



International Journal of Business and Globalisation

ISSN online: 1753-3635 - ISSN print: 1753-3627

<https://www.inderscience.com/ijbg>

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DOI: [10.1504/IJBG.2025.10074248](https://doi.org/10.1504/IJBG.2025.10074248)

Article History:

Received:	26 May 2025
Last revised:	03 August 2025
Accepted:	18 August 2025
Published online:	04 November 2025

Nested complexities: navigating new organisational culture in the post-crisis era in South Africa

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Abstract: In the current competitive business environment, the issue of sound organisational culture is gaining hegemony as it plays a quintessential role in organisational growth and talent retention. While there is an array of organisational culture literature, there is a paucity of studies that have looked at new organisational culture in the post-pandemic era in South Africa. Informed by Edgar Schein's organisational culture model, the study sought to investigate the challenges and influences of new organisational culture in Higher education in the post-crisis era. The study adopted a qualitative research approach and used semi-structured interviews as the primary instrument for collecting data from 18 employees in South Africa. The findings of this study identified difficulties in adapting to change, digital technology accessibility, the inadequacy of resources, lack of leadership support, and lack of training and team-building initiatives as the main challenges and influences associated with the new organisational culture.

Keywords: organisational culture; human resource issues; workplace transformation; higher education; South Africa.

Reference to this paper should be made as follows: Ndelu, H.L. and Utete, R. (2025) 'Nested complexities: navigating new organisational culture in the post-crisis era in South Africa', *Int. J. Business and Globalisation*, Vol. 41, No. 6, pp.1–23.

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1 Introduction

Organisational culture in the higher education sector holds significant importance in shaping the beliefs, values, norms and behaviour of individuals within academic institutions (Nanayakkara et al., 2021). However, the lack of scholarship on new organisational culture is astonishing considering that inevitable changes are constantly happening in the educational sector due to unforeseen upheavals. In the previous years, there has been an increasing interest amongst academicians to investigate the concept of organisational culture in higher education institutions to manage the transformation taking place globally and across various sectors. However, organisational culture remains a contentious subject amongst researchers. To date, only a few studies have been conducted focusing on organisational culture change in academia concerning the post-COVID-19 pandemic era (Khan et al., 2020). Organisational culture encompasses shared attitudes, practices and customs that define the identity and character of an organisation. The post-COVID-19 pandemic period has brought about significant changes and challenges to the higher education sector, requiring institutions to adapt and evolve their organisational cultures to meet the new realities of a rapidly changing world (Chandler et al., 2017). The pandemic has pressured higher education institutions to adopt remote learning and flexible work arrangements, as well as implementing digital technologies at an unprecedented pace, which has become the new normal in the post-pandemic period (Ingelsson et al., 2018). These changes have not only altered how education is delivered but have also impacted the way faculty, staff and students interact and collaborate within the academic environment. As a result, Nanayakkara and Wilkinson state that organisational cultures in higher education are transforming to incorporate elements such as virtual communication, technology integration, and a greater emphasis on resilience and adaptability (Nanayakkara et al., 2021).

The pandemic brought about significant changes in the field of human resources, particularly in the South African higher education sector (Ingelsson et al., 2018). A growing number of institutions are re-thinking traditional structures and practices to foster collaboration, creativity and continuous learning among their employees (Yang et al., 2023; Creswell and Creswell, 2018). In light of the new working methods, such as remote and hybrid working, employees are expected to be digitally proficient, maintain open communication, and quickly adapt to change. As a result, cultural change within organisations is an essential aspect of ensuring that employees are effective in their roles (Yang et al., 2023). To achieve this, new values, norms, beliefs, processes and communication practices must be implemented (Lee et al., 2016). Although cultural change occurs naturally over time, management can actively engineer it through long-term organisational development, employee training and short-term transformational changes (Creswell and Creswell, 2018). Despite prior research revealed that organisational culture remains a contentious subject amongst researchers, to date, only a few studies have been conducted focusing on organisational culture change in academia with reference to the post-COVID-19 pandemic era (Khan et al., 2020; Aina and Ogebo, 2022). This study offers insights into the influences and challenges of organisational culture changes in South African workplaces. It contributes to the growing body of literature by examining a relatively underexplored context: a middle-income African nation with a predominantly poor resource base. The current study sought to:

- 1 explore the challenges associated with the new organisational culture in the post-pandemic period in South Africa
- 2 examine the key factors influencing the change of organisational culture in South Africa.

2 Literature review

With the void of empirical information on challenges and influences of new organisational culture in HEIs in the post-pandemic era, this section reviews the literature concerning the change of OC in the aftermath of the COVID-19 pandemic. Change has become a mainstay in today's organisations, but the effort overwhelmingly portrays unsuccessful and stressful events for both management and employees (Davis and Dolson, 2018; Haningsih and Rohmi, 2022; Weston, 2018). Moreover, other literature on organisational change modifies culture as an outcome of change. Despite the effort put into organisational change interventions, they are still unsuccessful, with an estimated failure rate of up to 70% (Al-Haddad and Kotnour, 2015). Bakhri et al. (2018) argue that whenever transformation is handled well, it creates enormous potential for an organisation. Researchers find it fascinating to discuss the importance of monitoring corporate culture, as has been proven by many studies on organisational culture, such as those conducted by Bakhri et al. (2018), Tsai (2011) and Acar (2012).

2.1 *The concept of organisational culture*

According to Davis and Dolson (2018), organisational culture is defined as a set of underlying principles that a group develops to address challenges related to internal integration and external adaptation (Davis and Dolson, 2018). Mikušová et al. (2023) emphasise that Schein contributed to an entire generation of scholars with his theory of organisational culture, which is divided into three levels: artefacts, values and norms, and fundamental beliefs (Tsai, 2011). According to Cameron and Quinn (2006), there are four types of cultures, namely clan culture, hierarchy culture, adhocracy culture and market culture (Acar, 2012). The attributes of a clan culture include cooperative thinking, a welcoming work atmosphere and shared values and objectives (Tsai, 2011). Adhocracy culture has a vibrant, creative and entrepreneurial atmosphere. Individuals are risk-takers and managers are creative and imaginative visionaries. A results-driven organisation's competitive and goal-focused environment is reflected in its market culture. A hierarchical culture has formal rules that are the uniting factor which emphasises procedures and regulations in an organised and formalised work environment (Mikušová et al., 2023).

Taye et al. (2019) highlight that culture has been a well-known issue of discussion in everyday debates and has evolved into an academic priority within institutions (Cameron and Quinn, 2006). Moreover, inside group cultural norms establish what is accepted, rejected, discouraged and encouraged. Nonetheless, the two essential aspects that hold independence of an organisation's size, kind, industry or location are how people interact with one another and how the organisation responds to change (Luo et al., 2016). Additionally, Groysberg et al. (2018) emphasise that these two elements must be identified to comprehend where organisational culture fits in. An organisation's attitude

towards the co-ordination and interaction of its members can be characterised as either very independent or highly interdependent. Response to change is defined as a culture that emphasises stability, flexibility and control.

2.2 Challenges and factors affecting organisational culture

According to Yang et al. (2023), affordability, accessibility, flexibility, lifelong work and dynamic regulations have become recognised as issues concerning a contemporary culture and hybrid work setting. Through the emerging attitude, various workplaces have reported unequal treatment, disparities and prejudice, which is because many occupations need a staff member to be physically present at the office, whereas other employment might permit an employee to operate either physically or remotely (Yang et al., 2023). Nevertheless, virtual learning is now more popular in South Africa. However, it is hindered by load-shedding which constantly interrupts internet connections. Additionally, many educational institutions are forced to consistently use traditional ways of work instead of distance learning since many learners, particularly beginners, need access to modern gadgets. However, there are a few concerns about the prospects of the state of education in SA because of several issues related to a warped culture. In South Africa, still-growing academic institutions are the most affected by these drastic transitions (Tsai, 2011). However, minimal research has previously been conducted in those still-growing academic institutions, in this case, vocational colleges. Hence, the current study focuses on Vocational Colleges in KwaZulu-Natal.

The new culture of hybrid work in the aftermath of the COVID-19 pandemic is giving rise to several extraordinarily unlawful and immoral problems, which encompass inequity, nepotism and prejudice in a variety of roles, whether contract workers or permanent staff members hold them (Taye et al., 2019). Even when the pandemic ended and many issues disappeared, the pandemic aftermath brought transformation that required adaptability and flexibility from staff members. Unfortunately, certain employees need a greater ability to adjust to the current requirements as quickly as the organisations anticipates (Mikušová et al., 2023). Additionally, South African HEIs face many opportunistic challenges that became significant in the aftermath of the COVID-19 pandemic. Although certain universities embraced an emerging organisational culture centred around hybrid work, others returned to fully-fledged in-person employment. However, employees need assistance with the new culture of hybrid working. The new culture leads to substantial absenteeism and high work abscond rates. A worse scenario is when several employees leave their existing employer in favour of companies that still support remote work cultures (Taye et al., 2019). At HEIs, learners who prefer virtual education over in-person instruction exacerbate and sustain resistance to cultural transformation, making them the biggest threat to transformation initiatives (Groysberg et al., 2018).

2.3 Theoretical framework

The current study is guided by Edgar Schein's organisational culture model. Edgar Schein's organisational culture model presents a valuable perspective for comprehending how organisational culture evolves in response to external disturbances, such as the COVID-19 pandemic. Schein categorises organisational culture into three tiers, namely artefacts and behaviours, espoused values, and fundamental underlying assumptions

(Paschal et al., 2022; Timmis et al., 2022). Amidst the pandemic, organisations have experienced considerable cultural transformation across all three tiers of Schein's model. To navigate the impact of the pandemic on artefacts, espoused values and fundamental assumptions, organisations can proactively manage cultural change; encourage employee engagement; and cultivate a resilient organisational culture that can thrive in the uncertain and fluctuating conditions depicted in the post-pandemic period (Schein, 1985).

- **Artefacts and behaviours:** this level signifies the perceptible expressions of culture, which include the physical environment, dress code, rituals and communication styles within an organisation. Ahorsu (2020) posits that with the advent of the COVID-19 pandemic, organisations were constrained to shift operations to remote work, adopt virtual communication tools and execute safety protocols to safeguard employees' health. These changes in artefacts and behaviours represent the prompt adaptations undertaken by organisations to address the crisis.
- **Espoused values:** the following level of culture entails the expressed beliefs, objectives and philosophies that inform decision-making and behaviour within the organisation. During the pandemic, Njegovan and Kostic (2014) state that numerous organisations prioritised values such as employee well-being, agility and innovation in response to the exceptional challenges posed by COVID-19. Leaders propagated these values to the workforce to inspire resilience, co-operation and adaptability in navigating the crisis.
- **Basic underlying assumptions:** at the core, organisational culture is formed by unconscious beliefs, practices and expectations that govern the way things are carried out within the organisation (Shi, et al., 2020). The COVID-19 pandemic has put to the test many fundamental assumptions concerning work, leadership and organisational resilience. In the aftermath of the pandemic, organisations must re-evaluate and potentially transform their basic assumptions to align with the new realities of a post-pandemic world.

The COVID-19 pandemic has necessitated significant cultural adjustments across all three levels of Schein's model for organisations. Acknowledging the impact of the pandemic on artefacts, espoused values and underlying assumptions, organisations can proactively manage cultural change; encourage employee engagement; and build a resilient organisational culture capable of prospering in times of uncertainty and change (Gruman and Saks, 2018).

3 Methods

3.1 Research design

The study followed an interpretivism research philosophy and employed a qualitative research approach. The qualitative research approach provides a deeper understanding of a phenomenon through an exploration of the perspectives and experiences of the individuals involved (Taylor et al., 2016). Qualitative research explores the lived experiences of individuals which can be invaluable for understanding influences and challenges associated with new organisational culture in the post-pandemic period. In addition, this study used an exploratory research design because it presents the final and

precise responses to the qualitative research questions, as well as an in-depth exploration of the research theme (Etikan and Bala, 2017; Kothari, 2020). Lune and Berg (2017) expound that the exploratory research design is used because it develops a profound sense that pronounces occurrences and attempts to elucidate why the behaviour is the way it is.

3.2 Research setting

The colleges that were selected for the study are the part of Coastal KZN TVET Colleges, which is the largest college in KwaZulu-Natal. These campuses offer a range of vocational and technical education programs aimed at equipping students with practical skills for the workforce. Known for its scenic surroundings, these campuses provide a variety of educational programs and are dedicated to fostering a supportive learning environment. Both campuses are integral parts of Coastal KZN TVET College, which was formed through the merger of several technical colleges and colleges of education.

Both colleges were selected because the study aimed to find challenges the schools faced in the township and rural areas when the COVID-19 strike. TVET colleges were not exposed to digital technology teachings and employees had to work from home with insufficient resources. Even though employees use desktops in offices they cannot take them home. Due to innovations and the fourth industrial in the post-COVID-19 era technology usage and online teachings are most recommended yet TVET colleges are still struggling.

3.3 Target population and sampling method

The target population for this study included 137 employees in the two selected Vocational colleges/ higher education institutions in KwaZulu-Natal and the sample size of 20 participants was selected from the target population. According to Creswell and Creswell (2018), in a qualitative research study, a sample of between 10 and 50 participants may be considered. This study adopted a purposive sampling technique which is a non-probability sampling strategy to select the participants. The purposive sampling technique was adopted because of its ability to target a specific participant who knew the organisational culture that was being investigated making it cost-effective and efficient. In addition, purposive sampling was used because it was efficient and cost saving as it allowed the researcher to focus more on the most relevant participants. Non-probability sampling is defined by Etikan and Bala (2017) as a method of selecting research participants based on non-random criteria. Non-probability sampling strategy is suitable for qualitative research studies (Mujere, 2016). In addition, it is quicker, cost-effective, are more suitable for studies with limited resources and time constraints (Suri, 2011).

3.4 Participant recruitment

An information letter was personally sent to the management by the researcher requesting the employees to participate in the study. Verbal communication recruitment was done to elaborate on what is written in an information letter. The management was requested to introduce the researcher to the participants. Thereafter participants were approached personally by the researcher to participate in the study.

3.5 *Measuring instrument*

The in-depth, semi-structured interview schedule was used to collect data for this study and to develop a guide to the entire process. The respondents were asked about challenges and influences associated with new organisational culture in the post-COVID-19 pandemic era. Semi-structured questions were utilised by the researcher to solicit information that answered the research questions of the study, looking into questions relevant to the subject. A semi-structured interview schedule was used, through which the interviewer allowed the interviewee to freely speak about their experiences and opinions on the challenges and influences associated with the new organisational culture in the post-pandemic period.

3.6 *Trustworthiness of qualitative data*

According to Korstjens and Moser (2017), trustworthiness in qualitative data refers to the credibility, dependability, confirmability, and transferability of the research findings. Credibility in this study was enhanced through employing qualitative research methods that had been used in previous studies. In-depth open-ended questions were used to collect vital primary data from the participants' perspectives on the change of organisational culture in higher education institutions. Transferability was enhanced through a detailed discussion of the research context, research procedure and data collection procedure that was used. In addition, the researcher used a theoretical framework as guidance when developing the open-ended questions, which in turn informed the objectives of the research underpinning this study. To ensure dependability, the design of the open-ended research questions was done in such a way that if future studies were to conduct the same study in the same setting, the same or similar results would be produced. To assure confirmability in this study, the researcher thoroughly checked and assessed the data to ensure that the interpretation and findings which emerge from the interviews are not biased but are a true reflection of the views of the participants.

3.7 *Analysis*

The thematic analysis method was in line with an inductive analysis approach. The data was interpreted manually through an inductive analysis approach which adhered to the steps of Braun and Clarke (2013) presented as follows: the initial step is for the researcher to familiarise themselves with the data. In this study, the researcher listened to audios, read notes and a general glimpse of the data to familiarise with it. In addition, the audios were transcribed into text. Initially, the collected data were meticulously categorised into broad sections, which could encompass words, sentences, paragraphs, or pages conveying conceptual understanding. Each segment of data was encoded with descriptive labels to facilitate organisation and analysis. Subsequently, the coded data were systematically examined to identify recurring patterns and themes. Each category of code bundles was scrutinised, and themes were derived from these bundles, with each theme focusing on a general case or concept emerging from the data. The various categories of generated themes and codes were organised and presented coherently. This involved describing the themes and their respective codes in a manner that was understandable and reflective of the data. Each theme was given a name. In addition, in

this step, the researcher derived subthemes from the main themes. Finally, the identified themes and codes were subject to interpretation and discussion by the researcher. This phase involved delving into the significance of the themes, exploring their implications, and drawing conclusions based on the interpreted findings.

3.8 *Ethical considerations*

Participants gave their consent in writing to participate in this study prior to collection of data. Participants were informed about this study, its aim, objectives, questions and data collection process, and provided their written consent for inclusion into the study. This research adhered to the ethical guidelines and obtained ethical approval (Ethics Clearance Number: IREC 138/23) from Institutional Research Ethics Committee (IREC) of Durban University of Technology.

4 Results

In this study, interviews were used to explore the challenges and influences linked with the new organisational culture within vocational colleges. Through the semi-structured questions posed to participants, responses were collected and subsequently subjected to thematic data analysis methods and procedures. In line with the sample of the study, the research approached 20 respondents comprised of academic and support staff. However, the data were successfully gathered from 18 respondents. The remaining two participants declined to take part in the interview due to their busy schedules. Hence, the response rate was 90%.

4.1 *Descriptive analysis*

Table 1 provides demographic profiles of the participants.

As shown in Table 1, the gender distribution of the participants comprised 50% male and 50% female. The majority of the participants (74%) were the ages between 31 and 40 years. While the bulk of participants (95%) were of African origin, 60% served between 10–14 years in the organisations. Most participants (61%) hold a degree and held different positions in their organisations with almost 60% occupying positions of senior lecturers and junior lecturers.

As vocational colleges strive to adjust to evolving environments marked by technological advancements and unforeseen disruptions like the COVID-19 pandemic, they encounter multifaceted obstacles in reshaping their cultural frameworks. To gain insights into these challenges, this study explored the sub-themes that have emerged from qualitative research, presenting the perspectives of participants. In this study, the Gioia (2021) approach served as the frame for conducting the analysis. To accomplish the key objectives of this study, Gioia reinforces the criticality of reporting informant-centred (first-order), theory-centred (second-order) and findings (third-order) data (Figure 1) (Gioia et al., 2013). In this study, the Gioia approach was chosen to comprehensively understand the challenges and influences of new organisational culture within South African higher education.

Table 1 Demographic information

	<i>Gender</i>	<i>Age group (years)</i>	<i>Racial group</i>	<i>Length of service (years)</i>	<i>Qualification</i>	<i>Position</i>
Participant 1	Male	31–35	African Black	5–9	Diploma	Professional staff
Participant 2	Female	41–45	African Black	10–14	Degree	Junior lecturer
Participant 3	Male	36–40	African Black	5–9	Degree	Junior lecturer
Participant 4	Male	> 51	African Black	15–19	Degree	Head of department
Participant 5	Male	41–45	White	15–19	Degree	Senior lecturer
Participant 6	Male	46–50	African Black	10–14	Diploma	Senior lecturer
Participant 7	Female	> 51	African Black	10–14	Degree	Senior lecturer
Participant 8	Female	41–45	African Black	10–14	Diploma	Professional staff
Participant 9	Male	36–40	African Black	5–9	Degree	Senior lecturer
Participant 10	Female	36–40	African Black	14–19	Diploma	Professional staff
Participant 11	Female	36–40	African Black	14–19	Diploma	Professional staff
Participant 12	Male	36–40	African Black	10–14	Degree	Junior lecturer
Participant 13	Female	41–45	African Black	10–14	Degree	Junior lecturer
Participant 14	Female	41–45	African Black	10–14	Degree	Junior lecturer
Participant 15	Male	36–40	African Black	10–14	Degree	Junior lecturer
Participant 16	Female	41–45	African Black	10–14	Degree	Junior lecturer
Participant 17	Female	41–45	African Black	5–9	Diploma	Professional staff
Participant 18	Male	41–45	African Black	5–9	Diploma	Professional staff

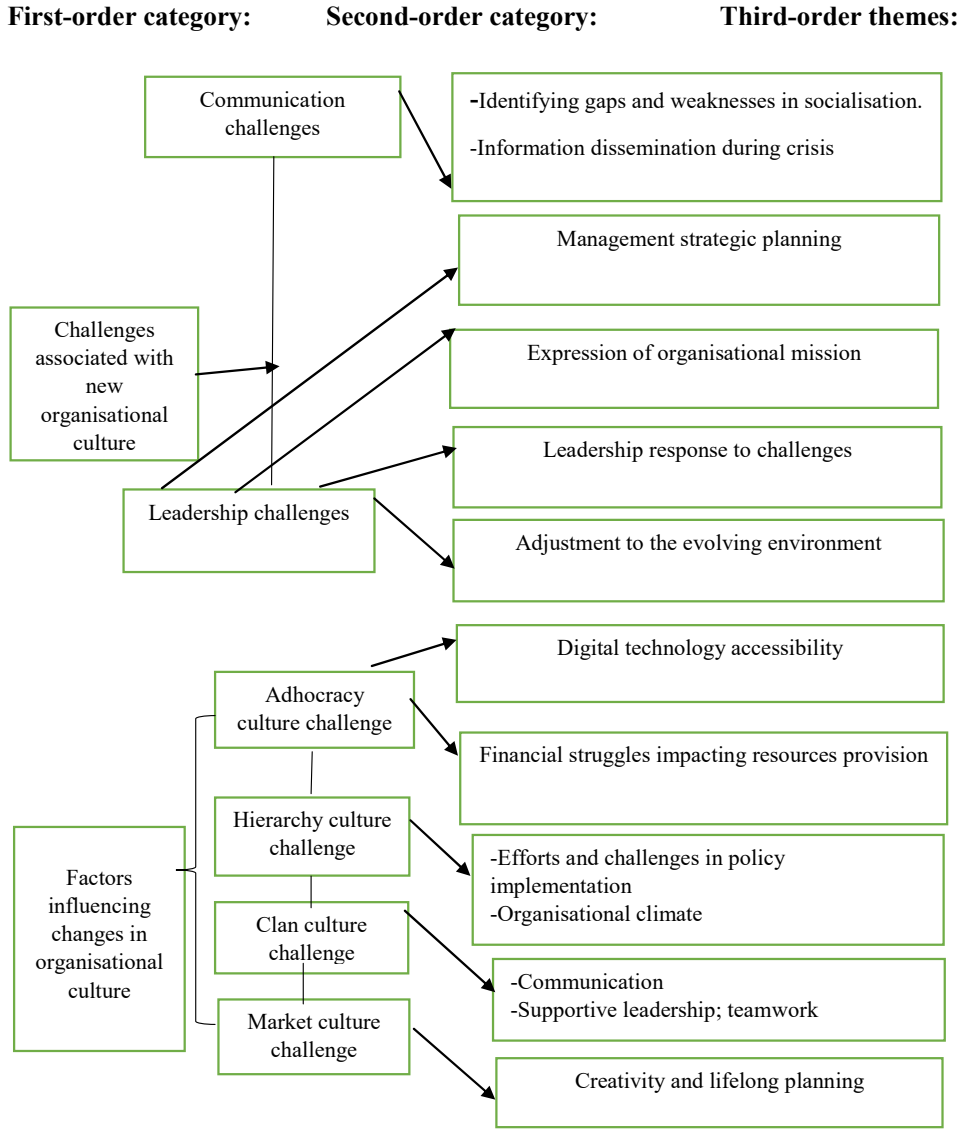
Source: Researchers' analysis

The analytical approach encompassed the development of first-order, second-order and aggregate third-order themes indicated by Gioia et al. (2013), was utilised to systematically analyse qualitative data and uncover key challenges and influences associated with new organisational culture. In the first-order analysis two categories, namely factors influencing changes in organisational culture and challenges associated with new organisational culture, were identified (Kothari, 2020).

4.2 Themes identified

The main themes that emerged from the qualitative analysis in line with the objectives of the study are the challenges and factors that influence the change in organisational culture at the vocational colleges.

Figure 1 Themes (see online version for colours)



Source: Authors' compilation

4.3 Objective 1: challenges associated with the new organisational culture

Table 2 Challenges associated with the new organisational culture

<i>Objective 1</i>	<i>Themes</i>
Challenges associated with the new organisational culture	Adjustment to the evolving environment
	Management strategic planning
	Identifying gaps and weaknesses in socialisation
	Expression of organisational mission
	Leadership response to challenges
	Information dissemination during crisis

4.3.1 Theme 1 – adjustment to the evolving environment

Participants indicated that the COVID-19 pandemic brought about many changes in the manner in which people in organisations work and communicate. Many COVID-induced changes such as the intensive use of digital communication devices in work settings, and the use of technology to enhance the ease of teaching and flexibility in terms of working hours were carried into the post-pandemic period. The following statement was quoted verbatim (P10):

“The more frequent use of digital communication tools such as Zoom, Microsoft Teams and other online learning tools in the post-COVID-19 is a major challenge for some of us who are not tech savvy, as we were only able to communicate via WhatsApp and through emails during COVID-19. It was and still is a struggle for us to learn as well as adjust to having meetings and even perform our duties using these technologies.”

4.3.2 Theme 2: management’s strategic planning

Another significant theme that emerged was management’s strategic planning. Participants provided perspectives on the actions taken by management to address the challenges posed by the crisis. While some participants acknowledge the implementation of strategic planning and adaptations in teaching and learning methodologies. Some acknowledge that managing limited resources was one of the challenges that impacted the change in culture in the post-pandemic period. Transitioning to the post-pandemic period required resources such as computers and software, and staff had to ensure that they could have internet access, as well as time. The extract below from P17 depicts some sentiments and perceptions from the participants regarding resources:

“During the post-pandemic, the institution management had to seek financial resources to ensure that all educators had fast computers and software to ensure that we were all on the same page. In addition, in the post-pandemic period, some of us can now perform our duties even at home but they must have fast and reliable internet at home which most of us do not have.”

4.3.3 Theme 3: identifying gaps and weaknesses in socialisation

Table 2 shows the theme ‘Identified gaps and weaknesses in socialisation’ highlighting the broader societal ramifications of the crisis at the college. These gaps include variations in social support systems and access to technology. The participants shed light

on disparities in social support systems. Notably, P1 draws attention to the stark division between affluent and disadvantaged individuals emphasised by the pandemic, while P6 stresses the digital divide in technology access. Additionally, P8 raises concerns about the challenges associated with identifying affected individuals. Despite endeavours to bolster teaching and learning initiatives (P9), there's a recognised imperative for a comprehensive approach to bridging socialisation gaps, as advocated by P10. This emphasises the need for a comprehensive educational approach tailored to meet the diverse needs of employees. There is a need for evolution in organisational culture entailing efforts to foster inclusivity, diminish socioeconomic disparities, improve technological resources and create a nurturing learning environment capable of accommodating the diverse circumstances and obstacles faced by employees. Find the details in the extract below.

P1: "It showed that we are not united. It even exposed the fact that there are rich and poor people. P9: "The support was provided for teaching and learning but lacks emphasis on other socialisation aspects." P10: "I think our college needs more comprehensive methods of operation for all staff beyond emergencies."

4.3.4 Theme 4: expression of organisational mission

Moreover, in Table 2 under the theme of 'Expression of organisational mission', participants offer varied perspectives. While some recognise the organisation's dedication to employee welfare and its ability to adjust to the pandemic (P1, P6, P7), others voice uncertainty or doubt regarding any observable shifts (P3, P5). When the mission prioritises employees' well-being and adaptation to challenges such as the pandemic, it fosters a culture characterised by resilience and an employee-centred approach. This shift may result in an increased emphasis on excellence and responsiveness to the changing needs of employees and stakeholders. Nonetheless, there remains an overall agreement on the significance of maintaining the organisational mission in the face of challenges. This sentiment is echoed by responses emphasising an ongoing commitment to excellence (P8) and the provision of support for teaching and learning initiatives (P9). This evidence shows that organisational mission has the potential to transform organisational culture within Vocational Colleges by guiding behaviours, decisions, and attitudes.

P10: "One of the challenges that I think really affected the transition from COVID-19 pandemic to post-pandemic was lack of adequate team building activities by the colleges to ensure an atmosphere of teamwork, cooperation, coordination and mutual effort towards the organisational values. Teambuilding ensures that we bond together, share the same values and norms. On the other hand, training provides us with the knowledge and skills that support the new way of doing things such as the use of online learning platforms amongst other things."

4.3.5 Theme 5: leadership response to challenges

The participants expressed that they did not feel motivated to change their behaviours, values and beliefs to align with the post-pandemic culture that was inevitably adopted by their organisations. P1 was quoted verbatim:

“Despite management’s focus ensuring quality teaching, there was not enough effective leadership responses and initiatives to promote innovation, collaborative problem-solving and a willingness to embrace change among faculty, staff and students.”

4.3.6 Theme 6: information dissemination during crisis

From Table 2 ‘Information dissemination during crisis’ emerged as the last theme. Under this theme participants indicated the communication methods employed for information dissemination within Vocational Colleges amidst the crisis. Notably, social networks like WhatsApp emerge as prominent channels (P1 and P2) with P2 exemplifying the distribution of laptops to facilitate connectivity. This is complemented by the acknowledgement of both formal and informal communication avenues, as seen in P3’s reference to e-mails and WhatsApp. Also, traditional methods such as posters and signs coexist with digital platforms like social media and e-mail (P6, P7 and P8). Meanwhile, participants, including P5, express confidence in the efficacy of these communication efforts, showing the importance of a multifaceted approach. The recognition of WhatsApp and e-mail channels’ significance during the pandemic, shows their vital role in maintaining connectivity and disseminating critical information during challenging times (P9 and P10). Prioritising clear and timely communication, colleges promote an atmosphere of openness and trust among faculty, staff, and students. This emphasis on transparent communication encourages greater engagement and collaboration, empowering individuals to contribute ideas and solutions collectively.

P1: ‘Social networks, e.g., WhatsApp’. P2: ‘Social networks, WhatsApp groups’. P3: ‘In the post-COVID-19 we were given devices (laptops)’. P4: “It was spread in many ways, formal and informal, e.g., emails and WhatsApp’. P5: “Our marketing was always there to provide the information. That is one area that I believe did well.” P6: “Posters, signs and email communication. P7: “They created WhatsApp groups and email for communication.” P8: “Through social media platforms.” P9: “We were communicating through WhatsApp and email due to the pandemic.” P10: “We were communicating via WhatsApp and email channels.”

4.4 Objective 2: factors influencing changes in organisational culture in the post pandemic period

Theme two explored the variables shaping the shift in organisational culture within these institutions after the pandemic. Each sub-theme represents a unique facet contributing to the broader evolution of organisational culture within vocational colleges. Analysing the responses associated with these sub-themes provides valuable insights into the complex nature of change occurring in these institutions post-pandemic, guiding efforts to cultivate a more adaptable, resilient, and student-centric organisational culture.

- Objective 2: factors influencing changes in organisational culture.

4.4.1 Theme 1: digital technologies accessibility

The participants revealed that the pandemic inevitably catalysed the use of digital technologies in communication and performing jobs by employees in colleges, which was widely adopted in the post-pandemic period: P7 was quoted verbatim:

“The wave of digital technology has shaped how work is conducted around the globe, particularly in the education sector where we now have to deliver our classes using Microsoft teams, assignments are being submitted via Moodle and meetings are done virtually. Covid-19 was just a catalyst that sped up the adoption of technology and digitalisation in most academic institutions”. P13 echoed the same sentiments: “The continued use of digital technologies in the post-pandemic period has changed and shaped the culture of my organisation about the way communication is done, how we conduct our duties, and it has brought flexibility which limits interactions among employees as they spend most of their times in offices or working remotely”. The above perception from the participants shows that digital technologies have a great influence on organisational culture in the post-pandemic period.

Table 3 Factors influencing changes in organisational culture

<i>Objective 2</i>	<i>Themes</i>
Factors influencing changes in organisational culture	<ul style="list-style-type: none"> • Digital technology accessibility • Communication • Financial struggles impacting resources provision • Efforts and challenges in policy implementation • Supportive leadership • Teamwork • Creativity, lifelong planning and organisational climate • Incorporation of flexible methods of content delivery

4.4.1.1 Sub-theme 1.1: communication

The participants expressed that communication is an important variable for any changes to be smooth and effective in an organisation: P9 was quoted verbatim:

“In huge shifts such as transitioning from a very tough situation such as the COVID-19 pandemic, management definitely need strong and timely communications regarding all changes to working procedures, methods, tools, equipment and values to ensure that everyone is on the same page.”

4.4.2 Theme 2: resource availability

The participants highlighted a significant sub-theme influencing culture change within Vocational Colleges which is having resources. Although change is inevitable, when it comes, resources should be made available to ensure the successful transition from old to new required change. P1 was quoted verbatim:

“The colleges were not prepared for the culture change which requires investments in resources such as computers, software and availability of financial resources to migrate to digital infused culture. The economic downturn exacerbates existing constraints, making it difficult for colleges to allocate funds for crucial resources like technology and infrastructure.” This showed that having adequate resources was a contributing factor towards the change of culture in the colleges in the post-pandemic period.

4.4.3 Theme 3: challenges in policy implementation

Challenges in policy implementation were indicated in Table 3 as another sub theme on challenges affecting organisational culture change in the post pandemic period. The Challenges in policy implementation can lead to confusion, frustration, and divergence from organisational goals, which can negatively impact the overall culture. This sub theme captures a diverse perspective among participants. Whilst some participants express confidence in the existence and efficacy of organisational change policies, others raise concerns about their adequacy or implementation. Participants acknowledge the presence of policies, particularly regarding resource access and health and safety, suggesting a foundational framework within the institution: P17 was quoted verbatim:

“There are policies in the organisation about the health, safety and well-being of employees, and resources. However, some workmates and campuses do not have adequate resources such as computers and internet connectivity.”

4.4.3.1 Sub theme 3.1: supportive leadership

The participants revealed that effective leadership support is a factor that influences the organisational culture of colleges in the post-pandemic period. Most participants agree that for any initiative, such as a change in values and ultimately organisational culture, to be successful leadership support is vital. P7 was quoted verbatim:

“There has to be buy-in from the top-level management and they must support the culture transition. Change begins at the top and Leadership in an organisation must have a sharp vision and skills to inspire people to see the need to embrace change, value it and make it happen. Our leaders must orchestrate an environment that enables employees to have a zeal for continuous innovation, improvement and change by giving them time, space and resources that they require. In addition, leadership is responsible for developing an effective plan, values and tone which ensures that the operation in an organisation runs effectively and efficiently.”

All the strategies, including change management, fall under the responsibilities of leaders. P13 was quoted verbatim: “Breaking the old and embracing the new rests on the shoulders of leadership. Therefore, leadership are responsible for working culture, workflows and the way everyday activities in the colleges are conducted”.

4.4.3.2 Sub theme 3.2: teamwork

The participants acknowledged that teamwork is a factor which influenced organisational culture change in the post-pandemic period in the selected vocational colleges. Teamwork emerged as another finding from both colleges, P1 was quoted verbatim:

“It is very important to create a community where employees are all pulling together towards adopting and embracing the culture change. Teamwork allowed us to assist each other to cope with changes, assist others in their shortfalls and collectively deal with the challenges presented by situations, especially the digital migration. In addition, teamwork allowed us to put all of our experiences during the COVID-19 pandemic together and come up with the best solutions on how we can handle change in a positive way.”

4.4.4 *Theme 4: creativity, lifelong planning and organisational climate*

The participants revealed that creativity was a factor that influenced organisational culture change in vocational colleges by the participants. P15 was quoted verbatim:

“We need an organisation that will encourage creativity so that the employees in an organisation can be able to come up with solutions on how to deal with the problems, challenges and difficulties in an effective and efficient manner. In the post-pandemic period, an innovative and creative culture is required so that we constantly improve the way we work and provide solutions to the new demands imposed by redesign of work and lifelong planning for the fourth industrial revolution.” Creativity is crucial in change as it allows employees to come out with a variety of ideas both right and wrong, using their strengths, and experiences and not to be afraid of any failure or airing one’s idea.

4.4.5 *Theme 5: flexible methods of content delivery*

The participants expressed that flexible methods of content delivery are another factor which influences organisational culture change. Under this sub-theme, participant insights provide valuable perspectives on how flexible methods of content delivery had the potential to drive a profound transformation in organisational culture within Vocational Colleges. P10 was quoted verbatim:

“Flexible methods of content delivery are now being used; however, I think we lack the skills and knowledge on how to effectively use these methods. The blended method of learning allows us to deliver our content using both traditional classroom methods and through online platforms such as Zoom, Moodle, Microsoft Teams and Google Meet among other learning management systems”. The flexible content delivery methods allow me to deliver content outside the campus which limits the office interactions with colleagues and calls for greater collaboration and communication. In addition, this changes the norms of being at the workplace all the time as I can deliver my duties anywhere.

5 Discussion

5.1 *Challenges associated with new organisational culture*

One of the objectives of this study was to identify the challenges associated with new organisational culture in the post-pandemic period. The findings of this study identified difficulties in adapting to change, the inadequacy of resources, lack of leadership support, policy implementation, and lack of training and team-building initiatives as the main challenges associated with organisational culture change at the case colleges in KwaZulu-Natal in the post COVID-19 period. The results revealed the significant shift of culture in organisations due to an infusion of digital technologies and flexibility. The findings indicated that resource shortage is a bottleneck which compromises the core values of the organisation, leading to a culture that inhibits rather than facilitates change. The results are in line with Van den et al. (2014) findings, which found that resources play a pivotal role in enabling organisations to adjust to and navigate through periods of change effectively. This perspective shows the essential contribution of resources in facilitating organisational adaptation and resilience amidst shifting environments. In addition, the findings presented by Mncayi and Singh (2021) and Van Biljon and Mentz

(2021), underline the profound impact of resource allocation on organisational culture, particularly within the context of Technical Colleges in South Africa. This phenomenon becomes even more pronounced during periods of crisis, such as the COVID-19 pandemic, where technological infrastructure deficiencies worsened existing systemic barriers, thus hindering cultural evolution. The core value is one of the components of organisational culture serving as guiding principles shaping behaviours, decisions and interactions among members. However, in their study, Appio et al. (2021) found that when resources are scarce or improperly allocated, these core values can become compromised, leading to a culture of stagnation rather than innovation.

Difficulties in adapting to change were also identified by the participants as one of the challenges that impede culture change in technical colleges in the post-COVID-19 period. In the post-COVID-19 period, the use of digital technologies in facilitating flexibility, collaboration and innovation, facilitating connections amongst educators from diverse geographical locations, has increased and is expected to continue growing. However, the findings of Mavimbela and Mncube (2018) concur that those who did not have a technological background and older generations found it very difficult and challenging to adapt to the use of computers and digital technologies in performing their duties. On the contrary, the findings of Reshi (2021) in the study on the challenges to organisational change indicated that failure to adapt and cope with changes hinders the process of change. The study recommended that instead of seeing adaptability as a new trait to be cultivated, organisations need to tap into existing resources and mechanisms to navigate challenging circumstances. Thus, their view emphasises a more optimistic stance, suggesting that adaptability is not something to be instilled but rather something to be recognised and nurtured within organisational cultures.

5.2 Factors influencing new organisational culture

The findings of the study indicated that the accessibility of resources such as digital technology presents significant variables that influence organisational culture. This finding confirms the finding of Oosthuizen and Bodibe (2015) showing a disparity in access to digital technology at TVET colleges in South Africa. The inability to provide adequate digital resources to all faculty and students reflects a discrepancy in the college's commitment to ensuring equal opportunities for learning and advancement. This shows a fundamental factor that directly affects the core values of equity and inclusivity, which shape the culture within these institutions. A similar finding was arrived at by Olatokun and Hassan (2019), indicating digital technology accessibility amongst academic staff in the TVET colleges in South Africa as a major factor of organisational culture change.

Creativity has been identified as a factor that influences organisational culture in the post-pandemic period by the participants. Spicer (2020) found that the fundamental values and assumptions of various organisations give the impression of having shifted from exploration and creativity towards safety and resilience (Mbele, 2020). The post-pandemic period requires employees in organisations to be creative and innovative in embracing the digital landscape that has been fuelled by the pandemic. Climate encompasses the tangible elements that contribute to the culture, such as policies, practices, procedures and routines, which in turn shape employee beliefs and values (Oosthuizen and Bodibe, 2015).

However, it is crucial to note that modifications in procedures and the way things are done in an organisation are short-lived unless accompanied by fundamental changes in values, ways of thinking and problem-solving approaches. This is because resisting forces will simply renew their efforts to restore the old status quo (Mbele, 2020; Beitler, 2005). To achieve sustainable organisational culture change, all the significant stakeholders must fully commit to the change process, incorporating variations in norms, values, policies and procedures to accommodate the new paradigm shift because all members of the organisational setup must become change agents, actively contributing to the spread of the new culture and engaging in constructive dialogue with their colleagues (Schneider et al., 1996; Masilela and Mncube, 2017). Therefore, it can be asserted that for an effective new organisational culture to be fruitful, creativity and organisational climate must be created, and must be monitored to ensure a dynamic and flexible culture that can easily adapt to changes.

The findings also identified supportive and effective leadership as an essential element that plays a pivotal role in the process of change, and to some extent facilitates cultural shifts. This is because management is accountable for the culture within the organisation, as well as the practices and values it promotes to establish the climate and culture. Studies on organisational culture change suggest that certain leadership traits, such as the level of involvement of subordinates in decision-making, have a positive influence on the acceptance of culture change (Meyiwa and Khan, 2020; Gumbo and Mhlanga, 2017). On the other hand, the failure of management to engage all stakeholders and involve the inputs in the implementation of culture change will result in resistance to change, as indicated in the findings of Gumbo and Mhlanga (2017). To successfully lead change, management must not only align their respective parts of the organisation with the change but also be the role models of the new organisational culture, in addition to communicating the new norms to the employees.

In addition, the findings revealed that incorporating flexible methods of content delivery can significantly shape the organisational culture at vocational colleges in the post-COVID-19 pandemic era. The findings of Meyiwa and Khan (2020) concur that persistent challenges with technological equipment and work resources hinder institutions' adaptation to new modes of content delivery, thus impacting organisational culture. These hurdles signify a cultural struggle to embrace technological advancements and innovation, potentially fostering a sense of frustration and resistance amongst staff. Moreover, the inability to overcome these challenges may lead to a culture of stagnation and inefficiency, hindering the organisation's ability to meet evolving educational demands and maintain competitiveness in a rapidly changing environment, as highlighted by Mavimbela and Mncube (2018).

Despite these factors, efforts by the organisation to cater to the teaching and learning needs of employees demonstrate a commitment to addressing the evolving educational system. However, divergent views on the effectiveness of adapting and improving content delivery methods suggest a need for clearer communication and training to ensure staff awareness, commitment and engagement with change, which is in line with the findings of other studies (Van-Staden and Masinga, 2020; Mhlanga et al., 2019). Conflicting perspectives on flexible content delivery methods can create communication gaps within the institution. While some acknowledge proactive measures, others perceive a lack of staff awareness. This discord may impact organisational culture by fostering uncertainty and highlighting the need for improved communication strategies to align staff expectations with institutional goals. Gumbo and Mhlanga (2017) indicate the

importance of robust training programs and transparent communication strategies to facilitate the successful implementation of flexible delivery approaches and foster a culture of adaptability. Mncayi and Singh (2021) indicate that a stagnant content delivery environment and resistance to change underscore the necessity for proactive measures to foster innovation and agility within Vocational Colleges. This highlights a cultural need for adaptability and responsiveness to meet evolving educational demands and maintain competitiveness in the modern environment.

5.3 Practical implications

Since the findings indicated that the training provided was not adequate, the vocational colleges should provide training to their employees. Therefore, Department of Higher Education and Training should provide well-designed and comprehensive training for employees to be able to use digital technologies, which are more prevalent in content delivery and communication in the TVET colleges. The training can be in form of role playing, behaviour modelling and business games. The findings revealed that there was inadequate team building. The management at vocational colleges should provide more robust action learning initiatives and activities to their TVET employees, teams and departments. In addition, management at vocational colleges should enhance their communication in both directions, up and down the chain of command. Organisation culture change is supported by open communication from both ends through various platforms such as meetings, memos and informal discussions. Department of Higher Education and Training should provide adequate resources in terms of finance, technology and other resources that support the culture change in the TVET Colleges. Leadership at the vocational colleges should be supportive and be at the forefront of driving the new organisational culture. Leadership should lead by example by practising the desired values and norms, be clear in their communication, lend a helping hand, and provide resources and guidance through the culture change processes and phases. Management at vocational colleges should enhance the awareness of various policies among the employees. The findings revealed that policies existed, but some employees were not aware of them. Therefore, policy awareness and education campaigns for employees should be initiated and employees should be given copies of the policies available in the organisation. Management at vocational colleges should manage and deal with resistance to change by fostering open communication, transparency and active engagement with all stakeholders involved. Management should create a positive climate in the organisation that influences employees to contest the status quo and think outside the box to come up with new solutions, methods and values.

5.4 Theoretical implications

The study provides empirical assessment of Schein model's three tiers of organisational culture, namely artefacts and behaviours, espoused values, and fundamental underlying assumptions. Amidst the pandemic, the study indicated that institutions experienced considerable cultural transformation across all three tiers of Schein's model. The results of this study supports Schein's model by revealing the significant shift of culture in organisations due to an infusion of digital technologies and flexibility. Fundamental underlying assumptions is one of the Schein model's three tiers of organisational culture and current study confirmed the tier by demonstrating that resource shortage is a

bottleneck which compromises the core values of the organisation, leading to a culture that inhibits rather than facilitates change. It supporting the artefacts and behaviours of Schein model, the current study's findings revealed that incorporating flexible methods of content delivery can significantly shape the organisational culture at vocational colleges in the post-COVID-19 pandemic era.

5.5 Limitations and suggestions for future studies

The limitations of this study lie in its scope and research approach. The study was conducted covering only Umbumbulu and Appelsbosch Coastal Colleges which are in KwaZulu-Natal, South Africa. This was due to the available resources and timeframe allocated for the study. Therefore, the findings may not be representative of the broader population or applicable to other colleges in other provinces, highlighting the importance of caution in interpreting and applying the results of the study. In addition, the study used a qualitative research approach to gather data from 20 participants out of 137 through interviews. The adoption and use of a mixed method approach could have provided more perceptions of the challenges and factors influencing new organisational culture in the post-COVID-19 period. However, the identified limitations did not compromise the quality of the results. Future studies can focus on assessing the role of training and development programs in promoting a culture of resilience, innovation and adaptability in the face of future disruptions, which is a crucial area of focus for enhancing organisational performance and sustainability in vocational colleges in the post-COVID-19 period. In addition, researchers may investigate the long-term impact of technology adoption and digitalisation on organisational culture in vocational colleges.

6 Conclusions

The key objectives of the current study have been accomplished. In relation to the factors that influenced organisational culture change in the post-pandemic period, the study emphasised that digital technologies, the availability of resources, communication, teamwork, leadership and organisational climate had great impact in bringing new ideas, values and norms. The study revealed several challenges that were associated with the change in organisational culture at the selected colleges. These challenges include resistance to change, policy implementation, lack digital skills and knowledge, leadership did not foster engagement, lacked adequate training to cope with the change, and there was inadequacy in team building to ensure that the team was bonding and sharing the same values and norms. The study has made significant contributions to the existing body of knowledge and provides valuable insights for educational institutions in relation to their human resource management. Furthermore, the findings of the study provided practical recommendations for colleges in KwaZulu-Natal, assisting them in navigating the post-pandemic landscape and enhancing organisational culture acceptance and embracement. The paper makes two key contributions: first, unlike many prior studies that investigated organisational culture in general, it explores variations in influences and challenges based on the available resources. The study strengthens leadership capabilities and promotes innovation and collaboration by reinforcing a vibrant organisational culture.

Informed consent

Participants voluntarily participated and provided their written consent for inclusion into the study. Participants were informed that they have the right to withdraw from the study at any time deemed necessary, without any prejudice.

Declarations

All authors declare that they have no conflicts of interest.

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