Influence of Organizational Culture on Organizational Effectiveness in Higher Educational Institutions : Ownership as a Moderator

K. Subha [1]
C. N. S. Ramnath Babu [2]

Abstract

Purpose : An organization's effectiveness is significantly impacted by its organizational culture. This empirical study aimed to comprehend how private and government teaching professionals perceived the prevailing culture in their institutions and its influence on organizational effectiveness. It also assessed the moderating effect of ownership types on an institution's effectiveness operating in Tamil Nadu, India.

Design/Methodology/Approach : Competing Values Framework was adopted to determine the organizational culture. A pilot study was conducted to validate the survey instrument developed using Cameron's Organizational Culture Assessment Instrument. This descriptive and cross-sectional study used the purposive sampling method to collect data. The questionnaire was sent to 956 email addresses, and the participants represented 82 colleges.

Findings : The analysis revealed significant differences in the perception of clan and market culture between professionals working in private and government colleges. The ownership type of the educational institution negatively moderated the relationship between perceived market culture and organizational effectiveness.

Practical Implications : The findings demonstrated the importance of effective strategy and culture in determining an institutional mission that can be successfully carried out. Regardless of its ownership type, higher educational institutions should focus on building and fostering the critical dimensional characteristics of cultures, with a particular emphasis on adhocracy to advocate its effectiveness.

Originality/Value : The study may be extended in diverse educational contexts to gain comprehensive knowledge about the relationship between organizational culture and effectiveness.

Keywords : higher education institution, organizational culture, organizational effectiveness, ownership type

JEL Classification Codes : M1, I2, I23, L25

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Organizational culture is the core beliefs that a particular group has established, discovered, or developed to deal with the challenges of internal integration and external adaptations (Schein, 2010). These beliefs must have worked well enough to be considered valid and passed down to new members as the proper

[1] *Senior Assistant Professor,* Xavier Institute of Management and Entrepreneurship, Hosur Road, Phase 2, Electronic City Bangalore - 560 100, Karnataka. (Email : subhadiwakar114@gmail.com)
ORCID iD : https://orcid.org/0000-0002-4807-5314
[2] *Assistant Professor (Corresponding Author),* Bharathidasan Institute of Management, BHEL Complex, MHD Campus, Tiruchirappalli - 620 014, Tamil Nadu. (Email : ramnathbabu@yahoo.com)
ORCID iD : https://orcid.org/0000-0002-9427-1025

perspective. Organizational culture interweaves people into a community (Ogbonna, 1992) by encompassing the organization's vision and mission. Leaders must have a deeper understanding of culture as it influences the attitude and behavior of its members and how it operates (Nungchim & Leihaothabam, 2022). Broadly, it is understood that culture forms the foundation of the way of living for individuals within a family and in their association with a social group or an organization.

The formation of culture begins when a leader or founder proposes a course of action for solving an organization's external and internal problems. As these activities effectively resolve issues, they become accepted as the norm, and the underlying assumptions and beliefs are no longer challenged and debated. Educational institutions are no longer an exception when considering their culture and performance, which are influenced by the leadership or the type of ownership. According to Bartell (2003), values and beliefs significantly impact university decision-making processes and affect organizational and individual behavior.

As every individual has a personality, every organization, university, and higher educational institution has a unique culture and distinctive characteristics it has created and sustained. The institution's culture is substantially shaped by the attitudes and behaviors of competitors, trustees, top administrators, faculty, students, neighbors on campus, and the general public. Universities and higher educational institutions owned by public or private have faced increasing pressure over the past two decades to adapt to the fast-evolving social, technical, economic, and political influences emanating from the localized and more general post-industrial external environment (Bartell, 2003). Educational institutions are under constant and mounting demand to adapt to the changing environment because of the changing requirements of a complex global economy (Peterson et al., 1997). This environment uncovered the need to create and adapt an effective and efficient university or educational institution culture that teaches and exhibits appropriate behavior influencing internal relationships and values. An educational institution's culture (clan, adhocracy, hierarchy, or market) has a greater influence on how effective the institution is.

Schein (2010) claimed that leaders define and sustain culture. Schein (1984) stated that the stability and homogeneity of the group's membership and the scope and depth of its shared experiences can be used to assess the degree or strength of culture. Hence, this study aimed to understand the impact of different kinds of prevailing cultures of educational institutions on their performance and examine the mediating effect of the type of ownership on organizational effectiveness. The findings of this research recommend that the head of the administrators, the owner or founder of the institution, be informed about the importance of adopting a suitable and sustainable institutional culture, encompassing its vision and mission to improve its effective performance.

The Indian Higher Education System

India stands third globally in terms of the size of its higher education system, next to the USA and China. According to the National Education Policy 2020, the Indian government intends to spend 6% of its GDP on India's education. In India, the education sphere encompasses private and public sectors, which work parallelly to provide technology-driven knowledge and skills to drive the country's economy. With 42,343 institutions across India, Tamil Nadu is among the top eight states with the most colleges (Minister of Education, Government of India, 2020). However, these colleges face significant challenges in maintaining equity in the Gross Enrolment Ratio (GER) and delivering quality education to students. Sharma and Sharma (2015) stated that the Indian educational system must implement innovative, creative, and transformational approaches from primary to higher education to become more relevant and competitive globally. These challenges could be mitigated by adopting the proper dimensions of organizational culture within educational institutions and how the prevailing culture is perceived and experienced by the teaching professionals working there.

Research indicates that organizational cultural attributes strongly influence business performance

(Seidu et al., 2022) and employees' turnover intentions (Hemavathi & Justus, 2023). Public sector organizations that foster a collectivistic culture tend to benefit from increased employee commitment compared to those with an individualistic culture (Triguero-Sánchez et al., 2022). Public entities require an organizational culture that supports strategic implementation, directly and positively impacting organizational performance (Gasela, 2022). For vocational educational schools to foster innovation, a favorable organizational culture is necessary, as well as affective commitment and employee contributions (Hidalgo-Peñate et al., 2022).

The Competing Value Framework (CVF), established by Cameron and Quinn (2019), has been utilized in this study to investigate the cultural aspects of higher education. This research study explores the perception of teaching professionals regarding the prevailing culture in higher educational institutions and examines the influence of organizational culture on organizational effectiveness. It has also been assessed how ownership types moderate the relationship between organizational culture and its effectiveness. The findings and contributions of this study will help the owners of higher educational institutions decide whether to continue with the prevailing culture or to change the dimensions of the prevailing culture to maximize the effectiveness of their organizations.

Research Gap

More studies on organizational culture in educational institutions need to be conducted, despite the fact that the corporate sector has researched it extensively to enhance its effectiveness. A few researchers have studied the relationship between the types of culture prevailing at educational institutions and the institutions' effectiveness, specifically among colleges. Aktaş et al. (2011) have observed that organizational effectiveness is affected by variations in the organizational hierarchy, market, and adhocracy cultures. Aktaş et al. (2011) recommend investigating the influence of different types of cultures on organizational efficiency, considering the organizational founders' value as a moderator. This empirical study aims to test organizational culture's influence on organizational effectiveness, considering the type of ownership of the college as a moderator. This is because the value system of the organizations depends on the type of ownership of the institution. This study focuses on the type of ownership of a few selected private and government institutions in Tamil Nadu.

Review of Literature

Over decades of empirical research has established significant links between an organization's culture and performance. Several research studies on organizational culture and its associated aspects may be found in the literature, such as those by Schein (2010), Schwartz (1992), Hofstede (2011), and Cameron and Quinn (2019). The Competing Value Framework (CVF) suggested by Cameron and Quinn (2019) examines whether an organization's focus should be predominantly on the internal or external environment or strive for flexibility and individuality or stability and control. The following summarizes each culture's implications on organizational effectiveness.

Clan Culture

This culture emphasizes collaboration and cooperation among team members, talent and knowledge management, enablement, or interpersonal relationships (Cameron, 2009). This culture is rich in objectives, cohesion, participation, cooperation, and assistance, where people are committed to their community and oriented toward common principles, involvement, and communication. Building a sense of community and fostering trustworthy relationships are two ways leaders strengthen their organizations (Cameron & Quinn, 2019), where outcomes and results are highly emphasized.

Adhocracy Culture

This emphasizes a dynamic, innovative, and creative workplace. The entrepreneurial spirit, which includes risk-taking, flexibility, and looking forward, is embraced by employees and leaders (Cameron, 2009). The people are motivated by growth-oriented organization and adaptability to turbulent environments. They gain by a commitment to experimentation to value outside opportunities. According to Cameron and Quinn (2019), experimentation, lack of emphasis on structure, and achieving predictable outcomes become detrimental when taken to an extreme.

Hierarchical Culture

It is a very formal and organized workplace. Formal policies, rules, and processes govern the behavior of employees. The organizational structure clearly defines the roles to keep the organization working smoothly. Planning, effective systems and procedures, and ensuring compliance are prioritized in this culture. The dominance of rule, protocol, and process gives rise to predictable and dependable performance (Cameron, 2009). When taken to an extreme, according to Cameron and Quinn (2019), the hierarchical culture may become harmful, including inert, red tape bureaucracy, and may lead to organizational stagnation.

Market Culture

The results-driven company focuses more on outside interactions and prioritizes work completion. The organization emphasizes efficiency in achieving goals through market competitiveness (Cameron et al., 2022). The driving purposes of leaders are long-term and goal-oriented. They are focused on profits, market share, revenue, brand equity, and speed of response (Cameron & Quinn, 2019). When taken to an extreme, according to Cameron and Quinn (2019), the market culture becomes negative by giving rise to conflict and self-interests while ignoring issues involving more compassionate people.

Organizational Effectiveness

Organizational effectiveness encompasses various interpretations within different contexts. The concept of organizational effectiveness holds different connotations for different individuals. According to Reddy and Aswathappa (2018), finance managers perceive effectiveness as achieving a return on investment or increasing market capitalization. Conversely, marketing managers view effectiveness as a measure of sales growth. HR managers, on the other hand, associate effectiveness with employee satisfaction. It signifies the successful accomplishment of organizational objectives determined according to the system's requirements. Barnard et al. (2006) highlighted that every institution strives to enhance its effectiveness and achieve superior performance and results. Educational institutions are no exception to this pursuit. The goals of educational institutes vary from creating, evaluating, and improving educational programs, improving faculty member skills, and transforming the learning experience into a significant one for the students to developing and promoting innovation in all its activities (Al-Dulaimi, 2016).

Organizational Culture and Organizational Effectiveness

Different cultures within the organizations influence the organizational climate, affecting their effectiveness. Turnipseed (1988) assessed the effectiveness of district schools in terms of the student's scores on the skill tests

that measured their reading, writing, and mathematical abilities. His finding revealed that district schools with more detailed and confined rules, regulations, and a hierarchical managerial structure reflecting the bureaucratic culture were less effective. In contrast, schools that scored low on effectiveness focused on the small informal groups, whereas the highly effective schools focused on the school-level groupings. Tandon et al. (2021) found a pattern of significant correlation between organizational culture and self-efficacy, professional development and decision-making among the teaching fraternity employed in private universities. The organizational support dimension of organizational culture catalyzes innovation and creativity among the teaching fraternity in public and private universities (Chandel & Kaur, 2023).

However, a limited number of educational institutions have realized the significance of culture on its performance and effectiveness (Ng'ang'a & Wesonga, 2012). It is necessary to assess the culture of the educational institutions as it directly impacts the way the decisions are made, who is being rewarded, the way they are rewarded, and how agile the institute is in responding to challenges such as the Covid-19 pandemic in the teaching methodology and so on. When studying the association between the dominant culture type and cultural strength on the performance of colleges and universities, Smart and John (1996) discovered that the dominant culture substantially impacted performance compared to cultural strength.

Type of Ownership and Culture

Wang et al. (2007) explained that the presence of a learning organization culture tends to be stronger in privately-owned enterprises compared to state-owned enterprises, indicating that the type of ownership influences the culture established and sustained. This arises due to the immense pressure faced by privately owned enterprises for their survival and development in their respective industries, compelling them to seek ways to build a culture that promotes success (Wang et al., 2007)**.** To create an innovative culture in the organization, leaders must adopt different approaches depending on the ownership type of the organization. Villaluz and Hechanova (2019) claimed that leaders in sole proprietorships and family-owned corporations have greater control over the organizations, allowing them to implement developmental mechanisms, such as effective communication, evaluation, and rewards, that foster an innovative culture. Conversely, leaders in corporations other than sole proprietorships and family-owned businesses experience less control and power, and they need to focus more on developing creative strategies to cultivate an innovative culture (Villaluz & Hechanova, 2019). Zeng and Luo (2013) assessed the influence of culture on organizational effectiveness, considering different types of ownership. Foreign-invested firms tend to benefit from the effectiveness derived from organizational culture by prioritizing traits, such as involvement, consistency, and mission traits, particularly when compared to state-owned firms (Zeng & Luo, 2013).

Objective of the Study

The main aim of this study is to examine how the perceived culture of an organization affects the educational institutions' effectiveness while considering the ownership type as a moderating factor. It also evaluates how the teaching fraternity perceives the cultural dimensions in private and government colleges. In addition to the prime objective, this research analyzes how clan, adhocracy, hierarchy, and market culture impact the effectiveness of organizations. Further, it also investigates how a college's type of ownership (private or government) moderates the association between the four categories of organizational culture (adhocracy, clan, hierarchy, and market) and organizational effectiveness.

Conceptual Model and Hypothesis

The comprehensive literature review supported the researchers to understand how the organizational culture dimension is related to organizational efficiency. The literature also shows that the type of ownership plays a vital role in establishing the organizational culture. The ownership type moderates the values of the organizational culture. Figure 1 shows the proposed conceptual model adopted for the study.

The above-detailed literature review identified that different cultures in an organization significantly influenced organizational effectiveness. Thus, the following hypotheses were developed due to a thorough assessment of the literature and the suggested conceptual model, as shown in Figure 1.

↳ **Ha1 :** The teaching professionals working at government and private colleges significantly differ in their perception of clan culture.

↳ **Ha2 :** The teaching professionals working at government and private colleges significantly differ in their perception of adhocracy culture.

↳ **Ha3 :** The teaching professionals working at government and private colleges significantly differ in their perception of hierarchy culture.

↳ **Ha4 :** The teaching professionals working at government and private colleges significantly differ in their perception of market culture.

↳ **Hb1 :** The perceived clan culture of teaching professionals influences organizational effectiveness.

↳ **Hb2 :** The perceived adhocracy culture of teaching professionals influences organizational effectiveness.

↳ **Hb3 :** The perceived market culture of teaching professionals influences organizational effectiveness.

↳ **Hb4 :** The perceived hierarchy culture of teaching professionals influences organizational effectiveness.

↳ **Hc1 :** The ownership types moderate the relationship between the perceived clan culture and organizational effectiveness.

↳ **Hc2 :** The ownership types moderate the relationship between the perceived adhocracy culture and organizational effectiveness.

Figure 1. *The Conceptual Model*
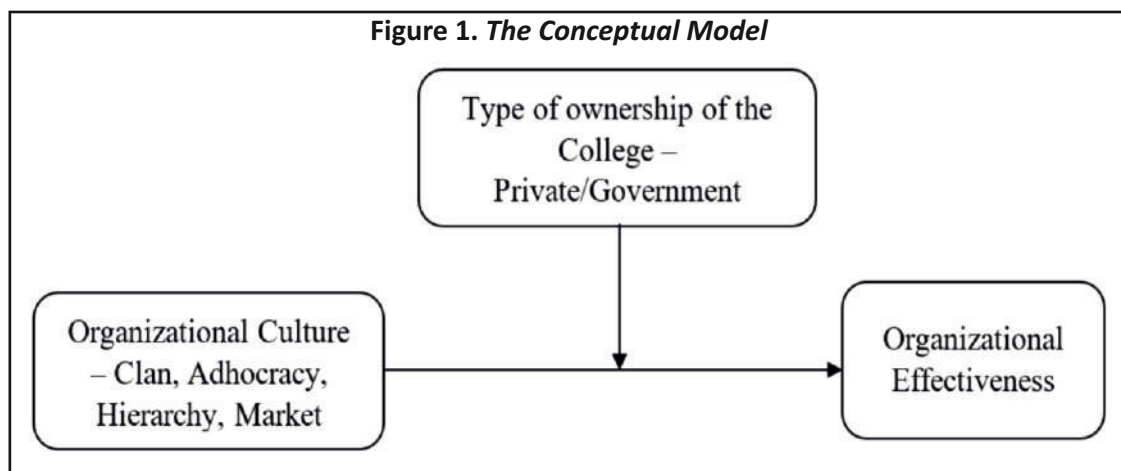
↳ **Hc3 :** The ownership types moderate the relationship between the perceived market culture and organizational effectiveness.

↳ **Hc4 :** The ownership types moderate the relationship between the perceived hierarchy culture and organizational effectiveness.

Development of the Survey Instrument

This empirical study adopted the assessment instrument (OCAI) that Cameron and Quinn (1999) developed to measure the perception of cultural dimensions in professional and arts and science higher educational institutions. A total of 24 items, adapted from Cameron and Quinn (2019), were used to measure the organization's prevailing culture. The instrument was amended to meet the study's specific objectives and educational institutions' needs. Then, the process of validation for the questionnaire was carried out. Five items were excluded for further assessment after the analysis of the results. The dropped items are: (a) My college is like an extended family, (b) My college is a very controlled and structured place, (c) Rules govern what faculty does, (d) Success in my college is defined based on outpacing the competition in the education sector, (e) The Head of the Department and Dean & Director emphasize efficiency, control, and smooth functioning of the departments.

To measure the organizational effectiveness dimensions in educational institutions, we adopted a scale from Smart and John (1996) and modified it with ten items in the research instrument. After the validation of the questionnaire, two items were excluded from the scale. The participants were requested to indicate their level of agreement for each item of the prevailing institutional culture and organizational effectiveness on a 5-point scale (1-*strongly disagree* and 5-*strongly agree*). A structured questionnaire was prepared in Google form and used to prepare the structured questionnaire, and it was pretested to measure its validity and reliability for the scale items. Minor corrections and modifications were made to the questionnaire before circulating it to the respondents for collecting the primary data.

Methodology

The study's target population is the higher education institutions in Tamil Nadu. Government engineering and arts and science colleges are directly owned and administered by the government of Tamil Nadu. This descriptive quantitative research utilizes a cross-sectional design to gather data from teaching professionals employed in private and government engineering, arts and science colleges in Tamil Nadu. Tamil Nadu has 461 private engineering colleges, 14 government and government-aided engineering colleges (Directorate of Technical Education, 2020), and 163 government arts and science colleges (TNGASA, 2020). The researchers collected 956 email addresses of the prospective participants visiting the educational institutions' websites. The questionnaires were distributed through the teaching professionals' email addresses. After a week, a reminder email was sent to the respondents to improve their participation. Subsequently, a second reminder mail was sent to participants to improve the response rate. Finally, 348 responses were received, of which 29 were not considered as the data provided was incomplete. Thus, a total of 319 responses were considered for the analysis. The participants represented 82 colleges, of which 43 are private and 39 are government colleges. The non-probability-purposive sampling procedure was adopted for this study. The reliability and validity test results of the data collected are shown in Table 1. The *t*-test was conducted to predict the perceptual difference of culture among teaching fraternities employed in private and government colleges. The researchers employed a hierarchy regression model to analyze the interactive effect of ownership type with different cultural dimensions on the effectiveness of educational institutions by using SPSS-Version-24. The respondents are the Assistant Professors, Associate Professors and Professors cadre teaching professionals. The study was conducted in March–June 2023.

Analysis and Results

The data was exported to SPSS (version 24) and cleansed for further analysis. The reliability and validity of constructs were calculated. Cronbach's alpha value of > 0.7 was achieved for all the factors except clan culture. The values shown in Table 1 indicate high internal consistency among the variables. The construct-wise items, the respective statements used in the questionnaire, and their loadings are shown in the Appendix.

A moderate value of Cronbach's alpha 0.625 was achieved for the factor clan culture (Nunnally, 1967). It also fulfills the criteria of composite reliability as the values are more than 0.7 (Hair et al., 1995), and the average variance extract (AVE) is more than 0.5 (Fornell & Larcker, 1981). Thus, the measurement model satisfies the conditions for construct validity.

Table 2 shows that the square root of AVE from each construct is greater than the highest correlation from any other construct as per the standard of Fornell and Larcker (1981), thus fulfilling the criteria for discriminant validity.

Table 3 shows that most participants are male (63.4%), and 78% of the respondents fall within the age groups of 31 to 40 and 41 to 50 years. Furthermore, 90.2% of the respondents are married. It is noteworthy that 48.8% of the participants hold a doctorate. Among the 82 respondents, the distribution between private and government colleges is balanced.

Table 1. *Statistics of Constructs*

Construct	AVE	Composite Reliability	Cronbach's Alpha
Adhocracy Culture	0.653	0.919	0.932
Hierarchy Culture	0.505	0.799	0.774
Market Culture	0.583	0.845	0.870
Organizational Effectiveness	0.688	0.946	0.963

Note. AVE – Average Variance Extracted.

Table 2. *Discriminant Validity*

	CC	AC	MC	HC	OE
CC	0.71				
AC	0.01	0.81			
MC	0.38	0.26	0.71		
HC	0.20	0.56	0.55	0.76	
OE	0.25	0.56	0.44	0.48	0.83

Note. CC – Clan Culture, *AC* – Adhocracy Culture, *MC* – Market Culture, *HC* – Hierarchy Culture, *OE* – Organizational Effectiveness.

Table 3. *Descriptive Analysis of the Demographic Data*

Variables	Frequency	Percentage (%)
Gender		
Male	52	63.4
Female	30	36.6
Age		
23 – 30 years	04	04.9

31 – 40 years	32	39.0	
41 – 50 years	32	39.0	
50 and above	14	17.1	
Marital Status			
Married	78	90.2	
Unmarried	04	09.8	
Institute Ownership Type			
Private College	43	52.4	
Government College	39	47.6	
Designation			
Assistant Professor	41	50.0	
Associate Professor	15	18.3	
Professor	26	31.7	
Educational Qualification			
Master's Degree	25	30.5	
M.Phil.	12	14.6	
Ph.D.	40	48.8	
Post Doctorate	05	06.1	

Table 4. *Perception of Teaching Professionals Towards Their Organizational Culture*

Culture Type	Institution Type				*t*-value	*p*-value
	Private College		Government College			
	Mean	SD	Mean	SD		
CC	4.28	1.015	3.99	1.221	2.751	0.007*
AC	3.47	1.154	3.37	1.242	0.591	0.557
HC	3.63	1.071	3.50	1.122	0.817	0.416
MC	3.94	1.013	3.43	1.161	3.054	0.003*

Note. N = 43 for Private college, N = 39 for Government colleges; (*p < 0.05).

From Table 4, it is found that the teaching professionals in private colleges (Mean = 4.28) perceive a better clan culture (*t*-value = 2.751, p < 0.05) compared to those in government colleges (Mean = 3.99). Teaching professionals in private colleges (Mean = 3.94) experience a higher level of market culture (*t*-value = 3.054, p < 0.05) compared to those in government colleges (Mean = 3.43). However, no significant differences are observed in perception towards adhocracy culture (p = 0.557) and hierarchy culture (p = 0.416) among teaching professionals in private and government colleges at a 95% confidence level.

An independent sample *t*-test was conducted to compare the perceptions of organizational culture among private and government college teaching professionals. Figure 2 indicates that private and government educational institutes exhibit all four dimensions of organizational culture: clan, adhocracy, hierarchy, and market culture. Regarding clan culture and market culture, the findings of the independent sample *t*-test show that the teaching professionals at private and government colleges have quite different perspectives.

Figure 2. *Visual Representation of Cultures Through Radar Chart*
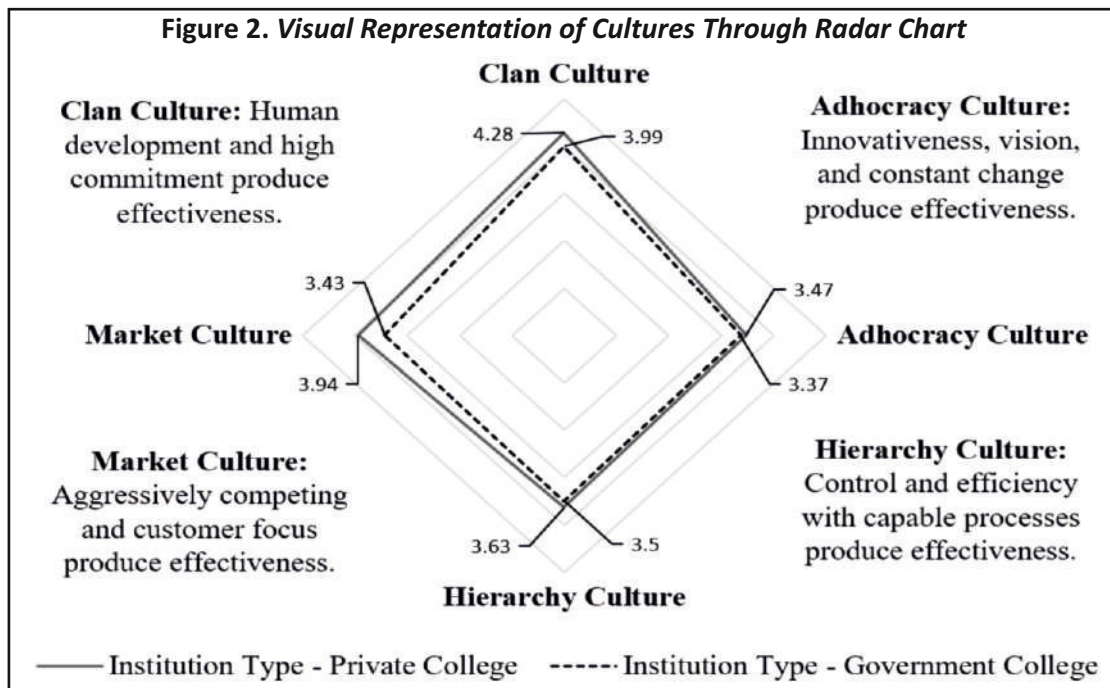
The outcomes indicate that government and private arts and science college teaching professionals have significantly different perspectives about market and clan culture characteristics. Consequently, we fail to reject hypotheses Ha1 and Ha4. However, among teaching professionals, no significant variation is observed in the perception of adhocracy and hierarchy culture characteristics. This has led to the rejection of hypotheses Ha2 and Ha3.

Organizational Culture on Organization Effectiveness with the Type of Ownership as a Moderator

The organizational culture can potentially impact the level of organizational effectiveness in private and government colleges. The researchers in this study aimed to analyze this influence using hierarchical regression analysis.

The proposed hypotheses are tested using the analysis findings. The additional variance explained by the independent variables, their interaction terms, and the moderating effect of the type of ownership were included in the analysis in two steps. Organizational effectiveness is the outcome variable, and the independent variables that are regressed on it are hierarchical, market, clan, and adhocracy cultures. The organizational effectiveness of educational institutions is strongly impacted by all the independent factors, as shown in Table 5. In the second step, moderation and interaction variables are added to the model to investigate the possible moderating effect of the proposed hypotheses. The market culture's significant moderation and interaction factors revealed that the educational institution's ownership type modifies the association between market culture and organizational effectiveness (Adjusted $R^2 = 0.233$, $p < 0.05$). However, the interactive terms of clan culture, adhocracy culture, and hierarchy culture concerning organizational effectiveness ($\beta = -0.065$, $p > 0.05$, $\beta = -0.074$, $p > 0.05$, $\beta = -0.017$, $p > 0.05$) are negative and do not meet the minimum significance level of $p < 0.05$. The significant change in R^2 between step 1 and step 2 ($R^2 = 0.058$, $p < 0.05$) supports the statement that the type of ownership of educational institutions, in conjunction with market culture, moderates organizational effectiveness.

The findings reveal that hierarchical, market, adhocracy, and clan cultures significantly affect organizational effectiveness. Thus, we fail to reject hypotheses Hb1, Hb2, Hb3, and Hb4. The interactive terms of market culture

Table 5. *Results of Hierarchical Regression Analysis*

	Variable	β-value	Sig.	Change in F	R^2	Adjusted R^2	Change R^2
Model 1							
Independent	CC	0.483	*	5.209	0.063	0.051	0.063
Moderator	CC × PVT.	–0.065	NS	1.574	0.081	0.058	0.019
Model 2							
Independent	AC	0.686	**	34.154	0.310	0.301	0.310
Moderator	AC × PVT.	–0.074	NS	2.300	0.331	0.313	0.021
Model 3							
Independent	MC	0.532	**	18.216	0.195	0.185	0.195
Moderator	MC × PVT.	–0.131	*	5.755	0.253	0.233	0.058
Model 4							
Independent	HC	0.634	**	22.703	0.225	0.216	0.225
Moderator	HC × PVT.	–0.017	NS	0.103	0.226	0.206	0.001

Note. PVT - Private Colleges. * $P < 0.05$, ** $P < 0.001$; NS – Not Significant.

and the type of ownership significantly impact organizational effectiveness, failing to reject hypothesis Hc3. However, the interaction terms of clan culture, adhocracy culture, and hierarchy culture are not significant at a 95% confidence level. Thus, hypotheses Hc1, Hc2, and Hc4 are rejected.

Discussion

The analysis of data and its findings signify that the teaching professionals in private colleges perceive a higher mean score (4.28) for clan culture compared to those in government colleges. This suggests that the teaching professionals working in private colleges experience better mentoring facilities from their senior and peer faculty members. Teaching fraternities experience the spirit of teamwork, participation in developmental projects, loyalty, trust, and positive relationships among themselves, which are favorable indicators to ensure the quality of education provided in higher education. It is reflected that the culture of collaboration and sharing is imperative among the faculty members, departments and institutions to advocate quality in higher education (Kumar, 2023). Clan culture has also negatively affected teacher burnout, indicating that administrators must promote and strengthen clan culture (Zhang et al., 2022).

The higher mean score of 3.94 in private colleges for market culture indicates that teaching professionals perceive their institutions as highly competitive, achievement-focused, result-oriented, and driven by challenging targets compared to government colleges. It accords with the findings of Tandon et al. (2021) that teachers in private universities predominantly perceive market culture. In private colleges, the placement of students is given more importance, and the success of students is a significant measure of achievement for teaching professionals. However, it is essential to note that teaching professionals may also express dissatisfaction or unhappiness with the reward or incentive system in place, as highlighted by Efeoğlu and Ulum (2017).

Teaching professionals at private and public institutions perceive no substantial difference between adhocracy and hierarchical cultures. The lowest mean score of 3.37 for adhocracy culture compared to other dimensions of organizational culture suggests that educational institutions should give priority to the development and adoption of innovative teaching pedagogies and evaluation methods as an alternative to enhancing the risk-taking factors rather than sticking to the traditional lecture-based approaches while rendering educational services. This observation is consistent with earlier studies that point out the challenges higher education in India faces regarding

efficiency, innovation, and competitiveness (Joshi & Ahir, 2016; Sheikh, 2017). A significant gap prevails between the traditional teaching pedagogy and students' expectations, which could be curtailed by collaborating with industry experts and creating an inclusive digital environment (Gill et al., 2023). It implies that intervention measures are required to promote innovation and enhance the efficiency of higher education institutions in India.

The results reveal that all four cultural dimensions present in educational institutions influence organizational effectiveness positively. This finding is consistent with earlier research highlighting the strong positive association between clan and adhocracy culture and organizational learning, leading to improved performance in private organizations (Oh & Han, 2020). It also aligns with the recommendation that developing a strong organizational culture is essential for enhancing employee and organizational performance (Pathiranage, 2019).

While examining the results of this study in ascending order, it was found that the adhocracy culture has the highest influence on effectiveness, followed by hierarchy, market, and clan cultures. For example, each unit increase in perceived clan culture correlates to a 0.483 unit increase in effectiveness. In contrast, each unit increase in perceived adhocracy culture in educational institutions is related to a 0.686 unit increase in effectiveness. The focus should be more on an adhocracy culture that promotes entrepreneur and innovator leadership than other organizational cultures to increase the effectiveness of educational institutions. In addition to attracting professional talent for teaching, coaching, mentoring, and research, the colleges may improve their adhocracy cultures by enticing high-potential students to enroll in their programs.

The analysis of the type of ownership of educational institutions as a moderator on organizational cultural dimensions and their effectiveness revealed that moderation is significant for the perceived market culture. The analysis indicates that a unit increase in perceived market culture in private colleges decreases the institution's effectiveness by 0.131 units. The moderating effect of the type of ownership accounts for 5.8% of the variance in effectiveness at a significant level of 95%. Hence, it is essential for colleges, i.e., the institution's founders, to prioritize and nurture their cultural dimensions, as clan, adhocracy, hierarchy, and market cultures directly impact organizational effectiveness.

Implications

Managerial Implications

An effective strategy encompassing organizational culture is critical to determining a viable institutional vision and mission. The existing hierarchy of the organization may hinder the advancement toward effective governance. However, the study revealed that government and private educational institutions score lower in adhocracy culture than other cultural dimensions. Therefore, management may emphasize enhancing the adhocracy culture within colleges to mitigate the conflict between faculty and administrators. To promote an adhocracy culture, colleges should facilitate fast decision-making processes, encourage risk-taking among faculty members, adopt innovative pedagogical approaches as alternatives to traditional teaching methods, and provide organizational support for experimenting with new practices. Intervention strategies like incorporating tech-driven teaching methodology, advocating interdisciplinary projects between departments, encouraging faculty and college clubs to collaborate with industrial projects, approaching the industries for seed funding, and promoting activity-based learning, such as workshops, role plays, and simulations can improve the characteristics of the adhocracy dimension. These efforts can foster a more dynamic and adaptive organizational culture that promotes creativity, innovation, and continuous improvement in educational institutions.

The type of ownership structure of the educational institution moderates the relationship between organizational effectiveness and perceived market culture negatively. This suggests that private colleges should be cautious when developing their market culture further, as it might negatively influence their organizational

performance. Professors perceive private colleges to be highly competitive and result-oriented in terms of the pass percentage of their students and research targets, which burn out teaching professionals continuously, leading to exhaustion. Further increases in this cultural dimension could be detrimental to private institutes, as they find it challenging to attract, select, engage, and retain professionals, which could negatively impact their effectiveness. Private colleges can maintain the cultural characteristics of market culture without further aggravation. Strategies can be adapted to reduce the burnout of faculty members by modifying their performance appraisal policies and being flexible in timelines. The weightage on students' results, placements, and research targets can be minimized, and more weight can be placed on innovative pedagogy, mentoring, learning, and development dimensions of teaching professionals. However, the type of ownership does not moderate the relationship between perceived clan, adhocracy, and hierarchy culture and their influence on the organization's effectiveness. Therefore, colleges, regardless of their ownership, should focus on building and fostering the important dimensional characteristics of clan, adhocracy, and hierarchy culture to increase their organizational effectiveness. The institutions should consider both the subjective and objective performance characteristics while measuring their effectiveness, which is incorporated as its dimensions of culture while establishing its strategy (Farooq, 2014). This can be achieved by regular reinforcement through activities, such as seminars, training, etc., involving all stakeholders to enhance individual performance (Kumari & Singh, 2018).

Theoretical Implications

The employee perceptions within the organization are reflected in the organizational culture. This study contributes to various dimensions of different cultures and the literature on organizational culture. The adhocracy and market cultures are outwardly oriented, whereas the clan and hierarchy cultures are oriented inwardly. All four cultural dimensions at varying levels influence higher education institutions' effectiveness. Adhocracy culture has a more significant influence as it prioritizes the importance of change, creativity, and innovation in raising the effectiveness of higher education institutions. It also recognized that the organizational culture significantly influences other dimensions, such as involvement and commitment, that help improve performance (Chandel et al., 2023).

Moreover, the intriguing interaction between ownership and cultural intricacies indicates that the founders' value system drives the effectiveness of higher education. The excessive external attention paid to higher education institutions can lessen the efficacy of private institutions. Therefore, the institution's founders must integrate the critical dimensions of its culture with its vision and mission while formulating their strategy and coordinating with all stakeholders to establish a conducive attitudinal and behavioral environment to improve performance.

Conclusion

Globally, educational institutions' external and internal cultural environments are changing rapidly. The findings of this study show that teaching professionals in private and government colleges see organizational culture differently. Government colleges are advised to take aggressive steps to improve the dimensional aspects of clan and market culture in light of the results that private colleges do better than government colleges. According to the research findings, clan, adhocracy, hierarchy, and market cultures directly and positively affect organizational effectiveness. The educational institution cultures that foster both individual and collective performance are the most successful ones. Knowing and using the individuals' skills effectively is the leaders' or founders' ability to compensate for the institutions' inconsistencies and personal weaknesses to meet the vision.

This study attempted to answer whether the type of ownership of the educational institution moderates the

effects of organizational culture on organizational effectiveness. It is found that the ownership type negatively moderates the relationship between market culture and organizational effectiveness. In private colleges, teaching professionals perceive higher dimensions of market culture, but further efforts to increase this dimension may prove detrimental to the college. This is because faculty members feel that private colleges are overly aggressive and competitive, with the success of faculty being measured against competing colleges. They also perceive that the targets the management sets are unrealistic and unachievable. Overall, these findings emphasize the need to consider the type of ownership in understanding the relationship between organizational culture, particularly market culture, and organizational effectiveness in educational institutions.

Limitations of the Study and Scope for Future Research

The findings suggest that the teaching professionals in private and government colleges have different perspectives on clan and market culture. Moreover, clan, adhocracy, hierarchy, and market cultures all strongly and positively impact organizational effectiveness. The ownership structure of the colleges moderates the relationship between market culture and organizational success. This finding brings opportunities for more research in this area.

However, it is essential to note that the results of this study should not be generalized to all educational institutions, as it focused specifically on private and government engineering and arts and science colleges located in Tamil Nadu. The management practices and cultural dynamics of other higher educational institutions, such as universities, nursing colleges, dental colleges, and business schools, may differ. The findings may be extended to a larger context and give a more thorough knowledge of the relationship between organizational culture and effectiveness in diverse educational contexts by performing studies in different institutions.

Authors' Contribution

Dr. K. Subha determined the research gap and its objectives and worked on reviewing the literature to develop the conceptual framework. Dr. C. N. S. Ramnath Babu worked on the questionnaire to collect data on the constructs and dealt with the pilot study. Dr. C. N. S. Ramnath Babu identified the colleges, looked up the email addresses of possible respondents on the websites, sent reminders, and circulated the questionnaire around. Further, he cleaned the data, and the analysis was done using SPSS 24.0 by Dr. K. Subha. Dr. K. Subha interpreted the data analysis and wrote the manuscript in consultation with Dr. C. N. S. Ramnath Babu.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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Appendix. *List of Questionnaire Items*

Construct	Items	Item Loadings	Cronbach's Alpha	Source
Clan Culture (CC)	The head of the Department and the Dean/Director leadership in my college are best defined by mentoring, facilitating projects, and nurturing faculty talents *[CC1]*.	0.628	0.625	(Cameron & Quinn, 2019)
	My college's management style is teamwork, consensus, and faculty participation toward development *[CC2]*.	0.495		
	Loyalty, relationships, and trust among the faculties are the glue that holds my college together *[CC3]*.	0.817		
	The Head of the Department and the Dean/Director emphasize open-mindedness in teaching fraternity and human development *[CC4]*.	0.836		
	Success in my department is defined based on the development of teaching fraternity, like research publications, empowerment, and teamwork *[CC5]*.	0.705		
Adhocracy Culture (AC)	My college is a very dynamic, entrepreneurial place. Faculties are fearless in taking risks, making change, and are willing to learn from mistakes *[AC1]*.	0.765	0.932	(Cameron & Quinn, 2019)
	The Head of the Department and the Dean/Director of leadership in my college are best defined by innovation and risk-taking *[AC2]*.	0.825		
	Continuous improvement through innovation, risk-taking, and uniqueness in pedagogy is the management style in my college *[AC3]*.	0.797		
	Commitment to innovation in teaching approach and freedom of thought and development is the glue that holds my college together *[AC4]*.	0.828		
	The Head of the Department and the Dean/Director emphasize undertaking new practices in imparting knowledge, initiative, and prospecting for valued opportunities *[AC5]*.	0.826		
	Success in my department is defined as having the most unique and creative teaching method other than the traditional talk and chalk method *[AC6]*.	0.806		
Hierarchy Culture (HC)	The Head of the Department and the Dean/Director of leadership in my college are best defined by organizing ability (workshops/conferences/webinars) and coordinating departments and faculties *[HC1]*.	0.728	0.774	(Cameron & Quinn, 2019)
	My college's management styles include employment security, conformity with rules, and relationship stability *[HC2]*.	0.861		
	Following formal rules and policies in rendering educational service is the glue that holds my college together *[HC3]*.	0.668		
	Success in my college is defined based on the efficiency of faculties and the smooth functioning of operations *[HC4]*.	0.551		
Market Culture (MC)	My college is result-oriented. Faculties are highly competitive and achievement-focused *[MC1]*.	0.595	0.870	(Cameron & Quinn, 2019)
	The Head of the Department and the Dean/Director	0.680		

	leadership in my college are best defined by aggressiveness toward goal achievement and exam result-oriented *[MC2]*.			
	Competitiveness and achievement of goals, such as 100% results and student placement, are the management styles in my college *[MC3]*.	0.889		
	The Head of the Department and the Dean/ Director emphasize results and competition among departments. Achieving challenging targets and being the best is emphasized *[MC4]*.	0.852		
Organizational Effectiveness (OE)	My college can maintain its competitive leadership in the education sector *[OE1]*.	0.801	0.963	(Smart & John, 1996)
	My college can attract reputed companies for campus recruitment *[OE2]*.	0.665		
	My college can attract the right talent to render its educational services *[OE3]*.	0.790		
	My college can adopt innovative teaching methodologies for students' academic development *[OE4]*.	0.839		
	My college can enhance the quality of services rendered for students' personal development *[OE5]*.	0.905		
	My college can provide a conducive workplace to its teaching fraternity *[OE6]*.	0.897		
	My college can retain its talented workforce through career development and job satisfaction *[OE7]*.	0.858		
	My college encourages research work and publications among the teaching fraternity *[OE8]*.	0.856		

About the Authors

Dr. K. Subha has been trained in pedagogy and research methods at IIM Ahmedabad. Dr. K. Subha holds a doctorate in management and is NET-qualified. She has two decades of academic experience and has published articles in ABDC/Scopus-indexed journals.

Dr. C. N. S. Ramnath Babu has a blend of over 25 years of experience in industry and academics. He is interested in social impact assessment studies, business marketing, and other related areas. He has also conducted several corporate training programs.