of these hospitality establishments.

These results support the existing body of research from the Review of Related Literature that emphasizes the impact of Total Quality Management on operational and service performance in the Hospitality Industry. As Zehir and Zehir (2023) stated, operational performance and quality performance are significant indicators of an organization's success, particularly within service-based industries where a satisfied customer represents the ultimate goal. In addition, Senarath (2020) stressed that for a manager to ensure that they deliver quality services consistently to customers and can respond to their needs efficiently in order to provide high-quality service. The same authors (Bytyçi *et al.*, 2023) further added that TQM practice is associated with improvement in Service Quality and Operational Efficiency as well as an Organization's Overall Performance. Finally, Liu *et al.* (2020) also provided evidence that using TQM practice will help an organization increase the reliability of its services while reducing operational errors. Therefore, these results provide additional evidence supporting prior literature that the effective implementation of TQM practices contributes to improved operational and quality performance in the Hospitality Industry.

Significant Difference (Operational Quality and Performance compared to Demographics)

Table 20. Summary Table of Significant Difference between the Level of Operational Quality and Performance and Demographic Profile of the Respondents

Demographic Variable	P-value	Hypothesis Decision
Sex	0.520	<i>H₀ Accepted</i>
Educational Level	0.277	<i>H₀ Accepted</i>
Department Assigned	0.288	<i>H₀ Accepted</i>
Position	0.877	<i>H₀ Accepted</i>

Working Experience	>0.921	<i>H₀1 Accepted</i>
Nature of Business/Establishment	>0.459	<i>H₀1 Accepted</i>
Note: n = 242		

The data indicate that there are no significant differences in Operational Quality and Performance (OQP) based on demographic characteristics (sex, education, department assignment, job title, work experience, and type of business) as indicated by each reported p-value being above .05 and acceptance of H_{01} . This shows that despite differing roles and backgrounds, participants generally perceive that their organizations deliver consistent service quality and operate with consistency. As an organizational implication, the findings suggest that OQP is being driven by system-level processes (i.e., standard operating procedures, service protocols, and managerial monitoring) over participant-level attributes. This provides insights into improving management through developing shared quality standards versus creating multiple quality programs to meet different demographic groups. These findings provide evidence that quality-related expectations (preventing service errors, keeping commitments, and timely responses to customer requests) are most likely assessed similarly across teams, which leads to similar assessments of performance. In general, these results answer the SOP's question regarding whether demographics create divisions in perceived OQP by providing evidence that there were similar operational practices used among the participating hospitality firms.

The results were supported by the RRL's focus on service systems and operational consistency as the primary drivers of employee OQPs. In this regard, Zehir and Zehir (2023) defined OQPs as reflective of an organization's ability to link its internal processes with quality and customer satisfaction, suggesting that OQPs are more dependent on organizational process management than employee demographics. Similarly, Senarath (2020) emphasized that consistent service delivery depends on error prevention, keeping promises, and responsiveness to customers – all activities which usually require shared methods or supervisory oversight among various employee groups. Additionally, Bytyçi *et al.* (2023) and Liu *et al.* (2020) also provided evidence for the fact that the application of TQM practices will improve both service dependability and organizational efficiency - providing an explanation for why different employee demographic groups reported similar OQP ratings. Moreover, Saragih *et al.* (2020) found that organizations implementing TQM will have fewer errors and will provide faster, more dependable services - improvements that are not limited to a particular employee subgroup. Overall, the above research supports the conclusions from this study that OQP ratings remained constant regardless of employee demographics - supporting the contention that improving operational quality in hospitality can be done through broad, system-wide quality improvement initiatives.

Significant Difference (Total Quality Management compared to Demographics)

Table 21. Summary Table of Significant Difference between the Level of Total Quality Management Concept and Its Dimensions and Demographic Profile of the Respondents

Demographic Variable	P-value						Hypothesis Decision
	Organizational Leadership <i>OL</i>	Customer Satisfaction and Relationship <i>CSR</i>	Human Resource Focus <i>HRF</i>	Strategic Quality Planning <i>SQP</i>	Supplier Quality Management <i>SQM</i>	Overall Total Quality Management (<i>OL+CSR+HRF+SQP+SQM</i>)	
Sex	0.865	0.772	0.951	0.848	0.980	0.892	<i>H₀2 Accepted</i>

Educational Level	0.622	0.599	0.611	0.504	0.126	0.394	<i>H₀₂ Accepted</i>
Department Assigned	0.595	0.207	0.196	0.060	0.407	0.216	<i>H₀₂ Accepted</i>
Position	0.395	0.709	0.691	0.870	0.701	0.761	<i>H₀₂ Accepted</i>
Working Experience	>0.733	>0.382	>0.798	>0.893	>0.890	>0.904	<i>H₀₂ Accepted</i>
Nature of Business/ Establishment	>0.178	>0.275	>0.267	>0.114	>0.142	>0.113	<i>H₀₂ Accepted</i>
Note: n = 242							

The findings from the statistical analysis indicate that the demographics of the respondent group (gender, education, department, job title, years of work experience, and type of business) did not result in any statistically significant differences for Total Quality Management (TQM) or any of the TQM dimensions. In addition, all calculated "p" values were larger than .05 which resulted in accepting the Null Hypothesis. These findings support the idea that respondents, regardless of demographic factors, have similar views on the application of TQM based upon their own experiences with implementing TQM-related practices in their hospitality establishment. Furthermore, these findings provide evidence that TQM concepts such as Organizational Leadership, Customer Satisfaction and Relationship, Human Resource Focus, Strategic Quality Planning, and Supplier Quality Management are utilized similarly by different levels within a single organization. Lastly, the lack of statistically significant differences supports the use of quality management systems at an organizational level versus individual demographic influences. On a management level, it provides valuable information to managers that quality management initiatives may be effectively developed and implemented utilizing a uniform approach across employees and departments to enhance overall operational efficiency.

These results have been supported by many other studies included within the Review of Related Literature. Specifically, these studies have emphasized that Total Quality Management (TQM) is an organizational strategy that can be applied throughout an organization, and will be based upon the organizational strategy of the firm, and not upon employee demographics. As stated by Zaidi and Ahmad (2020), in service industries, TQM practices focus on developing a quality culture that improves service delivery consistency and decreases operational failures. Additionally, they noted that TQM practices improve customer satisfaction through the standardization of quality processes. Consistent with the findings of Zaidi and Ahmad (2020), Liu *et al.* (2020) identified that three specific TQM practices that contribute to organizational performance include: leadership commitment, human resource development, and strategic planning. Furthermore, as indicated by Bytyçi *et al.* (2023), organizations that implement TQM practices experience improvements in both service quality and operational efficiencies. The authors also pointed out that quality initiatives that are implemented to develop a culture of quality in an organization result in increased levels of employee involvement in quality efforts, regardless of their job title or work environment. Similar to the findings of Bytyçi *et al.* (2023), Saragih *et al.* (2020) found that firms that apply TQM practice to their business operations realize significant improvements in both operational process effectiveness and customer satisfaction. This was attributed to the fact that the quality management system was applied uniformly across the firm. Therefore, based upon the findings of this study, the literature supports the view that TQM practices are similarly impactful for all employees regardless of employee demographics.

Significant Relationships

Table 22. Summary of Significant Relationships Between Total Quality Management (OL, CSR, HRF, SQP, and SQM) and Operational Quality and Performance

Total Quality Management (OL, CSR, HRF, SQP, and SQM) to Operational Quality and Performance	P-value	Hypothesis Decision
Organizational Leadership <i>OL</i> (IV)	<.001	<i>H₀₃ Not Accepted</i>
Customer Satisfaction and Relationship <i>CSR</i> (IV)	<.001	<i>H₀₃ Not Accepted</i>
Human Resource Focus <i>HRF</i> (IV)	<.001	<i>H₀₃ Not Accepted</i>
Strategic Quality Planning <i>SQP</i> (IV)	<.001	<i>H₀₃ Not Accepted</i>
Supplier Quality Management <i>SQM</i> (IV)	<.001	<i>H₀₃ Not Accepted</i>
Overall Total Quality Management (OL+CSR+HRF+SQP+SQM) (IV)	<.001	<i>H₀₃ Not Accepted</i>
<i>Note: n = 242</i>		

The correlations found from this study indicated a relationship exists among all dimensions of Total Quality Management (TQM) — Organizational Leadership, Customer Satisfaction and Relationship, Human Resource Focus, Strategic Quality Planning, and Supplier Quality Management — and Operational Quality and Performance (OQP). All values were at or below .05 so the null hypothesis was rejected, indicating that improved quality management processes are associated with higher levels of service and operational performance. Therefore, hospitality organizations will be more likely to deliver reliable services efficiently as well as have higher levels of employee commitment and engagement if they focus on developing organizational leadership through active management involvement, develop strong customer relationships through strategic customer-focused approaches, invest in training employees, and create systematic quality plans. Additionally, effective managerial practices along with an organization's ability to encourage collaboration among its employees will result in significant improvement in service reliability and customer satisfaction. As such, the respondents' perceptions of the value of total quality management practices in achieving better service delivery and operational efficiency, based upon the fact that respondents are managers/supervisors who make day-to-day operational decisions regarding their respective department(s), indicate the need to implement comprehensive quality management processes throughout an organization. Overall, these findings support that focusing on improving TQM is a viable strategy for hospitality organizations to improve both operational performance and service quality.

The study's results align with the previous literature review on TQM practices and an organization's performance. According to Zehir and Zehir (2023), the alignment of all internal processes and operational procedures of service industry organizations with quality and customer requirements leads to enhanced performance in both quality and operation of a service industry organization. As stated by Liu *et al.* (2020), the implementation of TQM within service organizations has been shown to enhance service reliability, reduce errors in service operations, and increase the overall quality of service provided. Additionally, Bytyçi *et al.* (2023) determined that organizations implementing TQM experience enhancements in their production and delivery of products/services as well as increased efficiency in service provision; and customer satisfaction increases due to continuous improvement and employee engagement encouraged through the application of quality management principles. Finally, Saragih *et al.* (2020) indicated that service delivery is generally completed at a faster rate and with greater consistency, and that customers have higher levels of satisfaction with service providers that apply TQM practices than those that do not. These studies validate the current research and provide further evidence that the successful execution of TQM dimensions contributes to the enhancement of both operational and quality performance in hospitality organizations.

Significant Influence

Table 23. Summary of Significant Influence Between Total Quality Management (OL, CSR, HRF, SQP and SQM) and Operational Quality and Performance (Based on Model 3 of 3.7b and Model 1 of 3.8b)

Total Quality Management (OL, CSR, HRF, SQP and SQM) to Operational Quality and Performance	P-value	Hypothesis Decision
<i>Organizational Leadership OL (IV)</i>	<.001	<i>H₀₄ NOT Accepted</i>
<i>Customer Satisfaction and Relationship CSR (IV)</i>	<.001	<i>H₀₄ NOT Accepted</i>
Human Resource Focus HRF (IV)	0.149	<i>H₀₄ Accepted</i>
<i>Strategic Quality Planning SQP (IV)</i>	0.015	<i>H₀₄ NOT Accepted</i>
Supplier Quality Management SQM (IV)	0.243	<i>H₀₄ Accepted</i>
Overall Total Quality Management (OL+CSR+HRF+SQP+SQM) (IV)	<.001	<i>H₀₄ NOT Accepted</i>
Note: n = 242		

The results from the regression analysis indicated that Total Quality Management (TQM) has a positive impact on Operational and Quality Performance (OQP) for the sample of hospitality establishments in Valencia City, Bukidnon. Specifically, Organizational Leadership, Customer Satisfaction and Relationships, and Strategic Quality Planning had a significant impact on OQP; however, Human Resource Focus and Supplier Quality Management were not found to be statistically significant. Therefore, it is evident that leadership support, customer-centric strategies, and structural quality planning are significant factors in determining the ability of hospitality organizations to provide high-quality services. It is additionally likely that, as the respondents include direct stakeholders involved in the decision-making process for the operations of the organization, their perspectives highlight the value of providing consistent service through leadership-supported initiatives and customer-focused service strategies. Additionally, the research findings indicate that if there is an increased emphasis on both leadership involvement and customer relationship management within hospitality organizations, then there may be opportunities to increase overall operational outcomes and achieve greater service standard compliance.

In addition to the results of this study, other prior studies cited in the literature review have provided additional evidence for the important relationship between TQM practices and a company's overall performance. For example, several studies have shown that when a company implements various TQM practices, it will be able to increase its service reliability, improve operational efficiency, and enhance customer satisfaction. (Liu *et al.* 2020; Zaidi and Ahmad 2020) In the same vein, Bytyçi *et al.* (2023) demonstrated that by applying TQM principles, an organization is likely to see improvements in both service quality and organizational performance as well as positive outcomes for customers due to leadership commitment and strategic planning that encourages ongoing improvement in all aspects of service delivery. Likewise, Saragih *et al.* (2020), identified that companies that implement TQM practices would show greater operational performance and increased customer satisfaction due to having consistent quality management systems across their organizational processes.

The study's findings also validate the theoretical framework for the study. Results from the study were found to be congruent with the principles of Deming's Total Quality Management (TQM) theory. This is due to its emphasis on continuous improvement, leadership commitment, and quality planning as being critical to an organization's long-term success. Additionally, the findings validate the principles of the Service Quality Model (SERVQUAL), which supports that service quality and customer satisfaction are two critical determinants of business performance within the hospitality industry. Finally, the results are congruent with the principles of the Resource-Based View (RBV) theory, which indicates that a firm's ability to achieve competitive advantage through the creation of superior organizational performance is greatly influenced by both its internal

organizational resources (such as strong leadership, knowledgeable employees, and established processes for managing), and how these resources are utilized.

CONCLUSION

Total Quality Management (TQM) has been widely accepted and used effectively by businesses within hospitality services; in particular, TQM practices in business operations improve Operational and Quality Performance (OQP) in several businesses in Valencia City, Bukidnon. Respondents consistently indicated that they had strong agreement with the practice of all TQM principles, especially Organizational Leadership, Customer Satisfaction and Relationships, Strategic Quality Planning, and Supplier Quality Management. These areas were found to be heavily represented and positively impact the operational efficiency and service quality of the respondents' organizations.

Organizational Leadership was found to be the strongest positive correlation with OQP through the use of statistical testing methods. The consistent response patterns across different respondent demographics indicate that TQM is an organization-wide approach to conducting business, rather than a function of employee characteristics.

There was, however, a noticeable exception in the area of Human Resource Focus (HRF), which demonstrated a statistically insignificant relationship to OQP. While HRF was included in the study to allow for a complete picture of how TQM is practiced and for comparison purposes, the results suggested that it would be beneficial to either redesign HRF or exclude it from the study. It can be concluded that HRF was less relevant as a factor contributing to OQP due to its small predictive value. This lack of predictive power may be attributed to the fact that a majority of respondents consisted of managers and not employees, who are at the front line of customer service delivery. Therefore, it is likely that the perspective of frontline employees could provide insight into their ability to deliver high-quality customer service.

Overall, while the study supports the hypothesis that TQM positively affects OQP, there are limitations. One of these limitations relates to the HRF dimension, where it was discovered that some further refinements or inclusion of a larger sample size of employees in future studies will likely provide more accurate representations of the role of human resources in delivering high-quality products and services.

The results of this study support three frameworks related to quality management: namely, Deming's TQM theory, the SERVQUAL model, and the Resource-Based View (RBV). In general terms, the results show that both leadership commitment and continuous improvement, along with aligning internal resources, are essential components to achieve superior levels of operational and service performance.

Limitations of the Study

This study has several limitations that should be considered in interpreting the findings. First, the geographic distribution of respondents was imbalanced, with 72.3% coming from Cluster 1. As a result, the findings are primarily reflective of urban Poblacion establishments and may not fully represent businesses from other geographic clusters. Second, the study utilized a cross-sectional research design, which collected data at a single point in time. Therefore, while relationships between variables were identified, causal relationships between Total Quality Management and Operational Quality Performance cannot be conclusively established. Lastly, the majority of respondents belonged to the Food & Beverage/Dining sector, which may limit the generalizability of the findings to other tourism-related sub-sectors with lower representation in the sample.

RECOMMENDATION

Based upon the findings and conclusions, several recommendations were made. First, hospitality managers and property owners should continually enhance their organizational leaders' level of commitment and strategic quality planning. As those two variables had the greatest amount of influence on operational performance, they are the first two areas that should be addressed. Second, with respect to Human Resource Focus (HFR), even though it was included in each analysis based upon statistical results, there is reason to believe that this variable

should be reevaluated due to its lesser amount of influence. It would be beneficial if future researchers develop new HRF metrics that more accurately measure an organization's perspective toward employees. Additionally, future research should also include data collected from rank-and-file employees and supervisors so that a more complete assessment can be conducted.

Organizations are also encouraged to include their employees in quality efforts through providing them with mechanisms of input (such as regular employee satisfaction surveys) and including employees within feedback processes for their training (participative feedback). Through this, organizations will have access to important "bottom-up" information regarding how well managerial decisions reflect real-world employee experiences. Moreover, a continued focus on customers is imperative. Organizations need to continually seek out and incorporate customer feedback into decision-making processes in order to maintain competitive levels of service quality. This has been demonstrated consistently throughout literature, with a strong association existing between customer satisfaction and an organization's operational performance.

For future research, it is recommended that studies include both frontline (rank-and-file) employees and managerial/supervisory respondents to provide a more comprehensive assessment of Total Quality Management (TQM) practices. As reflected in the discussion of findings, the non-significance of Human Resource Focus (HRF) may be partly influenced by the limited HR visibility and operational experience of management-level respondents alone. Incorporating frontline employees would allow for a more grounded understanding of HR-related practices as they are implemented at the operational level.

Furthermore, a mixed-respondent design is encouraged to enhance the depth and accuracy of TQM evaluations, particularly in relation to Human Resource Focus and Supplier Quality Management dimensions. This approach would provide richer, more balanced insights and improve the generalizability of findings across different organizational levels.

REFERENCES

1. Azarian, R. (2011). Potentials and limitations of comparative method in social science. *International Journal of Humanities and Social Science*, 1(4), 113–125. https://www.ijhssnet.com/journals/Vol._1_No._4%3B_April_2011/15.pdf
2. Bytyçi, I., Qerimi, A., & Qerimi, F. (2023). The impact of total quality management on operational performance. *Virtus InterPress*. <https://virtusinterpress.org/The-impact-of-total-quality-management-on-operational-performance.html>
3. Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
4. Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications. https://spada.uns.ac.id/pluginfile.php/510378/mod_resource/content/1/creswell.pdf
5. Department of Trade and Industry. (2023, June 16). Philippine Quality Award. Department of Trade and Industry Philippines. <https://www.dti.gov.ph/trabaho/philippine-quality-award/>
6. Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8th ed.). McGraw-Hill Higher Education. <https://archive.org/details/HowToDesignAndEvaluateResearchInEducation8thEd>
7. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). *Multivariate data analysis* (8th ed.). Cengage Learning.
8. Liu, H., Wu, S., Zhong, C., & Liu, Y. (2020). The sustainable effect of operational performance on financial benefits: Evidence from Chinese quality awards winners. *Sustainability*, 12(5), 1966. <https://doi.org/10.3390/su12051966>
9. Liu, J., Borazon, E. Q., & Santamaria, J. G. O. (2020). Antecedents of quality performance in the Philippine micro, small, and medium hospitality sector. *Asia Pacific Business Review*, 27(4), 559–582. <https://doi.org/10.1080/13602381.2021.1851514>
10. Ochave, N. (2022). Supply chain shortages weigh on PHL restaurants' operations. *BusinessWorld Online*. <https://www.bworldonline.com/top-stories/2022/05/30/451452/supply-chain-shortages-weigh-on-phl-restaurants-operations/>

11. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
12. Saragih, J., Tarigan, A., Pratama, I., Wardati, J., & Silalahi, E. F. (2020). The impact of total quality management, supply chain management practices and operations capability on firm performance. *Polish Journal of Management Studies*, 21(2), 384–397. <https://doi.org/10.17512/pjms.2020.21.2.27>
13. Senarath, B. T. D. N., Gunarathne, G. C. I., & Fernando, T. S. S. (2020). Impact of total quality management on operational performance. *Peradeniya Management Review*, 2(1), 98. <https://doi.org/10.4038/pmr.v2i1.36>
14. Shields, P. M., & Rangarajan, N. (2013). *A playbook for research methods: Integrating conceptual frameworks and project management*. New Forums Press.
15. Tabile, J. (2023). Resurging travel bookings bring labor shortage. *BusinessWorld Online*. <https://www.bworldonline.com/corporate/2023/01/16/498475/resurging-travel-bookings-bring-labor-shortage/>
16. Zaidi, Z. M., & Ahmad, N. (2020). Total quality management (TQM) practices and operational performance in manufacturing company. *Research in Management and Technology Bulletin*, 1(1), 13–27. <https://doi.org/10.30880/rmtb.2020.01.01.002>
17. Zehir, S., & Zehir, C. (2023). Effects of total quality management practices on financial and operational performance of hospitals. *Sustainability*, 15(21), 15430. <https://doi.org/10.3390/su152115430>