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Path Model on Organizational Effectiveness of Higher Education Institutions in Mindanao, Philippines:
An Explanatory Sequential Approach

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Abstract
This mixed methods study determined the best-fit path model for organizational effectiveness among Higher Education Institutions (HEIs) personnel in Region 12. The explanatory sequential design was used, along with stratified random sampling, path analysis, and thematic analysis, to obtain data from 250 teaching and non-teaching members for the quantitative survey and ten purposively selected participants for the in-depth interview and focus group discussion. Quantitative results showed high levels for all variables and significant relationships between the exogenous variables transformational leadership (TL), organizational health (OH and total quality management (TQM), and the endogenous variable organizational effectiveness (OE). Moreover, generated Model 3 was the best path model for the organizational effectiveness of HEIs, with transformational leadership and total quality management emerging as predictors of organizational effectiveness, while organizational health had no direct effect. The participants' high ratings of the variables and the importance of transformational leadership and total quality management on organizational effectiveness

were confirmed in the qualitative experiences and insights; therefore, the integration was connecting-merging (confirmation). The best-fit path model 3 was also established, suggesting the statistical influence of TL and TQM on OE. However, the participants did not confirm total quality management as the best predictor of organizational effectiveness and the negligible effect of organizational health on organizational effectiveness, leading to a connecting-merging (expansion) integration.

Keywords
Educational management, Transformational leadership, Organizational health, Total quality management, Organizational effectiveness

INTRODUCTION

Most higher education institutions' primary concern is organizational effectiveness (Miller, 2016; Ponsades & Guhao, 2021). In addition, researchers have apprehensions about the "effectiveness" of organizations, yet confusion persists regarding what the term means. Despite efforts exerted by academic authorities, certain factors greatly influence organizational effectiveness in a formal learning environment. The declining level of an institution's organizational effectiveness affects its pedagogical efficiency, thereby decreasing its learners' educational performance and outcomes (Elham, Ghani, Radz & Siraj, 2011; Haggar, Lewis & Richter, 2012; Meador, 2016; Shepherd, 2018). Moreover, it is more perplexing for agencies to expect the young generations, especially millennials, to stay long in an organization as they seem more committed to their career than the company (Guhao, 2019; Laurinolli, 2010; Suryani, 2018).

Learning organization culture has been proven to influence an organization's growth and development. In their investigation, Hussein, Omar, and Ishak (2016) discovered that continuous learning highly correlates with organizational performance, while collaboration and team learning were positively associated with organizational innovativeness. However, difficulty in empirically assessing organizational effectiveness has arisen because no one ultimate criterion of effectiveness exists. Instead, organizations may pursue multiple and often contradictory goals (Ashraf & Kadir, 2012).

Thriving academic institutions focus on the mastery of fundamental learning abilities and literacy. They likewise engage parents in school programs to improve students' accomplishments. School operations must aim to develop high-quality on-site teachers (Calman, 2011; Kirk & Jones, 2014; Lezotte, 2011). Transformational leadership, organizational health, and total quality management are among the aspects that influence effectiveness in an organization (Caballero & Guhao, 2020; Yenidoğan & Şencan, 2017). The practice of transformational leadership by creating a shared vision and behavioral component models increases the level of school organizational effectiveness that school administrators can implement (Leithwood & Jantzi, 2005; Talebloo, Basri, Hassan & Asimiran, 2017).

The current situation of government schools under HEIs reflects how these foundations embrace developments, enhance procedures and promote effectiveness. Learning organizations manifest particular attributes to provide for the increasing demands of an academic institution. For its vast contributions to academic learners in our country, PIHEs deem it necessary to adjust its instructional orientations because a learning organization culture shows an outward effect on the performance and innovation aimed at achieving success that goes a long way (Hussein, Mohamad, Noordin & Ishak, 2010).

In 2014, Abdullah and Siam disclosed that organizational structure and culture are significant factors as they perform their best in Palestinian Higher Education Institutions. Further analysis of the moderating role of strategic communication showed that it failed to moderate the influence of organizational structure and culture on organizational performance. Critiques of Higher Education have reported that colleges and universities in the United States of America are experiencing mismanagement and economic inefficiency, resulting in a dramatic increase in school fees despite their failure to provide quality education to their stakeholders. More so, these affected educational environments are incapable of defending themselves against these allegations as they become deficient in presenting quantitative and qualitative evidence to measure their efficacy as academic institutions to blunt these criticisms (Middaugh, 2011).

Comparatively, the investigation of Kwan and Walker in 2003 on the relative significance of the effectiveness of HEIs as an organization in specific dimensions posited that organizational effectiveness (OE) is a second-order construct. A survey conducted with respondents from Hong Kong Universities supported the second-order construct of OE. However, it was discovered that the student-related dimensions were less important than those about faculty employment and satisfaction. This implies the unequal provisions of Hong Kong government to their universities.

The empirical data gathered by Mansour, Heath, and Brannan (2010) showed the need to reorient institutions to a top-down principle, prioritizing high-level objectives and efficiency. This allows the Human Resource Personnel to eliminate universities' obsolete perspectives, which are either discursive or participatory. Effectiveness, therefore, entails the balance provision for the various requirements of stakeholders, administration, and the community. A model of HRM for business partners complements the expected development.

The findings on the factors that influence organizational effectiveness were conducted in an international setting and hardly investigated the combined influence of transformational leadership, organizational health, and total quality management on organizational effectiveness. The researchers have never come across a study that dealt with constructing a path analysis model on organizational effectiveness among higher education institutions in the local setting. In this context, the researchers were interested in determining whether the organizational effectiveness of higher education institutions in Region XII, Philippines is significantly affected by factors such as transformational leadership,

organizational health, and total quality management, as this may answer the needs of the intended beneficiaries of this study and pave the way for action plans. Likewise, this investigation may generate new knowledge and add to the literature on how organizational efficiency among higher education institutions predicts transformational leadership and total quality management. Hence, the need to conduct this study is deemed urgent and necessary.

This study is anchored on the theory of organizational effectiveness (OE) proposed by Hannan and Freeman (Frenken, 2011). These authors contend that OE depends on the environment in which the members of that particular company operate. They suggest that the means to sustain the environment must be designed. Further, they identify adaptation as the key mechanism to creating the proper organizational ecology within a particular agency. Given this goal-based definition of effectiveness, Etzioni (1975) states that effectiveness establishes the degree to which an organization realizes its goals under a given set of conditions. Effectiveness refers to evaluative information; however, it does not merely denote a degree of goal attainment but also a general virtue of the organization, which may be considered vague. Steers (1977) has noted that effectiveness is a broad construct that connotes a positive value which may be implemented in the form of organizational goal attainment. The project's conceptual framework is presented below:
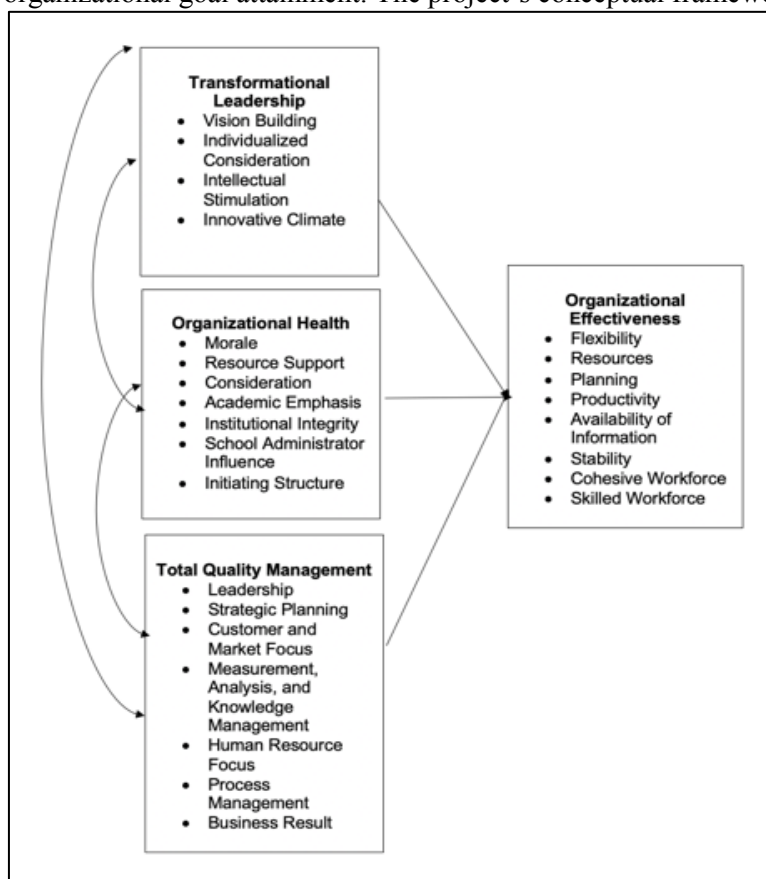
Fig. 1 Conceptual Framework of the Study

The primary purpose of this mixed methods study is to determine the transformational leadership, organizational health, and total quality management concerning the organizational effectiveness of selected Higher Education Institutions (HEIs) in Region 12 (SOCCKSARGEN). Given the issue of organizational effectiveness in higher education, the researchers used the explanatory sequential design with the qualitative data to explain the quantitative result. In addition, the study will determine which exogenous variables relate to the endogenous variable.

Organizational effectiveness determines the efficacy of organizations in achieving the outcomes their leaders or administrators intend to achieve (Jacob & Shari, 2013). In the global arena, every organization, regardless of industry or country, seeks to be more effective and achieve superior results. Locally, this study is expected to make the public more conscious of its higher education institutions. Specifically, the findings of this investigation will benefit the school administrators, faculty members, and support staff as they understand the basis of attaining effectiveness in institutions and reflect on how the effectiveness may be enhanced.

This explanatory sequential mixed methods study chose the participants through stratified random sampling. The investigation was conducted among 250 staff members from the participating institutions. Survey questionnaires were utilized in the data collection. In the qualitative phase, ten participants were purposively selected to undergo an in-depth interview and focus group discussion. The variables under study were considered to determine the relationships between the exogenous and the endogenous variables.

In this investigation, the causal relations between the independent variables and characteristics of interest (dependent variable) are presented in the path model. Usually, path models are deciphered from left to right with the variables on the left (independent variables) to predict the outcome variable on the right. This study on OE has been conducted to measure the efficiency in achieving business goals. In this research, OE is equivalent to transformational

leadership (TL), organizational health (OH), and total quality management (TQM). As HE is regarded as relevant, colleges and universities should operate effectively as well-designed academic organizations.

This study is supported by the theory on path analysis invented by Sewall Wright as he developed his shifting balance theory (SBT) of population genetics (Hamilton, 2010). Path analysis is a statistical technique used to investigate patterns of effect within a system of variables. It is one of several general linear models that examine the impact of a set of predictor variables on multiple dependent variables. Path analysis is similar to multiple regression in that the effect of multiple predictors on a criterion variable can be assessed. On the other hand, it differs from multiple regression with its two or more criterion variables that can be examined simultaneously.

MATERIALS AND METHODS
Research Respondents
For the quantitative phase, the researchers surveyed 250 Higher Education Institutions (HEIs) personnel, both teaching, and non-teaching, in Region XII (SOCCSKSARGEN) selected through stratified sampling. Stratified random sampling was applied by dividing the samples into smaller clusters called population strata which were created in view of the similar characteristics of the samples like financial capacity or educational background (Hayes, 2020). The respondents were employees who have been in the academic institution for at least five years and are teaching either full-time or part-time; otherwise, they are disqualified. Also, they freely gave their informed consent, while those who explicitly acknowledged their refusal were removed from the report.

Meanwhile, for the qualitative phase, 12 study participants were interviewed; five key informants through an in-depth interview and seven through a focus group discussion. The participants were purposively selected from those who participated in the quantitative survey. Consent and voluntary participation were asked from the participants prior to their selection. The aim of the interviews was to validate, confirm and triangulate the quantitative results, which is essential for data integration under mixed-methods research.

Materials and Instrument
The quantitative strand used standardized survey instruments from peer-reviewed journals. The 5-point Likert-type questionnaires were pilot-tested and subjected to both expert validation and reliability analysis through Cronbach's alpha. Both exercises rendered the instruments credible and appropriate relative to the study objectives, with a computed Cronbach's score of 0.953, implying high reliability and a validation rating of 3.91, described as very good in terms of content and item factors.

The questionnaire for transformational leadership was adapted from Balyer and Ozcan (2012) and comprised the indicators: vision building, individualized consideration, intellectual stimulation, and innovative climate. The questionnaire for organizational health was patterned from Hoy (2015) and had the indicators: morale, resource support, consideration, academic emphasis, institutional integrity, school administrator influence, and initiating structure. Meanwhile, the tool for total quality management was taken from Wright (2005) with the constructs: leadership, strategic planning, customer and market focus, measurement, analysis, knowledge management, human resource focus, process management, and business result. Finally, that for organizational effectiveness was designed by Eydi (2013) with measures: flexibility, resources, planning and productivity, availability of information, stability, cohesive workforce, and skilled workforce.

In interpreting the responses of the respondents, the researchers employed the five orderable gradations with a range of means and descriptions as follows: 1:00-1.79 (very low), which means the measures are almost not evident; 1.80-2.59 (low), which means the measures are seldom evident; 2.60-3.39 (moderate), which means the measures are evident in few times; 3.40-4.19 (high), which means the measures are evident most of the time; and 4.20-5.00 (very high), which means the measures are evident at all times.

Relative to this, an interview guide was used for the qualitative strand. Questions in the interview guide were based on the quantitative study results. The questions were open-ended questions to uncover issues and concerns and elicit views and behaviors. The interview questions allowed the participants to express their ideas freely. Consequently, the questions were also subjected to content validation from experts.

Design and Procedure
This study utilized the explanatory sequential mixed-methods approach where the researchers conducted the study in two phases, the quantitative research first, followed by the qualitative data collection and analysis. Then, the findings were integrated, and inferences were drawn (Sage Publications, 2016). Shown in Fig. 2 are the phases of the explanatory, sequential design.

The general purpose of this mixed methods study is to use the quantitative and qualitative approaches to understand complex problems better than a single approach to expand and strengthen the existing body of knowledge (Creswell & Plano Clark, 2011; Johnson & Christensen, 2017). Explanatory sequential design (EXPLA-SD) is a mixed methods approach that begins with the quantitative data collection and analysis phase, followed by collecting qualitative data to explain the quantitative results (Schoonenboom et al., 2017). The purpose of EXPLA-SD in the literature included the confirmation or complementarity of quantitative and qualitative studies (Herzog & Boomsma, 2009). Confirmation

means verifying the gathered data (Jackson, 2007) while complementarity is the ability of one type to compensate for the other (Green, 2016).

The quantitative phase used the quantitative, non-experimental design employing the path analysis. In a multiple-regression analysis, a path model is employed to evaluate several issues in causal analysis. Utilizing a path analysis, experts conduct a series of regressions within the model to see the relationships of the effects on dependent variables (O'Dwyer & Bernauer, 2013; Stage, Carter & Nora, 2015). Regarded as multiple causality-based regression, path analysis may be viewed as a special case of structural equation modeling (SEM) by Pearl (2018). It is specifically one where only a single indication is utilized for every variable in the causal model. Hence, one may come up with a regression weight (Alwin & Hauser, 1975; Coffman & MacCallum, 2005; Edwards & Lambert, 2007). The best-fit path model is determined using the goodness of fit criteria with the standardized model indices: CMIN/DF 0<value<2; P-Value> .05; NFI> .05; TLI> .95; CFI> .95; GFI> .95; RMSEA> .95; P-Close< .05 (Henseler & Sarstedt, 2013).
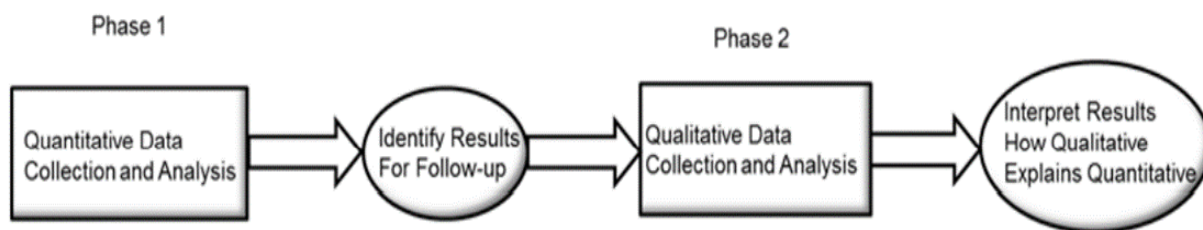
**Fig. 2** Explanatory Sequential Design (Two-Phase Design)

In the second phase, the qualitative study used phenomenology to establish categories and themes obtained through the primary collection and thematic data analysis, as explained in the study of Teddlie and Tashakkori (2009). The phenomenological approach focused on the lived experiences of some identified personnel of HEIs. Specifically, this study phase was directed toward learning from the participants' standpoints, experiences, opinions, and behaviors about organizational effectiveness in relation to transformational leadership, organizational health, and total quality management. Finally, this phase also elicited the different views, attitudes, beliefs, and behaviors of the personnel toward the best-fit path model on organizational effectiveness.

In the final phase of the mixed methods approach, methodological triangulation was done, mixing the two results from the two phases (Hesse-Biber, 2010). According to Guest (2013), the triangulation process involves examining the validity of results by comparing quantitative and qualitative data results, aiming to understand the complementarity of the findings from different data sources and the construct studied from a broader perspective. The mixing procedure was done through the integration of the quantitative and qualitative data findings of the study.

The data gathering commenced after the researchers had secured ethical clearance from an accredited research ethics board. This was implemented to ensure that the basic precepts of beneficence, non-maleficence, autonomy, and justice are held in the conduct of the study (Varkey, 2021); thus, making the conduct of the study, not just scientific but also ethical. After getting permission from the school administrators, the researchers personally administered the adapted survey questionnaires face-to-face with some help from friends and colleagues. The researchers ensured that the employees' work and classes were not interrupted during the survey process. After the data were collected and tabulated, the researchers sought the help of a credible data scientist to analyze and interpret the results. The different tools used in the analysis of data include the mean, Pearson r, and path analysis. The results of quantitative data became the basis for developing an interview guide for the in-depth interview and focus group discussion.

For the qualitative phase, five identified key informants were interviewed independently. In addition, a focus group discussion participated in by seven members was also done on a separate date. The interviews were done online through videoconferencing and were designed to elicit the views and insights of the study participants on the results of the quantitative data. After the interviews, the recordings were transcribed, analyzed, and interpreted through thematic analysis. The analysis was done by reading the transcripts and coding the statements before developing the themes. Then statements were grouped and integrated into meaningful units or categories using the NVivo 12+ qualitative data analysis software. Next, a textual description of what happened was documented in data analysis, followed by a structural description of how the phenomenon was experienced. Then, both textual and structural descriptions were integrated.

The researchers held seven elements to be considered in qualitative data gathering, including time and financial cost, geographical distribution, the topic's sensitivity, technology problem, interviewer safety, note-taking, and non-verbal language cues (Oltmann, 2016). After the quantitative and qualitative data collection and analysis, the triangulation activity was done by simply comparing or contrasting the responses from both types of inquiry (Holstein, 2014). The quantitative data collection and analysis were done first before the qualitative research. The outcome of the quantitative study determined the extent of the qualitative research. As for emphasis, quantitative data was accorded more emphasis with the qualitative data supporting or corroborating the quantitative data findings. Lastly, for the mixing procedure, the quantitative and qualitative research results were integrated and inferred from one another. The flow of procedures for the explanatory sequential approach of mixed-method design is presented in Fig. 3.
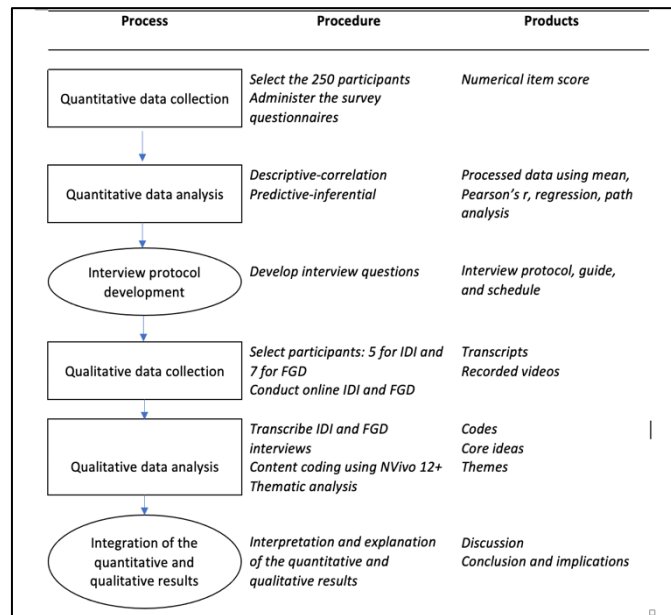
Fig. 3 Flow of Procedures

One essential element to make every study credible is trustworthiness. Trustworthiness is the confidence a person places in the data, methodology, and research analysis (Polit & Beck, 2014). Trustworthiness is a measure of qualitative research as to which extent the data and data analysis are believable and trustworthy. As a measure of qualitative research, trustworthiness determines the credibility and trustworthiness of the gathered data and data analysis. Trustworthiness is established by the four dimensions: credibility, transferability, dependability, and conformability. These are designed through the analogous quantitative criteria of internal and external validity, reliability, and neutrality.

RESULTS AND DISCUSSION

Quantitative Phase

The primary goal of this investigation was to measure the extent to which transformational leadership, organizational health, total quality management, and organizational effectiveness that influence the OE of HEIs. Presented in Table 1 is the transformational leadership, which has an SD of 0.479 and a mean score of 4.16, described as very high; this denotes that the indicators of (TL) are always manifested among personnel. Organizational health had a mean of 4.03 or high with a standard deviation of 0.476, which indicates that higher education institutions' organizational health is often manifested. The level for total quality management of higher education institutions obtained the highest mean of 4.17 or high with a standard deviation of 0.512, indicating that higher education institutions' total quality management is often manifested. According to the data, higher education institutions' organizational effectiveness had a mean rating of 4.14, which is very high, and a standard deviation of 0.500, which indicates that it is always manifested.

Table 1 Transformational Leadership (TL), Organizational Health (OH), Total Quality Management (TQM), and Organizational Effectiveness (OE) of HEIs

Variable	SD	Mean	Descriptive Level
Transformational leadership of school administrators	0.479	4.16	High
Organizational health	0.476	4.03	High
Total Quality Management	0.512	4.17	High
Organizational Effectiveness	0.500	4.14	High

Higher education institutions have a high level of transformational leadership, as evidenced by the respondents' high ratings. This implies that higher education professionals can consider the institution's vision and goals when planning and executing projects, procedures, and activities. Staff viewpoints are considered when making decisions, and school officials recognize their contributions to improving the institution. Another great school leadership trait is the ability to inspire staff intellectual participation. Leaders provide support and opportunities for professional development to motivate staff to try new methods and use technology to innovate and enhance the school. Thus, the top higher education institutions prioritize organizational innovation and have staff members eager to try new things, learn new things, enhance processes, have a positive work attitude, and take risks to make their institutions more effective.

The claim made by various authors (Balyer, 2012; Jambawo, 2018; Shields, 2010) that transformational leadership enhances teamwork, care, staff satisfaction, employee functioning, and retention was supported by this. Morally and ethically sound transformational leaders promote a positive culture and achieve favorable results. It takes moral and ethical behavior, such as being honest and respecting others, for transformational leaders to effectuate the

necessary changes in people and organizations. This is consistent with Ernawati's (2022) study that transformational leadership is related to employees' subjective perception, which can improve their self-determined motivation.

Employees' high level of organizational health implies that employee morale is high when there is confidence, trust, excitement, and friendliness. Work fulfills them. Teacher supplies and instructional materials are also provided. School leaders are pleasant, helpful, and collegial to teachers and employees. School leaders can persuade and demonstrate independent and productive work. All instructors advocate for student achievement sets. They create an environment where professors trust students and students flourish. Employees usually name their training schools. Teachers are protected from unreasonable group and parent expectations. School administrators also encourage task- and achievement-oriented personnel.

This is consistent with the claims made by some authors (Hoy & Sabo, 1998; Hoy & Tarter, 1997; Toprak, Inandi & Colak, 2015; Xenidis and Theocharous, 2014) that a healthy school is one in which levels of the organization, administration, and the teacher are in harmony. The school meets functional needs while successfully managing disruptive external forces and directing its resources toward accomplishing its mission. A safe school can adapt to its surroundings while maintaining the intellectual standard of its offerings. Teachers are protected from the demands and pressures of outside forces. Representatives from good schools will be empathetic, polite, responsive, and committed to equality. However, letting individuals know what is expected of them sets the stage for great success. The school's administration ensures the faculty's safety and is receptive to their recommendations. They can also have an impact on teachers and offer resource help. As a result, teachers experience a sense of friendship and excellent relationships with the school. Teachers have positive feelings about one another, their work, and their students. They enthusiastically carry out their responsibilities and are devoted to their friends and students. Everyone in school is driven to do their best academically.

Higher education institutions' high total quality management means executives use the organization's mission and values to guide people toward excellent work and performance. They foster knowledge-sharing and career growth in the workplace. The school involves personnel in strategic planning, especially to satisfy parents and children. Schools also measure work quality and analyze data to improve work and programs. Employees regulate schoolwork by gathering information and working together to meet key performance indicators. The institution also honors and encourages employees to study further. Thus, employees, customers, and communities are satisfied. This supports the claim made by earlier researchers (Edward, 2002; Frazier, 1997; Herman & Herman, 1994; Msallam, Al Hila, Naser & Al Shobaki, 2020; Yang, 2015), who explained that higher education organizations seek complete quality control by implementing a structured program that demonstrates that everyone and every employee in the company is engaged in performance improvement.

The relationship between results and the means through which outcomes are obtained is frequently maintained by school staff. Additionally, since whole quality management is required, schools can focus on the management process, which includes strategic planning, staff recruitment and development, resource implementation, and coordination of what is taught, how it is taught, and how it is evaluated. The school administration should also guarantee the quality of instruction for children. Since students are treated as clients and employees in the educational system, school administrators must give clients full attention to the educational relationship package. If schools provide a work environment that greatly influences employees' capacity to accomplish their jobs correctly and efficiently, then the requirements and satisfaction of consumers will be met. More importantly, a culture of achievement and promotion inside the school will be fostered, one in which staff members are valued for their work.

Higher education institutions are flexible and track reform suggestions due to their high organizational effectiveness. Schools have ample budgets, facilities, and trained staff, especially teachers. They frequently design long-term strategies and evaluate performance. Through constant planning and review, staff can maximize their physical, technological, financial, student, and human resources and maintain and stabilize them with the school administration's consistency in organizational direction and decision-making. Employees become more involved and effective by providing programs for children, teachers, the community, and school administration. Feedback and stakeholder communication is also thriving. However, the school management uses performance reviews, reward and recognition, and training and development programs to create a cohesive and skilled workforce, such as in faculty research output. Higher education has favorable outcomes. Improved teaching and learning and a continual improvement culture help students succeed.

The findings of the study support the assertions made by (Hambali, & Idris, 2020; Ninan, 2016; Reynolds, 2015; Sammons & Bakkum, 2011; Saunders, 2009; Teddlie & Reynolds, 2010), according to which a successful school organization adds value to students' achievement. For instance, higher education institutions are successful if their procedures continuously produce observable favorable results in their pupils throughout time. This implies that a school's productivity is more influenced by its methods and measured by its results. Furthermore, according to earlier researchers, competent educational institutions are desired for students' achievement (Bauer, 2007; Johnson, 2007; Lezotte, 2011; Soto-Pérez, Sánchez-Garca & Nez-Ros, 2020). All pupils can master the school's core curriculum if staff members and teachers believe in it and demonstrate it in a high-standards atmosphere. The successful school revolution also emphasizes teacher competence, teamwork, engagement, and input, making schools where employees can relate to their unique abilities and have a remarkable opportunity to grow and change.

The results of the computations are exhibited in Table 2. As can be gleaned in the table, the overall r-value on the correlation between the level of transformational leadership and the level of organizational effectiveness of higher education institutions is 0.749 with $p < 0.05$, which means that transformational leadership is significantly associated with the organizational effectiveness of higher education institutions. Hence, the null hypothesis is rejected. Nonetheless, the relationship between organizational health and higher education institutions' organizational effectiveness is shown in the table, with the overall r-value on the correlation between the level of organizational health and the level of organizational effectiveness of higher education institutions being 0.744 with $p < 0.05$, which means that organizational health is significantly associated with the organizational effectiveness of higher education institutions. Hence, the null hypothesis is rejected.

This exploration was conducted to determine the significant relationship between TQM and OE among HEIs. With an overall r value of 0.849 with a $p < 0.05$ in determining the correlation between the level of TQM and OE of HEIs, it came out that TQM is significantly associated with the OE of HEIs. The results, thereby, reject the null hypotheses.

Table 2 Correlation between Transformational Leadership, Organizational Health, Total Quality Management, and Organizational Effectiveness of HEIs

Paired Variables	r-value	p-value	Decision H_o
Transformational Leadership Of School Administrators and Organizational Effectiveness	0.749*	(0.000)	Reject
Organizational Health and Organizational Effectiveness	0.744*	(0.000)	Reject
Total Quality Management and Organizational Effectiveness	0.849*	(0.000)	Reject

@.05 level of significance

Transformational leadership and organizational effectiveness in higher education were correlated. Thus, schools' transformative leadership affects organizational performance. This suggests that school leaders should encourage staff to incorporate the school's vision and priorities into crucial choices to maximize operational efficiency in higher education. As school leaders provide intellectual stimulation, individualized support, and a productive school climate, personnel become more strategic, cohesive, skillful, and productive. The school becomes more adaptable, resourceful, information-driven, and stable. Thus, transformational school leaders boost organizational effectiveness.

This study supports Talebloo, Basri, Hassan, and Asimiran (2017), who found that school administrators can improve organizational performance by incorporating transformative leadership characteristics, including shared vision and model behavior. School leaders may encourage teachers by supporting the mission and vision of education. These transformational leaders support, encourage and motivate staff to create a great school. According to some empirical studies (Hallinger, 2003; Hallinger & Heck, 1998; Harris, 2008; Jackson, 2000; Hambali, & Idris, 2020; Leithwood, Seashore Louis, Anderson & Wahlstrom, 2004), school leaders can improve organizational effectiveness by focusing on long-term goals, creating a common vision, encouraging teachers to pursue their vision, and setting high-performance standards. Transformative leadership actions, such as setting a vision, objectives, and high expectations; improving individuals through individualized encouragement and intellectual stimulation; modeling activities; and redesigning the organization through culture, structure, and policies, increase academic optimism and provide a structure for impact.

The second association was substantial between higher education institution effectiveness and organizational wellness. Organizationally healthy schools do better. Higher education institutions work because they meet healthy organizational needs. Protecting teachers and staff from outside dangers and pressures can enhance schools' organizational effectiveness. The staff works better when everyone encourages exceptional performance. School administrators support teacher involvement and wellbeing for efficiency, productivity, and work performance.

Consequently, effective schools have high morale, resource support, consideration, academic focus, institutional integrity, school administrator influence, and beginning structure. This study confirms De Smet, Loch, and Schaninger (2007), Grawitch and Ballard (2016) as well as Lowe's (2010) conclusions that a healthy organization promotes worker wellbeing and organizational effectiveness. Stability improves efficiency. De Smet, Schaninger, and Matthew Smith (2014) say organizational health improves long-term efficiency and effectiveness. Some studies (Farahani et al., 2013; Hannum, 1997; Mirjalili, 2005) found that organizational efficacy is associated with high organizational wellbeing. Organizational health affects student academic success. Organizational health is also positively correlated with school and principal achievement. Schools' organizational health affects instructors' effectiveness and kids' academic performance.

Higher education institutions' total quality management and organizational effectiveness were correlated in the third correlation. Schools with strong and complete quality control are more effective. This covers overall quality management's contributions to collegiate organizational success, including leadership, strategic planning, customer and market focus, evaluation, research and knowledge management, human resource focus, process management, and business outcome. Through strategic planning and skill development, the school leadership guides and motivates staff to improve job quality and efficiency, boosting organizational productivity. Performance assessment and decision-making have kept school programming and operations effective. Thus, total quality control in higher education affects school performance. Operational productivity increases as personnel are deeply dedicated to upholding good work standards in all school operations.

This validated the argument presented by Gharakhani, Rahmati, Farrokhi, and Farahmandian (2013) that overall quality control is a crucial component of an organization's long-term effectiveness. Implementing quality control has been

crucial to raising organizational performance. Total quality management focuses on ongoing process optimization within businesses to create exceptional customer value and meet customer expectations. According to a study by Llantos and Pamatmat (2016), leadership, customer/stakeholder orientation, data-based decision-making, and professional learning are all aspects of comprehensive quality management linked to change or effectiveness in education.

Path analysis was performed on three proposed models to find the most effective model for analyzing the organizational effectiveness of higher education institutions. In Table 3, model fitting values are shown. Due to the causal model data fitting using Pearson r, which should be significant, Model 3 emerged as the best-fit model meeting the standard-fit requirements. Other factors that should be taken into account for a strong model fit include a value of 0.95 or higher for the comparative fit index (CFI) (Byrne, 2001), an RMSEA value of less than 0.05 (Meyers, Gamst, & Guarino, 2006) and an NFI (or normed fit index) value of more than 0.95. (Hu & Bentler, 1999). All of these requirements have been met by Model 3, which demonstrates that the Chi-square value of 0.771 is unimportant, the NFI is 0.991 over 0.95, the CFI is 1.000 above 0.90, and the RMSEA is 0.000 below 0.05. Model 3 has satisfied the requirements in the list, demonstrating that the p-value of 0.771 is significant, the NFI is 0.999 greater than 0.95, the CFI is 1.000 greater than 0.90, and the RMSEA is 0.021 less than 0.05. The NFI is greater than 0.95 by 0.999, and the CFI by 1.000 greater than 1.000. Fig. 1 shows the graph of the path analysis.

The investigation involved over 200 participants, which was beyond the minimum requirement for conducting a path analysis (Boomma, 1982). The 250 samples were sufficient to develop a satisfactory model fit. There is a more complex theory that eliminates weak-influencing variables in Model 3. Hence, it exhibits little or no effect on the other variables in the prior models. Displayed in Fig. 1 is the result of the number of theories and concepts taken from various studies where one is the exogenous factor's direct and indirect effect on the endogenous variables.

Table 3 Goodness of Fit Measures of the Three Path Analysis Models

Model	CMIN/DF 0<value<2	P-Value > .05	NFI > .95	TLI > .95	CFI > .95	GFI > .95	RMSEA < .05	P-Close > .05
1	183.053	0.000	0.782	-0.308	0.782	0.793	0.855	0.000
2	25.795	0.000	0.969	0.822	0.970	0.953	0.316	0.000
3	1.110	0.292	0.999	0.999	1.000	0.998	0.021	0.428

Legend:
CMIN/DF   - Chi-Square/Degrees of Freedom   GFI   - Goodness of Fit Index
NFI   - Normed Fit Index   RMSEA   - Root Means Square of Error Approximation
TLI   - Tucker-Lewis Index   P-close   - P of Close Fit
CFI   - Comparative Fit Index
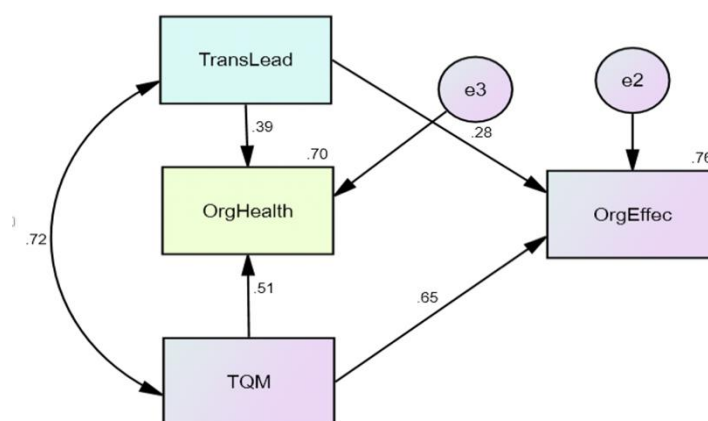
Fig. 4 Generated Best Fit Model on Organizational Effectiveness

The Path Analysis Model, 3 in Standardized Solution, is depicted in Fig. 1. In this section, the relationships between the variables under investigation are examined, and the model fit is evaluated. The combined effect of transformational leadership, organizational health, and comprehensive quality management on organizational effectiveness account for 76 percent of the variance, as shown in Fig. 1. Conversely, it may also be deduced that the combined influence of transformational leadership and total quality management is responsible for 70% of the variation in organizational health. Additionally, overall quality management (beta=0.65) and transformational leadership (beta=0.28) have a substantial impact on the organizational effectiveness of higher education institutions (P0.05). Additionally, comprehensive quality management (beta=-0.51) and transformational leadership style (beta=0.39) both strongly predict organizational health (P 0.05). Overall, quality management and transformational leadership positively correlate (beta=0.65; P 0.05).

Path analysis identified Model 3 as the best-fit model that predicts organizational effectiveness, which was used to develop the best model for the organizational effectiveness of higher education institutions. Model 3 demonstrates how total quality management and transformational leadership predict organizational effectiveness in higher education institutions. In addition, Model 3 is the result of a more developed theory because a weak influencing component deleted from earlier models was found to be insignificantly linked to the other factors. Different theories and notions gleaned from pertinent literature articles went into creating the model that illustrates the exogenous variables' direct and indirect effects on the endogenous variable.

Several authors have suggested that transformative leadership has a positive impact on organizational effectiveness, particularly in schools where the level of organizational effectiveness of schools is influenced by the transformative leadership practices of school leaders (Bass, 1997; Hallinger, 2003; Hallinger & Heck, 1998; Harris, 2008; Jackson, 2000; Leithwood & Jantzi, 2005; Talebloo et al., 2017; Weese, 1994; Leithwood et al., 2004; Yukl). On the other hand, other scholars have noted that quality control in higher education is the only overall indication of school operational effectiveness (Divine et al., 2006; Llantos & Pamatmat, 2016; Mashagba, 2014; Murad & Rajesh, 2010).

Qualitative Phase

The qualitative results presented in this section corroborate with the quantitative part of the study, which is the objective of the quantitative phase of an explanatory sequential mixed-methods research. Qualitative data were analyzed, including codes and themes. Likewise, thematic analysis was used in analyzing the retrieved data from the research participants of Focus Group Discussion (FGD); lastly, the coding process was done through NVivo software, from which a codebook was generated for the refinement and naming of relevant themes from the aggregated codes.

The participants' responses in the FGD were transcribed, open-coded, and analyzed to create essential themes as the standpoints of the participants on the exogenous and endogenous variables. The responses were treated as the participant's insights and experiences towards Transformational Leadership (TL), Organizational Health (OH), Total Quality Management (TQM), and Organizational Effectiveness (OE) of Higher Education Institutions (HEIs).

The themes and core ideas emerged presented in Table 4 confirm the high level of TL, OH, TQM, and OE of HEIs. More so, the following essential themes confirmed how TL, OH, and TQM help shape OE of HEIs. Here, three salient themes support TL: Educational Competence of Administrators, Institutional Agility, and Motivated and Empowered Teachers (Individualized consideration). Organization Health, on the other hand, was engrained through the presence of Clarity of Vision, Goals and Objectives, Participative Management, and Strategic communication. Lastly, the qualitative data support the high rating of TQM as revealed in quantitative results: Equitable Leadership, Systematic Planning, and Employee Competence and Teamwork.

Table 4 Essential themes and core ideas on how TL, OH, and TQM help shape OE of HEIs

Essential Themes	Core Ideas
Transformational Leadership	
Educational Competence of Administrators	● The HEI improved because we can mainly credit these to skilled transformational leaders. ● A leader should be competent and knowledgeable and can adapt to a particular situation. ● Administrators are well-trained to manage HEIs. ● The educational competence of the administrators.
Institutional Agility	● Our leaders were able to set some rules and guidelines to embrace change in our educational system during the pandemic. ● The pandemic taught these leaders to be more flexible. ● They support and encourage the teachers to still perform despite the present situation. ● HEI could continue and act on the vision and goals of their goals, considering that they have students to cater to. ● We can see the development of these institutions since pre-pandemic, during the pandemic, and post-pandemic.
Motivated and Empowered Teachers	● Teachers were motivated to work, and they were able to expose to different training. ● They were able to perform their duties and be inspired by whatever could happen. ● Leaders are empowering their employees to innovate and grow. ● There are a lot of incentives, rewards, and scholarships. ● The employees are empowered to innovate and improve their careers as they grow within the institution.

	● We need to start with the individual members of the organization.

Organizational Health

Clarity of Vision, Goals, and Objectives	● There is always that academic emphasis. ● We have that standard, uniform program outcomes ● Teachers are oriented with educational objectives. ● There is good planning and a good discussion of the vision and mission of the institution. ● The leader was able to explain the target to be achieved
Participative Management	● Improvement and passive change can also affect people who want to be leaders. ● Ensure that there will be holistic development among members of the organization. ● Constituents have a sense of honing. It is not always the leader who would be doing the plan but also a participative venture for the constituent. ● We were able to achieve success collectively due to the collective efforts of our organization's people.
Strategic communication	● I guess these encourage teachers and other organization members to perform because they are guided to what to achieve at the end of the year. ● The institution's administrators can unite around the same goal, and the communication flow in our HEI is very systematic. ● Our institution's vision and mission were properly disseminated and discussed. ● I guess these encourage teachers and other organization members to perform because they are guided to what to achieve at the end of the year. ● The institution's administrators can unite around the same goal, and the communication flow in our HEI is very systematic. ● Organizational health in our institution is high because our institution's vision and mission were properly disseminated and discussed.

Total Quality Management

Equitable Leadership	● I can say that there is excellent leadership in the institution to that I am connected right now ● I think managers in all HEIs considered everyone in the institution essential. ● Everyone has an equal opportunity to be an important part of the institution. ● The administrators of our HEI have this ability to glowing people of the same and different dispositions around the institution's vision, mission, and operation.
Systematic Planning	● I also observed that planning among the departments was very standard. ● There is that standardized monitoring and evaluation and application of the results to improve the institution's current practice. ● The Deans and management team members are well-equipped with seminars and training even during the pandemic. ● Our management focus through the lenses of keenly planning activities, providing leadership to our teachers, learners, and workers, the staffing process, organizing, monitoring, and evaluating. ● We have high-quality management.
Employee Competence and Teamwork	● There is no overlapping of functions. ● There is a proper delegation of tasks from the high-ups to the employees. ● Everyone is in one boat. Each of the team players knows what the direction of the school is when it comes to its performance. ● Everyone in the institution is a team player. ● It is also emphasized that they must take part to maximize potential and capitalize on that for productivity.

The qualitative data confirmed the high rating of transformational leadership of administrators among HEIs. One of the participants said that this was due to the presence of an experienced leader whose competence is of great help in sustaining organizational effectiveness. The participant remarked:

"I always believe that a school leader can make or break an institution. A leader should be competent and knowledgeable and can adapt to a particular situation. The two years of the pandemic define how these leaders perform despite the challenges"(FGD 1).

This was confirmed by the experience of the other participant who said:

"More importantly, they facilitate organizational learning. Also, the training of the administrators in the HEIs. The educational competence of the administrators"(FGD_4).

Another theme generated is the presence of the so-called institutional agility. One participant declared that, as experienced, their leader inspires employees to come up with innovative ways for the betterment of the HEIs. The participant further remarked:

"I also see that a kind of change in an individual impacts high transformational leadership. Our leaders were able to set some rules and guidelines to embrace change in our educational system during the pandemic" (FGD_2).

More so, one of the participants shares the same perception towards organization innovations and the openness of others to change when he said:

"The stakeholders are then willing to accept the change, and everyone is working to make changes depending on the situation or the leadership style we have in our institution"(FGD_3).

Another HEI personnel expresses the same experience when he said:

"We are ever willing to embrace the very situation that can cause a change in individual and social systems"(FGD_5).

Furthermore, motivated and empowered teachers surfaced as one of the essential themes that support the high rating of transformational leadership. This was confirmed by one of the participants when he said:

"Our administrators foster higher levels of motivation and commitment to the organization by developing the organization's vision, dedication, and trust among employees"(FGD_4).

This standpoint is also shared by most of the participants of the FGD; for example, one of the participants pointed out that:

"The HEI improved because we can mainly credit these transformational leaders, empowering their employees to innovate and grow. There are a lot of incentives, rewards, and scholarships"(FGD_1).

Moreover, another participant mentioned the same perception when saying:

"HEIs are giving scholarships or motivation awards to their employees. That is why our employees gained high morale and confidence, which will contribute to this high level of transformational leadership"(FGD_4).

On the experiences of HEIs on organizational health, clarity of vision, goals, and objectives emerged as one of the themes that confirmed institutional integrity that yielded a high rating. This was confirmed by one of the participants when he said:

"Organizational health is also high among HEIs. One of the factors that contributed to that is good planning, good discussion of the vision and mission of the institution where the leader was able to explain the target to be achieved and when these teachers or members of the school were able to understand their role and responsibilities"(FGD_3).

One of the participants confirmed this high rating of organizational health mainly because of the clarity of targets dispersed on time. He further pointed out that:

"Organizational health in our institution is high because our institution's vision and mission were properly disseminated and discussed"(FGD_6).

Another research participant shared the same experience towards organizational health that shape their organizational effectiveness. He said:

"Organizational performance is still high because plans are properly implemented, the targets are clear, the implementing rules and regulations are clear, and everyone understands strategizing"(FGD_5).

Aside from being clear about the educational targets and objectives that foster understanding among employees of HEIs, another theme that emerged was participative management. One of the participants declared:

"It's also important that everyone is provided with support on the part of recognizing their responsibilities, like incentives and rewards, to feel a sense of belonging when you realize specific goals. It's also important to have financial support for the activities"(FGD_7).

It can be noted that the support manifested to the employees from the management strengthens synergy creating a positive climate in an organization. One of the participants remarked:

"Collaboration is the key because they should have one sense of direction, and what makes it very healthy is that they would always think they are on the same clock"(FGD_5).

Another theme that emerged was strategic communication. Several research participants confirmed that this promotes a healthy organization; for example, one of the participants, based on her experience, said:

"I believe there is a high level of organizational health among the HEIs. The institution's administrators can unite around the same goal, and the communication flow in our HEI is very systematic. Proper protocols are highly observed, and the directions given by our administrators are apparent and precise. This contributed much to the positive result of why we have a high level of organizational health"(FGD_4).

This is supported by one of the participants from the other HEIs when he said:

"Organizational health is high because the institution's vision and mission were properly disseminated and discussed. Administrators and employees in our organization were focused on our vision, and we were able to achieve success due to the collective efforts of our organization's people"(FGD_6).

The high rating of total quality management (TQM) was also confirmed by the research participants. The emerging theme was equitable leadership. One participant has declared:

"I believe that our HEI has a high level of quality management since the administrators of our HEI have this ability to glow people of the same and different dispositions around the institution's vision, mission, and operation"(FGD_4).

This was the same experience mentioned by the other participants, saying:

"I believe that it is still high because everyone is in one boat. Each of the team players knows what the direction of the school is when it comes to its performance. I believe there is always a balance when it comes to the institution's management. HEI's total quality management is also high because they continuously adhere to the idea that everyone in the institution is a team player"(FGD_3).

Another theme was generated about systematic planning that helped shape the organizational effectiveness (OE) of Higher Education Institutions (HEIs). It is experienced by several personnel who were coming from various HEIs. Strategic planning bolsters the attainment of prearranged institutional targets. One participant, for instance, shared:

"I agree with the findings that there is a high level of HEIs total quality management. I can say that there is excellent leadership in the institution to which I am connected right now. I also observed that planning among the departments was very standard. And there is that standardized monitoring, evaluation, and application of the results to improve the institution's current"(FGD_1).

This was also experienced by the other participants, who declared:

"For the school to achieve quality management, which I believe our HEI has done, our management must focus through the lenses of keenly planning activities, providing leadership to our teachers, learners, and

workers, the staffing process, organizing, monitoring, and evaluating, all of which to achieve effectiveness and efficiency across the institution as HEI has done. Therefore, we have high-quality management"(FGD_4).

Finally, another theme that emerged was employee competence and teamwork. This entails that organization's strategic planning is of no use unless otherwise, employees are at work, armed with the necessary skills to do the designated tasks, and understand their role in the organization as to how they can contribute to the betterment of the institution, and to work as a team to achieve the desired output. This was experienced by one of the participants who said:

"In light of the total quality management, I also believe that it is high among HEIs because I think managers in all HEIs considered everyone in the institution essential, and everyone has an equal opportunity to be an important part of the institution"(FGD_1).

One of the participants supported the assertion that everyone must consider being working in a team. Based on his experience when he said:

"As such, they must perform well, considering that there should be balance in the internal and external operations of the institution. Further, it is also emphasized that they must take part to maximize potential and capitalize on that for productivity"(FGD_3).

Featured in Table 5 are the essential themes on the standpoints of HEIs on the path model generated on Organizational Effectiveness. There were four themes that emerged, to wit: Resilience and flexibility (Flexibility), Committed and Dedicated Faculty (Cohesive workforce), Timely and Updated Communication (Availability of information), and Continuing Quality Management (Planning).

Table 5 Essential Themes and Core Ideas on Organizational Effectiveness in Relation to TL, OH and TQM

Essential Themes	Core Ideas
Resilience and flexibility	- The HEI is very flexible, especially during a pandemic. We create meaningful connections. We do not settle in the present. - Despite the challenges, organizational performance is still high because the leaders and administrators are committed. - We still plan and look for things to improve. - We embrace our resilience to what is happening. - Institutions find ways to ensure that resources are available and proper planning is followed.
Committed and Dedicated Faculty	- The school has provided training to members for them to be competent faculty. - While knowledge is essential in leadership, I believe commitment equates to it. - It boils down to the dedication of the institution and its people. - Leaders are committed to doing the right thing to ensure that the institution's vision, mission, and goals were met.
Timely and Updated Communication	- There is also proper information dissemination, and the workforce works together as a team. - The organization has a clear mission and vision already communicated well to the members of the organization.
Continuing Quality Management	- Continuous assessment, planning, and evaluation, for example, were implemented. - Plans and Programs were also realigned to make it more relevant and in tune with the current situation. - Plans are properly implemented, the targets are clear, the implementing rules and regulations are clear, and everyone understands strategizing.

Resilience and flexibility emerged as one of the themes on perceptions of HEIs on the path model generated. It has been validated by one of the participants that transformational leadership and total quality management had a direct effect on organizational effectiveness when he said:

"I agree that the organizational performance of HEIs is high because, based on my observation and experiences, the HEI is very flexible, especially during a pandemic. We create meaningful connections. We do not settle in the present"(FGD_1).

Another research participant shared the same experience on resilience and flexibility; he said:

"Despite the challenges, organizational performance is still high because the leaders and administrators are committed. We still plan and look for things to improve. We embrace our resilience to what is happening"(FGD_2).

Moreover, another theme that emerged is the committed and dedicated faculty. It is evident that leadership directly impacts the commitment and dedication of the member of the organization. This is verified by one of the participants as he declared:

"Employee commitment is a manifestation of good leadership. I can tell that there is a sense of accountability on the part of the employees for not performing the tasks assigned. They are committed to doing the task because of their sense of belongingness manifested in the organization"(FGD_6).

This is the same standpoint of the other participants, saying:

"That means employees know what to do, and they also know how to do it. Though there are challenges, the good thing is that they are into this together, and still, collaboration is the key and is the game's name"(FGD_5).

One more emerging theme is the presence of timely and updated communication confirming the availability of information. One of the participants remarked:

"There is proper information dissemination, and the workforce works together as a team. This makes it effective in meeting its vision and mission. Since the enrollment rates were not affected by the pandemic, the school continues to produce competent graduates"(FGD_1).

Additionally, another participant attested to the importance of the availability of information when he said:

"I agree that organizational performance is high based on the findings, and maybe the factor that has a clear mission and vision already communicated well to the members of the organization"(FGD_7).

Finally, continuing quality management emerged as a theme pointing to one of the contributory factors that could strengthen organizational effectiveness. As one of the participants shares his experience:

"Organizational performance is still high because plans are properly implemented, the targets are clear, the implementing rules and regulations are clear, and everyone understands strategizing"(FGD_5).

In the same vein, this has been experienced by the other participants saying:

"Continuous assessment, planning, and evaluation, for example, were implemented. It was also realigned to make it more relevant and in tune with the current situation"(FGD_2).

Displayed in Table 6 are the quantitative and qualitative findings of the study to answer the research questions. The table shows the level of the exogenous and endogenous variables, the significance of their relationships, and the different direct and indirect relationships of the exogenous and endogenous variables explicitly, and, importantly the best-fit model itself.

In the level of the variables, Transformational Leadership (TL), Organizational Health (OH), Total Quality Management (TQM), and Organizational Effectiveness (OE) presented in Table 1, the participants in the FGD confirmed the high level of all the variables in the best-fit model. The confirmation was evident based on the different standpoints of the participants towards their experiences in HEIs.

Table 6 Joint Display of Quantitative and Qualitative Results
Using the Connecting and Merging Method

Research area	Quantitative	Qualitative	Nature of data integration
1. Level of exogenous and endogenous variables	- Overall mean of the four variables are all high as	- Informants/ participants	*Connecting, Merging

	follows:	confirmed the overall high levels of TL, OH, TQM and OE as evidenced by their standpoints.	(Confirmation)
- Transformational leadership of school administrators (high) - Organizational health (high) - Total quality management (high) - Organizational effectiveness (high)	TL (4.16) OH (4.03) TQM (4.17) OE (4.14) It indicates that HEIs in Region XI oftentimes manifest all these four variables covered in the study (Refer to Table 1)	(Refer to Table 4)	
2. Significance of the relationship between the exogenous and endogenous variables	Significant (p<0.05) relationships exist between TL & OE (.749); OH & OE (.744); TQM & OE (.849). (Refer to Table 2)	Informants/participants claimed the importance of TL, TQM, & OH to OE. (Refer to Table 4)	*Connecting, Merging (Confirmation)
3. Best Fit Model			
3.1 Direct Effect of TL on OE	The arrow from TL to OE has a beta value (.28) which shows its direct effect on OE (Refer to Fig. 1)	The participants confirmed the importance of TL to OE. (Refer to Table 5)	*Connecting, Merging (Confirmation)
3.2 Direct effect of TQM on OE	The direct path of TQM on OE with a beta value of .65 is represented by an arrow pointing to OE from TQM.	The participants confirmed the importance of a desirable relationship between TQM as input to OE. (Refer to Table 5)	*Connecting, Merging (Confirmation)
	In the model, the arrow of TQM directed towards OE has a beta value of .65, the biggest compared to TL (.28) direct effect on OE. Thus, it makes TQM the best predictor of OE. (Refer to Fig. 1)	The participants did not confirm TQM as the best predictor citing the contribution of TL and OH in achieving organizational success. (Refer to Table 4 and Table 5)	*Connecting, Merging (Expansion)
3.3 OH has no statistical effect on OE	In the model, while TQM and TL have influence on OH, it still failed to establish either a direct or indirect effect on OE.	The participants did not confirm the negligible effect of OH to OE. They believe that the ability of the institution to unite its people around a shared vision and cope with change and challenges are essential elements in achieving organizational survival and growth. (Refer Table 4)	*Connecting, Merging (Expansion)
	The model is significant, having fully met the criteria	The participants confirmed the significance of the best	

3.4 Best Fit Model 3 as a Path	for the goodness of fit measures. It displays the direct effects of TL and TQM on OE. OH was found no effect on OE. (Refer to Table 3 and Fig. 1)	fit model. Exclusion of OH in the model passed through statistical process and the remaining variables as the only accurate predictors, not discounting the importance also of OH on OE. (Refer to Table 4 and Table 5)	*Connecting, Merging (Confirmation)

CONCLUSION AND IMPLICATIONS

All the variables obtained an overall rating of high, which the participants of the qualitative strand confirmed. This conveys that transformational leadership, organizational health, and total quality management are vital for an organization to be effective. Also, significant relationships existed between the exogenous variables transformational leadership, organizational health, and total quality management and the endogenous variable organizational effectiveness. This implies that these variables are associated with one another and can affect their behavior statistically. The best-fit model that predicts organizational effectiveness is Model 3, which shows that transformational leadership and total quality management are predictors of organizational effectiveness. Thus, for organizations to thrive, they need transformative leaders and have to implement quality assurance in their operations.

The quantitative results of the study were further confirmed upon thematic analysis of the qualitative data, that is, transformational leadership and total quality management predicted organizational effectiveness, while organizational health did not. The themes which emerged supported the influence of the aforementioned two variables on organizational effectiveness.

The integration of the quantitative and qualitative data strengthened the causal link between the status of transformational leadership and total quality management as avenues for the involved HEIs in Region 12 to attain organizational effectiveness. These conform to certain writers that there are causal links between transformative leadership and organizational effectiveness, as well as total quality management and organizational effectiveness, as set forth in the theoretical framework of the study (Bass, 1997; Harris, 2008; Leithwood et al., 2004; Talebloo et al. 2017;). Essentially, the best-fit model 3 has the greatest reliability with its remaining domains.

Based on the findings, the researchers came up with these implications for practice:
The study's results confirm the anchor theory of Hannan and Freeman (Freken, 2011), who purported that organizational effectiveness depends on the environment wherein the members work. Sustenance and adaptation are the keys to the proper organizational ecology.

Participative management and *strategic communication*, two *a priori* themes for organizational health, also show the importance of involving employees in decisions concerning their occupational health to make them feel that they matter and that the communication lines are always open.

All schools nationwide must also be aware that for their institution to become competitive, the concepts of Total Quality Management must be instilled in both teaching and non-teaching employees. The *a priori theme*, *employee competence and teamwork* sums up the importance of being a team player and the importance of each employee being given recognition for their contribution to the organization. This may be concretized in policies from departments like Quality Management and Quality Control.

Since organizational health was not a predictor, school administrators must always keep in mind that their faculty and staff should be able to cope with change in a constantly evolving world. This suggests that activities may be provided for employees of varying positions and tenure to be updated with new policies, technology, and trends in the workplace so that their morale is uplifted and they find fulfillment in their work. Full administrative support may also be provided, and an atmosphere of trust among all the stakeholders in the institution may be cultivated.

DECLARATION OF CONFLICT
The authors declare that they have no known competing financial interest or personal relationships that could have appeared to influence the work reported in this paper.

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