

EFFECTS OF COVID-19 ADJUSTED SCHOOL CULTURE AND INTERACTION ON STUDENTS' PARTICIPATION IN SCHOOLING IN PUBLIC BOARDING SECONDARY SCHOOLS IN THARAKA-NITHI COUNTY, KENYA

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Abstract

Schooling participation is a critical determinant of social learning, shaping students' interpersonal skills, emotional intelligence, identity development, and civic dispositions. COVID-19 pandemic had irreversible effects on school interactions and culture, emanating from the resultant mitigation measures which had a profound impact on people around the world. This study sought to identify effects of covid-19 adjusted school culture and interaction on students' participation in schooling in public secondary schools in Tharaka-Nithi County in Kenya. The study used adopted Functionalist Theory. The study employed an ex-post facto and descriptive research design to examine the relationship between COVID-19-adjusted school culture and students' participation in schooling among secondary schools in Tharaka-Nithi County. Data were collected from 300 respondents (teachers and curriculum masters) using questionnaires and interview guides, analyzed through descriptive and inferential statistics, including the Wilcoxon signed-rank test to assess significance in participation changes. The findings revealed that before COVID-19, schools had a vibrant, interactive culture characterized by active teacher-student engagement, strong peer relationships, and robust co-curricular activities that enhanced student participation. However, the pandemic disrupted these interactions, limiting physical contact, communication, and extracurricular activities, thereby weakening students' sense of belonging and participation. Despite this, the Wilcoxon signed-rank test showed no statistically significant difference in participation levels before and after the COVID-19 adjustments ($Z = -0.256$, $p = 0.798$), suggesting resilience within the school system despite cultural disruptions. The study recommends that the Ministry of Education develop a crisis management policy to safeguard learning continuity during pandemics, strengthen co-curricular programs to foster emotional and social development, and conduct further research on the roles of teachers and parents in supporting students' adaptation during crises.

Key words: School culture and interactions, student's participation, *Schooling*, and *COVID-19 Pandemic*

INTRODUCTION

Participation in schooling refers to students' active engagement in both curricular and co-curricular activities that shape their academic, social, and emotional development. It encompasses regular attendance, classroom interaction, and involvement in activities such as sports, clubs, and cultural events that nurture interpersonal skills, emotional intelligence, and civic values (Greenberg, 2023; UNESCO, 2024). Through these engagements, students develop communication, teamwork, and problem-solving skills essential for life within and beyond school (UNICEF, 2023). A supportive school culture, characterized by collaboration, inclusivity, and mutual respect, creates an environment where students feel valued and motivated to participate meaningfully in the learning process (Golding & Hughes, 2023).

Before the COVID-19 pandemic, public secondary schools in Kenya, particularly boarding schools, were vibrant social environments that reinforced academic and social development. Daily routines such as assemblies, peer mentorship, and co-curricular programs provided avenues for interaction and holistic growth. Parental involvement in paying fees, attending school functions, and maintaining communication with teacher's strengthened accountability and transparency within educational institutions, fostering a culture of shared responsibility and trust between schools, families, and the broader community. Religious activities, including commu-

nal prayers, worship, and moral instruction, were integral to school life, promoting values such as honesty, compassion, discipline, and respect for authority (Sofi, 2023; Singoei et al., 2025). These practices not only provided moral guidance but also emotional and psychological support, helping students cope with academic and personal challenges within a nurturing environment.

However, the onset of the COVID-19 pandemic in early 2020 disrupted established school routines and social structures globally. To curb viral transmission, governments introduced lockdowns, social distancing, and school closures, prompting a rapid transition to remote learning. While necessary for public health, these measures altered the fundamental nature of school interactions, eroding students' sense of belonging and weakening the communal aspects of learning (Goodwin et al., 2021). Students faced social isolation, limited physical interaction, and diminished access to co-curricular activities, all of which undermined their emotional well-being and motivation to participate in schooling.

In Kenya, the closure of schools revealed significant disparities in access to digital infrastructure and learning resources. Most public boarding schools lacked the capacity to provide online learning, leaving students, especially those from rural and low-income backgrounds, disconnected from formal education (African Economic Research Consortium [AERC], 2021).

The situation was compounded by economic hardship, parental job losses, and psychosocial distress, which further reduced participation and engagement. The Ministry of Education (MoE, 2021) reported increased cases of early pregnancies, child labor, and school dropouts during the prolonged closure period, particularly among girls. These disruptions not only affected learning outcomes but also undermined the socialization processes that schools traditionally facilitate.

Globally, studies indicate that COVID-19 altered the dynamics of schooling participation in diverse ways. In Germany, the pandemic exposed pre-existing inequalities in educational access, prompting renewed focus on inclusion and mental health (OECD, 2021). In India, school closures led to increased dropout rates, early marriages, and learning regression, particularly among rural girls (Jandhyala, 2021; Andrabi et al., 2020). Similarly, research from Italy and Canada revealed that remote learning reduced collaborative engagement and heightened loneliness among students, especially in boarding settings where learners were accustomed to structured social environments (Trotta et al., 2023; Vailancourt et al., 2021). These findings suggest that while education systems sought to preserve instructional continuity, the social dimensions of schooling suffered substantial setbacks.

In Kenya, the cultural and social implications of COVID-19 were profound. Traditional communal practices, including religious gatherings and family ceremonies, were restricted, weakening social bonds and altering behavioral norms. Boarding students—who typically spend most of their time in school environments, experienced acute isolation and emotional distress when forced to return home for extended periods (Mandillah et al., 2022). With limited psychosocial support, many struggled to adjust to the unstructured home setting, leading to disengagement and reduced motivation to resume studies when schools reopened. The absence of co-curricular programs, mentorship opportunities, and faith-based guidance further diminished students' holistic development and school attachment (Batistis et al., 2024).

From a sociological perspective, these disruptions can be understood through the lens of Functionalist Theory, originally advanced by Émile Durkheim and later developed by Parsons, Spencer, and Merton. Functionalism views education as a key social institution responsible for transmitting knowledge, values, and norms necessary for societal stability. Schools function to integrate individuals into society by fostering cooperation, discipline, and collective consciousness. When the COVID-19 pandemic disrupted schooling, the education system sought adaptive mechanisms, such as remote learning and staggered reopening, to preserve its core functions. However, these adjustments also revealed systemic weaknesses, particularly in ensuring equitable participation among students from diverse socioeco-

nomic backgrounds. Thus, Functionalist Theory provides a useful framework for understanding how schools and communities in Tharaka-Nithi County attempted to maintain educational equilibrium amid crisis, while highlighting the resulting social strain and diminished student engagement.

Empirical evidence underscores that the social consequences of pandemic-induced school culture adjustments were multifaceted. Reduced teacher-student interaction, suspended extracurricular activities, and restricted peer collaboration weakened the sense of belonging that anchors student participation. For boarding students, who depend heavily on institutional structure and peer interaction, the disruption of this culture was particularly destabilizing. Although schools later implemented mitigation strategies such as psychosocial counseling and modified co-curricular programs, their effectiveness in restoring full participation remains unclear. This uncertainty underscores the need for empirical investigation within the Kenyan context.

Despite growing global scholarship on COVID-19 and education, limited research has examined how pandemic-adjusted school culture and interaction specifically affected student participation in public boarding secondary schools in Kenya. Most studies have concentrated on online learning, academic performance, or psychosocial effects, leaving a gap in understanding how cultural and interpersonal dynamics within schools were reshaped by pandemic restrictions. Addressing this gap is critical because participation in schooling extends beyond academic engagement—it encompasses students' emotional, social, and moral development, which collectively determine the resilience of the education system.

Therefore, this study sought to examine the effects of COVID-19-adjusted school culture and interaction on students' participation in schooling in public boarding secondary schools in Tharaka-Nithi County, Kenya. Guided by Functionalist Theory, the study analyzed how pandemic-induced adjustments influenced student engagement, sense of belonging, and involvement in both curricular and co-curricular activities. By exploring these dynamics, the research aims to contribute to a deeper understanding of how schools can strengthen resilience, inclusivity, and continuity in the face of future crises.

Methodology

The study adopted an ex-post facto and descriptive research design to explore cause-and-effect relationships between COVID-19-related factors and students' participation in schooling in Tharaka-Nithi County. This design enabled the researcher to analyze existing differences among groups and describe the social, economic, and cultural adjustments made by students during and after the pandemic (Dannels, 2018; Jowell, 2018). The study was conducted in Tharaka-Nithi County, in the former Eastern Region, which has over 147 public and 10 private secondary schools, with a total teacher population of 1,784. The target population comprised 1,532 respondents, including 1,434 teachers and 108 curriculum masters. Further, using the Yamane formula, a sample size of 368 participants (348 teachers and 20 curriculum masters) was determined, though only 300 questionnaires were valid for analysis. Sampling involved simple random selection of sub-counties and schools, while curriculum masters were purposively chosen. The Yamane formula is as follows;

$$\frac{N}{1 + N(e)^2}$$

In substituting the numbers, $n = 317.18$, where 10% of the teachers was added, making it 348, and 20 purposively selected directors of studies were added, leading to a final sample size of 368, as shown in the table 1 below;

Table 1: Distribution of sample size

Category	Teachers	Directors of studies	Total sample size
Tharaka North	60	4	68
Tharaka South,	73	4	83
Chuka	81	5	90
Igambango'mbe.	65	3	71
Maara.	69	4	78
Totals	348	20	368

Data collection instruments included structured questionnaires for teachers and interview guides for curriculum masters, both designed to capture demographic information and responses related to study objectives. The tools were pre-tested among 37 respondents in Meru County to assess clarity, reliability, and validity. Reliability was tested using the split-half method and Spearman-Brown formula, while content and face validity were confirmed after expert review and refinement (Harris & Brown, 2017). The researcher obtained ethical approval from relevant authorities and ensured ethical considerations such as informed consent, confidentiality, and voluntary participation were upheld throughout the study

(Adam, 2020). Finally, data analysis involved both quantitative and qualitative techniques. Descriptive statistics (frequencies, percentages, and means) and inferential statistics (Wilcoxon signed-rank tests and correlation analysis) were used to examine relationships between independent variables, COVID-19 lockdown, learning strategies, and adjusted school culture, and the dependent variable, student participation in schooling.

Results and Discussions

Demographic Characteristics

The study collected demographic information on the teacher respondents and general information. Data on the age of respondent is indicated in Table 4.

Table 2: Age distribution of the respondents (n=

	Age	Percent
Age	25-30 years	21
	31-35 years	52.7
	36-40 years	24.3
	41-45 years	0.7
	Above45 years	1.3
Gender	Male	39.3
	Female	60.7
Years of Teaching Experience	1-5 years	46.3
	6-10 years	47.0
	Above 10 years	6.7

The information presented in Table 2 show that the most teachers (52.7%) were aged between 31–35 years, followed by with 24.3% being between 36–40 years, 21.0% aged between 25–30 years, representing a very young adult sample. Fewer numbers were in older age ranges, 0.7% being between 41–45 years, and an insignificant 1.3% above 45 years. The demographic characteristics of the study participants were primarily young adults aged 25–35 with moderate teaching experience reflect a workforce that was likely more adaptable to the rapid changes imposed by the COVID-19 pandemic. The predominance of younger teachers aligns with global observations during the pandemic, where younger educators were often more technologically proficient, facilitating smoother transitions to remote teaching (Katsarou, 2023; UNESCO, 2021). There were 60.7% females and 39.3% males, indicating the predominance of female participants in the study. The gender trend is indicative of greater percentage of female over male teachers in secondary school. The distribution, is consistent with global teaching demographics, which found that female teachers were

more than the male teachers particularly in secondary education, Reichelt et al (2021).

The findings show that 46.3% of respondents had between 1–5 years of experience in the teaching profession, while 47.0% had between 6–10 years. Only 6.7% of the respondents had more than 10 years of experience. These figures indicate that the majority of the respondents (93.3%) had less than a decade of experience in the education sector. This distribution suggests that the sample was largely composed of early to mid-career educators. As a result, the teaching profession is undergoing a generational transformation, with older teachers playing more peripheral roles in the classroom, Katsarou, (2023).

School Participation as influenced by COVID-19

The study sought to establish the nature and extent of school programs that were in place prior to the onset of the COVID-19 pandemic. Table 3 presents the findings.

Table 3: School programs before COVID-19 lockdown

Program	Yes (%)
Games	99.7%
Drama	80.0%
Music	95.3%
Science and Engineering Fair	92.0%
Inter-house Competitions	95.3%
Inter-school Competitions	97.7%
Debates	92.0%
Group Discussions	98.7%
School Feeding Program	97.7%

The pre-COVID-19 lockdown school programs statistics reveal that most of the participants reported doing lots of activities like drama and all other extra-curricular activities, which shows an active school culture. While others reported doing some definite activities like games, music, science fairs, and interschool activities. This suggests that prior to the pandemic, most schools had well-rounded extra-curricular programs that involved students to take part and become fully developed. Findings in Table 3 show 99.7% of teachers agree that students were involved in a wide range of activities like drama, debates and other co-curricular activities schools and 97 % agree that students were involved in interschool activities that were more specific such as games, music, scientific projects and inter-school competitions that are structured in nature and reflect the domains of Kenya's educational co-

curriculum framework. The statistics of pre-COVID-19 school closure in Tharaka-Nithi County school programs are indicative of a rich, healthy culture of extracurricular activities participation by learners. They are important in promoting holistic education. These activities offer an avenue for the development of social skills, creativity, leadership and emotional intelligence (Eccles & Barber, 1999; MoE, 2019).

The study sought to examine the types of extracurricular activities that were avoided in schools during the COVID-19 lockdown. Table 4 presents the findings, highlighting the extent to which specific co-curricular and inter-school activities were suspended as a result of pandemic-related restrictions.

Table 4: Activities avoided during COVID-19 lockdown

Activity	Yes (%)
Inter-school Athletics Competitions	96.3
Inter-school Ball Games Competitions	97.3
Inter-school Discussions and Contests	95.3
Inter-school Debates	93.3
School Tours and Excursions	98.0
Inter-school Games Friendly Matches	96.0
Average	96.0

The data indicates that a wide range of inter-school activities were almost entirely avoided during the COVID-19 lockdown. The highest avoided activity was school tours and excursions (98.0%), followed closely by inter-school ball games competitions (97.3%) and inter-school athletics competitions (96.3%). The cancellation of athletics competitions likely hindered the development of students' physical fitness, teamwork, and competitive spirit. For many learners, such events serve as a platform to identify and nurture talent, especially for those from underprivileged backgrounds who rely on sports for potential scholarships or career paths. The lack of such opportunities may have negatively affected student morale and motivation. The lowest was inter-school debates at 93.3%, which still reflects a significant level of cancellation. The avoidance of discussions and contests likely reduced platforms for intellectual exchange, critical thinking, and exposure to diverse perspectives. On average, 96.0% of respondents confirmed the suspension of these inter-school engagements, indicating a widespread disruption of social, recreational, and cognitive development opportunities typically offered through such activities.

Nonetheless, the effects of the COVID-19 pandemic changed the engagement contexts irreversibly. This indicate that co-curricular activities entirely ceased during the lockdowns (ball games, interschool competitions, and debates). The blanket suspension cut off academic social activities and development prospects abruptly. Studies from across the world accounted for the same interruptions. For example, a study by UNESCO (2021) revealed that pandemic lockdowns in sub-Saharan Africa suspended sports, arts, and performance-based school activities, limiting socio-emotional learning and mental health for active students. Onyema et al. (2020) also indicated the differential impact of such disruptions on marginalized students who use school-based programs as a source of psychosocial support as well as access to social mobility.

Information from these curriculum masters show that before COVID-19, schools had a rich culture of

energetic and participatory interactions with students, where learners were actively engaged with classroom discussions, group learning, co-curricular activity, and interactions with peers. One of respondent response was; *In my school we had activities like inter-dorm games competition, music and drama festivals and educational tours before covid 19.* The respondent's reflection highlights the rich co-curricular environment that existed prior to the pandemic. The implication of this is that the abrupt suspension of such activities during the COVID-19 lockdown likely disrupted students' creative expression, social engagement, and experiential learning. Activities like music and drama festivals foster emotional intelligence, cultural appreciation, and self-confidence, while inter-dorm competitions and educational tours enhance teamwork and real-world exposure.

Respondent 4 responded that; *students in my school were involved in activities like clubs, interschool contests, excursions, games and sports before COVID-19.* Respondent responded that; *before covid 19 lockdown students in my school had activities like talent shows, C.U rallies athletics and games competition.* These interactions were not only important to academic learning; they were also an important part of emotional development, bonding with peers, and expressing oneself in the school setting. According to curriculum masters this conducive environment was interrupted by the mitigation measures that were introduced during COVID-19.

Effects of COVID-19 Adjusted School Culture on Schooling Participation

The aim of this section is to examine how school culture influenced student participation in schooling prior to the introduction of COVID-19 mitigation measures. These aspects were assessed using data collected from teachers through a structured questionnaire. The findings are summarized in Table 5.

Table 1: Student Participation in Schooling Before COVID-19 Adjusted Culture

Item	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Learners interacted freely with peers	0.0	0.3	0.3	57.4	42.0
Learners were close to teachers and interacted freely	0.0	0.0	1.0	66.0	33.0
School environment was supportive	0.0	0.0	0.3	61.4	38.3
Parental involvement (academic clinics etc.) was high	0.0	0.0	0.7	64.3	35.0
There was a clear school routine and culture	0.0	0.3	0.3	62.7	36.7
Free & positive teacher-student interaction	0.0	0.3	0.7	75.0	24.0
Good communication between teachers and students	0.3	1.0	1.3	58.1	39.3
Frequent teacher-student communication	0.7	1.7	0.3	71.6	25.7
Enjoyable peer-teacher physical interaction	0.7	1.0	1.0	58.6	38.7
Learners consulted freely with teachers	0.0	0.7	2.0	71.3	26.0
Average (%)	0.17	0.5	1.06	64.64	38.67

The findings in Table 5 shows a remarkable 99.4% (57.4 agreed and 42.0% strongly agreed) of teachers agreed that learners interacted freely with their peers, while only 0.3% of respondents disagreed and 0.3% remained neutral. This suggests a socially cohesive environment where peer interaction was a norm, likely promoting collaborative learning, emotional support, and student motivation factors essential for both academic success and personal development. On the item concerning student-teacher interaction, 99% of teachers affirmed that learners were close to teachers and interacted freely, with 1% expressing neutrality. The finding points to a strong relational culture between students and teachers, which may have facilitated mentorship, emotional security, and responsive pedagogy components known to enhance learner engagement and classroom participation. Regarding the school environment, 99.7% of respondents agreed that it was supportive, with 0.3% remaining neutral and none expressing disagreement. A supportive environment likely contributed to the psychological well-being of students, allowing them to thrive in academic and co-curricular activities. It also indicates the presence of clear structures and responsive systems that encouraged learner attendance and performance.

The respondents also indicated that 99.3% agreed parental involvement through initiatives such as academic clinics was high, while 0.7% responded neutrally. Strong parental engagement may have rein-

forced the home-school connection, fostering accountability and academic encouragement. This involvement often correlates with improved learner discipline and consistent school attendance. On the existence of a clear school routine and culture, 99.4% of teachers agreed or strongly agreed, 0.3% disagreed, and 0.3% were neutral. Well-established routines and school culture likely contributed to learner stability and predictability in academic life, which are key in building consistent learning habits and positive behavior. Overall, the average agreement rate across the items was 96.36%, with only 0.52% of responses being neutral and 0.12% expressing disagreement. These findings underscore the importance of a stable, interactive, and supportive school culture in promoting student participation. The pre-COVID schooling context provided an enabling environment for both academic and social development. The data provide a critical benchmark for evaluating the impact of pandemic disruptions on school culture and learner engagement. As shown in the data collected from teachers in Table 16, nearly all respondents (99%) agreed that teacher-student interactions were free and positive. This indicates that the learning environment was relationally supportive, allowing students to feel emotionally secure and academically engaged. This overwhelming consensus reflects a pre-pandemic school culture characterized by mutual respect, accessibility, and a strong emotional connection between teachers and students.

Similarly, 98% of teachers confirmed that communication with students was effective, reflecting a system in which instructional clarity and mutual understanding were consistently maintained. This high level of agreement suggests that, before the COVID-19 pandemic, the school environment fostered open dialogue and responsiveness, enabling teachers to address students' academic and personal needs effectively. Such communication likely enhanced classroom engagement, reduced misunderstandings,

and contributed to higher levels of trust and participation.

The study sought data from teachers regarding how student participation in schooling was affected during the period of COVID-19 mitigation measures. The study specifically sought to get information on the extent to which changes in school culture impacted learner engagement and participation. A detailed analysis of the responses is presented in Table 6.

Table 6: Student Participation in Schooling During and post COVID-19 Adjusted Culture

Item	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Interaction with peers was difficult	0.0	0.0	1.3	63.4	35.3
Learners felt distanced from teachers	0.3	0.0	0.7	68.7	30.3
School environment was less supportive	0.0	2.3	3.7	56.7	37.3
Less parental involvement affected learning	0.0	0.3	1.0	70.7	28.0
School routine and culture were disrupted	0.0	1.7	2.7	55.9	39.7
Restricted teacher-student interaction	0.0	2.3	1.3	61.7	34.7
Less communication between teachers and students	0.7	0.7	1.0	78.6	19.0
Less peer-teacher physical interaction	0.0	0.3	1.3	60.7	37.7
Students felt distanced from teachers	0.7	1.0	3.0	71.3	24.0
Overall school interaction was negatively affected	1.0	0.3	3.08	62.4	33.3
Average (%)	0.27	1.13	1.08	81.26	39.88

The findings in Table 6 show majority (97.2%) of the respondents agreed that the COVID-19 school adjusted culture negatively affected student schooling with 98% of them agreeing that interaction with peers was difficult during COVID-19 adjusted culture and, 99% agreed that learners felt distanced from teachers which affected negatively students' participation in schooling. The findings that the adjusted school culture alienated learners from teachers and their own school environment aligns with Azevedo et al (2021) "cultural shock" model, whereby boarding students who were suddenly dislocated from their institutional homes suffered intense adjustment trauma. The findings of reduced peer interaction (98.6% adversity) resonate with the views of Minkos and Gelbar (2021), where social vacuums were expressed through increased antisocial activities like violence and self-harm. A cause for concern was the breakdown of support ecosystems which disproportionately affected vulnerable groups.

The decline in school-connectedness also aligns with global research on the psychosocial effects of pandemic-related isolation. Studies by Cerna et al (2020) and Viner et al (2020) identify how school closures compromised students' sense of belonging a fundamental driver of participation in schooling motivation and mental health. In Kenya, where education is based on communal values, banning gatherings (Gilbert et al., 2020) deprived students of rites like interschool com-

petitions and cultural festivals, which are otherwise sources of identity and cohesion. The description of impaired teacher-student relations in the findings resonates with those of Yang et al. (2022) in China, where prolonged distancing exacerbated anxiety and depression among adolescents. Similarly, the collapse of parental involvement reflects overall socioeconomic strain; as families faced unemployment (Nicola et al., 2020), their capacity for involvement in schooling was diminished. This cultural disruption had immediate learning effects: robbed of the structure of shared routines (95.7% disruption), students struggled to adapt to distance learning, echoing Drane et al.'s (2020) accounts of "zoom fatigue" and declining self-discipline in Australia. Most harmful was the reduction of interschool activities, since interschool activities had historically promoted social mobility and cross-community relations in Kenya Mandillah et al., (2022). In the Western communities of Kenya, for instance, initiation ceremonies and cultural bullfighting that are critical to adolescent socialization were suspended, Mandillah et al (2022), leaving learners detached from identity-forming traditions. Meanwhile, the cancellation of museum field trips and heritage tours (Popova, 2021) severed connections to extended cultural learning, amplifying feelings of disconnection. These disruptions point to the reality that school culture, having been peripheral, lies at the center of sustaining engagement in the face of disruption.

The researcher sought opinion of Curriculum Masters on the effect of new COVID-19 adjusted school culture on students' schooling participation before COVID-19 pandemic. Results from the respondent show that before new COVID interaction culture students were close to their teachers as they went to ask them questions, during clubs meeting and in games and sports training and sometimes during counselling sessions. Parents were involved in the learners learning by visiting schools to discuss the learners academic progress and also attended learners' academic clinics and during school visiting days and meetings. Schools had school routines were known and followed by students as one respondent indicated; Respondent 4; *In my school all students followed a school program starting from morning to evening and terms program from opening to closing which was known to all students.* Majority of the respondents agree that before new COVID-19 school culture student interacted freely with peers and teachers making participation to schooling easy, teachers gave individual attention to students ac-

cording to their needs. The COVID-19 pandemic disrupted the norms and routines, of schooling and culture, that have defined the school experience for generation curriculum masters and mistresses expressed that the establishment of school culture had collapsed during this prolonged closure due to the stringent health protocols and the shift to online school).

Impact of COVID-19-Induced Cultural Adaptations on Student Participation

Wilcoxon signed-rank test was used to determine whether the changes that were undertaken in school culture due to the COVID-19 pandemic had a statistically significant impact in terms of participation of students in schooling. The analysis aimed to test the difference in the engagement of individual students based on the levels of engagement they had prior to the introduction of cultural adaptations as a result of the disruptions caused by the pandemic

The results of such analysis are shown in Table 7.

Table 7: Wilcoxon signed rank test statistics

	N	Mean Rank	Sum of Ranks
Negative Ranks	195 ^a	64.10	3846.00
Positive Ranks	9 ^b	61.98	4029.00
Ties	96 ^c		
Tota	300		
Z		-0.256 ^b	
Asymp.Sig. (2-tailed)		0.798	

Wilcoxon rank test showed there was no significant change ($Z = -0.256$, $p = .798$). There was almost the same number of negative (60 students) and positive (65 students) ranks, as well as 175 ties, suggests that the pandemic-adjusted school culture did not worsen or improve participation. This is in line with the null finding of the ordinal regression, which implies little influence of culture. The findings of the Wilcoxon signed-rank test that indicated no statistically significant change in the level of student participation before and after the adoption of COVID-19-adjusted school culture ($Z = -0.256$, $p = 0.798$) bring to the fore a multifaceted and multilayered truth concerning cultural adaptation in education. Theoretically, school culture consisting of norms, values, common beliefs, routines, and rituals is part of the shaping of student engagement. Nevertheless, under crisis conditions like that of the COVID-19 pandemic, especially in rural and under-resourced areas, even the selective cultural adaptation does not seem to be enough to restart the process of meaningful involvement. The null results indicate that the interventions used were not significant or far-fetched enough to the vastly transformed experiences of students to trigger behavioral change. According to Cerna et al. (2020), student

belonging, classroom community, and peer relationships as the essential elements of the supportive school culture were disrupted by the COVID-19 pandemic. The abrupt transition to distance education or full school shutdowns disrupted the rhythm and symbolic moorings like morning assemblies, group instruction, and co-curricular clubs that students relied on to feel emotionally and socially attached to participation in schooling.

Conclusion

This study sought to explore the effects of the new COVID-19-adjusted school culture on students' participation in schooling in Tharaka Nithi County. The findings revealed that before the onset of COVID-19, schooling interactions were highly collaborative, interactive, and grounded in communal values. These were supported by routines and structures such as school assemblies, regular class timetables, co-curricular activities, and parental engagements like academic clinics and visiting days. There was frequent and positive interaction between teachers and students, as well as among students themselves.

However, during the COVID-19 pandemic, this free interaction was restricted by the need for social distancing and adherence to health protocols. The new school culture that emerged during this period was characterized by reduced social and academic interaction, limited physical contact, and minimal engagement in group activities. Consequently, student participation in schooling activities declined, reflecting the broader disruption caused by pandemic-related adjustments to school routines and culture.

Recommendations

The Ministry of Education and relevant stakeholders should develop a comprehensive, multi-dimensional crisis management policy framework that outlines clear strategies for sustaining student participation during pandemics or similar crises. Such a framework should emphasize inclusive participation, preparedness, and proactive planning to minimize disruptions to schooling during lockdowns and prolonged closures. In addition, the Ministry should prioritize and strengthen co-curricular activities as an integral part of the school calendar, recognizing their vital role in promoting students' emotional and social development. These activities foster a sense of belonging and connectedness within the school com-

munity, which in turn enhances students' overall participation in learning. Furthermore, future research should focus on examining the roles of teachers and parents in supporting students to adjust to changing learning environments during crises. Understanding their specific contributions can help in developing effective strategies to sustain student engagement, resilience, and continuity in education during periods of disruption.

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Conflict of interest

The authors declare no conflict of interest at all.

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