



Personnel Management Challenges and Institutional Growth of Public Early Childhood Education Centres in Jomvu Sub-County, Mombasa County, Kenya

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ABSTRACT

Early Childhood Education centres in Kenya face persistent staffing deficits that undermine their capacity for institutional growth, yet the specific pathways through which personnel management challenges constrain centre development remain poorly understood, particularly in devolved governance settings. This study examined how personnel management challenges experienced by ECE Teachers in Charge (TIC) relate to the growth of public ECE centres in Jomvu Sub-County, Mombasa County, Kenya. Grounded in Ecological Systems Theory and Resource Dependence Theory, the study employed a descriptive cross-sectional survey design using a convergent parallel mixed-methods approach. Census sampling included all 58 stakeholders: 11 Teachers in Charge, 44 class teachers, one Sub-County ECE Coordinator, and two County Directors. Data were collected through structured Likert-scale questionnaires and semi-structured interview guides. Instrument reliability coefficients ranged from $\alpha = .802$ to $\alpha = .969$, with a Content Validity Index of .89. The study achieved a 93.1% response rate ($n = 54$). Findings revealed severe personnel deficits, with a composite mean of 1.50 for TICs and no respondent confirming that teacher-to-child ratios meet recommended standards. Personnel management emerged as the strongest predictor of centre growth at both the TIC level ($r = .787, p = .004$) and the teacher level ($r = .903, p < .001$), with a dominant regression weight (Beta = 1.023, $p < .001$). Qualitative data traced this association through TICs' dual burden as classroom teachers and centre managers, unsustainable workloads, and the absence of teacher replacement after attrition. The study recommends that Mombasa County Government recruit additional ECE teachers on permanent terms and establish structured professional development for Teachers in Charge.

Keywords: personnel management, early childhood education, institutional growth, Teachers in Charge, devolved governance, Mombasa County

INTRODUCTION

Early Childhood Education occupies a position of growing importance in global education discourse because the developmental gains it produces are both substantial and durable. Children who attend quality ECE programmes demonstrate stronger primary school readiness, higher completion rates, and improved socioeconomic trajectories across the lifespan (Heckman, 2011). The World Bank (2021) confirmed that investments in the early years generate higher returns through improved educational attainment, health outcomes, and adult productivity than interventions at any subsequent stage. These findings have catalysed increased government investment in ECE across sub-Saharan Africa, where participation rates remain the lowest globally, with fewer than one in three eligible children accessing any form of pre-primary education (Zickafoose et al., 2024).

Translating policy commitment into classroom-level quality depends heavily on centre-level management, and personnel management stands at the core of this challenge. Banda et al. (2025) reported that teacher-related factors were more strongly associated with learning outcomes in multi-country ECE studies than either funding



levels or physical infrastructure. Ragadu and Rothmann (2025) reached a comparable conclusion in southern Africa, identifying teacher working conditions as the primary determinants of programme sustainability. No amount of infrastructure or curricular innovation can substitute for a qualified, motivated teacher in the classroom; a centre may improvise around missing furniture, but it cannot produce quality learning outcomes without adequate numbers of trained educators.

Kenya has taken significant steps to strengthen its ECE system, though these reforms have introduced new complexities into personnel management. The Basic Education Act of 2013 devolved ECE services to the 47 county governments, making each county responsible for employing ECE teachers, constructing classrooms, and administering centres within its jurisdiction (Nyongesa, 2020). The subsequent rollout of the Competency-Based Education framework imposed additional pedagogical requirements, including activity-based learning, formative assessment, and play-centred approaches, all of which demand teacher training and classroom resources that many counties have been slow to provide. Kenya's pre-primary teacher-pupil ratio currently stands at 1:38, well above the recommended standard of 1:25 (IEA Kenya, 2025), reflecting a chronic national under-investment in the ECE workforce that individual centre managers cannot resolve through local action alone.

Mombasa County, located on the Kenyan coast with a population of 1,190,987 according to the 2019 Kenya Population and Housing Census, presents a distinct context for these workforce dynamics. Jomvu Sub-County, situated on the mainland northwest of Mombasa Island along the Nairobi-Mombasa highway corridor, is one of six administrative sub-counties within Mombasa County. Its 11 registered public ECE centres serve communities spanning from middle-income residential areas to low-income informal settlements. The coastal location introduces workforce pressures that inland settings do not face: wage competition from the tourism and hospitality sector draws potential ECE teachers toward better-compensated service positions, and seasonal employment fluctuations reduce the stability of parental fee contributions.

Preliminary consultations with education stakeholders in Jomvu revealed persistent concerns about teacher shortages, high turnover, limited professional development opportunities, and unsustainable workloads for Teachers in Charge who must simultaneously manage centres and carry full classroom teaching loads. Yet the specific ways in which these personnel challenges constrain institutional growth had not been empirically investigated in this or any comparable coastal Kenyan setting. The problem this study addresses is the gap between what policy frameworks expect of public ECE centres and what the current personnel environment allows them to deliver. Centres are expected to operate with sufficient qualified teachers, sustainable workloads, effective supervision systems, and structured professional development to support institutional growth measured through rising enrolment, improving learning outcomes, growing community engagement, and strengthened centre reputation. The actual situation is that these centres operate with teacher-pupil ratios exceeding the national standard, with TICs carrying dual classroom and administrative responsibilities, and with attrition going unreplaced due to county-level recruitment constraints.

Theoretical Framework

Two complementary theoretical frameworks grounded this study. Ecological Systems Theory (Bronfenbrenner, 1979) explains institutional development as shaped by nested environmental systems: the microsystem of daily centre operations, the mesosystem of community interactions, the exosystem of county-level resource decisions, and the macrosystem of national policy frameworks. Applied to ECE personnel management, the theory illuminates how staffing decisions made at the county level (exosystem) cascade into classroom-level consequences that directly shape children's learning experiences (microsystem). Resource Dependence Theory (Pfeffer & Salancik, 1978) explains how organisations manage their reliance on external resources and predicts that the degree of dependence determines organisational vulnerability to disruption. Public ECE centres exhibit acute dependence on county government for teacher recruitment and deployment, a critical resource for which no alternative supply exists. Together, these frameworks guided both the research design and the interpretation of findings.



Purpose of the study

The purpose of this study was to analyse how personnel management challenges relate to ECE Teachers in Charge's effectiveness in enhancing growth of public ECE centres in Jomvu Sub-County, Mombasa County, Kenya. The study was guided by the research question: How do personnel management challenges relate to ECE Teachers in Charge's effectiveness in enhancing growth of public ECE centres in Jomvu Sub-County?

LITERATURE REVIEW

The ECE workforce challenge and personnel management

Ragadu and Rothmann (2025) established through quantitative analysis that teacher working conditions, encompassing workload intensity, recognition structures, and professional development access, were the primary determinants of ECE programme sustainability in southern African contexts. Their finding that sustainability depended more on how teachers experienced their work than on material resources redirected attention from what centres have to how centres function. Banda et al. (2025) extended this line of inquiry across multiple East African countries and concluded that personnel-related factors carried a stronger statistical association with learning outcomes than either funding adequacy or infrastructure quality.

Personnel challenges in Kenya's devolved ECE system

Kenya's 2013 devolution created a specific personnel challenge for ECE centres. County governments became the primary employers, but employment terms varied dramatically across the 47 counties. Shumba et al. (2020) found that many counties hired ECE teachers on short-term contracts with compensation significantly lower than that of national-government teachers, establishing a two-tier employment system that eroded morale and accelerated turnover. The national pre-primary teacher-pupil ratio of 1:38 reported by IEA Kenya (2025) represents a structural workforce deficit rooted in county-level recruitment and budget allocation decisions rather than in centre-level operational failures.

Odongo et al. (2025) tracked turnover intentions among East African teachers and documented a pattern in which highly committed educators remained in poorly resourced centres for several years before eventually departing for better-compensated positions outside education entirely. Their longitudinal perspective revealed that intrinsic motivation, however strong initially, does not sustain indefinitely without external reinforcement through adequate remuneration and professional recognition. Isakova (2021) reached a parallel conclusion in Singapore's restructured preschool sector, finding that retention policies required both competitive compensation and structured career advancement pathways.

The dual burden of ECE Teachers in Charge

In Kenya's public ECE system, the TIC combines full-time classroom teaching with centre-level administrative responsibilities, including personnel supervision, budget oversight, community liaison, and policy compliance. Legede et al. (2024) found that centre managers who received formal training in instructional leadership were substantially more effective at supporting teacher development, but they also observed that such training was rare among ECE managers in developing countries. Compounding this structural challenge, TICs typically have no formal authority over teacher recruitment, deployment, or dismissal, as these decisions rest with the county government. Garrett and Gibbs (2025) identified that centre managers who maintained regular professional dialogue with their staff achieved higher retention rates, suggesting that relational management practices can partially buffer against systemic workforce pressures.

Knowledge gap

The literature establishes personnel management as the most consequential predictor of ECE programme quality across multiple contexts, yet three specific gaps remain. First, no study has examined the TIC's dual burden as both classroom teacher and centre manager in a devolved governance setting. Second, research from coastal East African contexts is virtually absent, despite the distinct workforce pressures created by tourism-



dependent economies. Third, existing studies overwhelmingly employ single-method designs that either quantify the severity of personnel shortages or describe their experiential dimensions, but rarely combine both approaches to trace the specific pathways through which staffing deficits translate into constrained growth. This study addresses all three gaps.

METHODOLOGY

A descriptive cross-sectional survey design using a convergent parallel mixed-methods approach was adopted (Creswell & Plano Clark, 2018). Quantitative and qualitative data were collected concurrently through questionnaires and interviews, analysed separately, and integrated during interpretation. The study was conducted in Jomvu Sub-County, Mombasa County, Kenya. Census sampling targeted 58 stakeholders involved in ECE administration and service delivery, with 54 participants responding (93.1% response rate). Participants included Teachers in Charge, ECE teachers, the Sub-County ECE Coordinator, and County Directors. Data were collected using structured questionnaires and semi-structured interview guides. Reliability was confirmed through Cronbach's alpha coefficients ranging from .802 to .969, while validity was established through expert review and factor analysis. Quantitative data were analysed using SPSS Version 28 through descriptive statistics, correlation, and regression analysis. Qualitative data were analysed thematically using Braun and Clarke's framework (2006). Ethical approval was obtained from Kenya Methodist University and NACOSTI, with informed consent, confidentiality, and voluntary participation maintained throughout the study.

RESULTS

Demographic characteristics

All 11 TICs were female, reflecting the gender composition typical of Kenya's ECE workforce. Nearly half (45.5%) were aged 40 to 50 years, and 81.8% held diploma-level qualifications. Among the 40 participating teachers, the demographic profile was similarly female-dominated, with qualifications concentrated at the certificate and diploma levels.

Descriptive findings: TIC responses

Table 1 presents TIC-level descriptive statistics for personnel management. The composite mean of 1.50 ($SD = 0.43$) indicates that TICs collectively rated personnel conditions as severely deficient.

Table 1: TIC Responses on Personnel Management Challenges ($n = 11$)

Statement	SD %	D %	N %	A %	SA %	M	SD
Enough qualified ECE teachers available	63.6	27.3	9.1	0.0	0.0	1.45	0.69
Teacher recruitment processes effective	54.5	36.4	9.1	0.0	0.0	1.55	0.69
Staff retention rates satisfactory	72.7	18.2	9.1	0.0	0.0	1.36	0.67
Teacher-to-child ratios meet standards	72.7	27.3	0.0	0.0	0.0	1.27	0.47
Staff motivation levels high	72.7	18.2	9.1	0.0	0.0	1.36	0.67
Teachers receive adequate supervision	72.7	18.2	0.0	9.1	0.0	1.45	0.93
Regular professional development provided	54.5	36.4	9.1	0.0	0.0	1.55	0.69
Performance appraisal systems effective	45.5	27.3	9.1	18.2	0.0	2.00	1.18
Composite						1.50	0.43

Source: Field Data (2026)

Teacher-to-child ratios attracted the strongest disagreement: eight TICs (72.7%) strongly disagreed and three (27.3%) disagreed that ratios meet the recommended 1:25 standard. Not a single TIC selected a neutral or positive response on this item. Staff retention and motivation received equally bleak assessments, with eight



TICs (72.7%) strongly disagreeing on both. Performance appraisal was the one area where any positive rating appeared: two TICs (18.2%) agreed that appraisal systems function effectively.

Descriptive findings: Teacher responses

Table 2: Teacher Responses on Personnel Management Challenges ($n = 40$)

Statement	SD %	D %	N %	A %	SA %	M	SD
Teachers receive adequate supervision	25.0	7.5	35.0	15.0	17.5	2.93	1.40
Regular professional development provided	30.0	25.0	17.5	15.0	12.5	2.55	1.40
Centre manager provides adequate support	22.5	17.5	22.5	17.5	20.0	2.95	1.45
Staff relations and teamwork positive	20.0	12.5	25.0	22.5	20.0	3.10	1.41
Motivated to do work	27.5	15.0	20.0	17.5	20.0	2.88	1.51
Fair treatment and recognition provided	32.5	15.0	22.5	12.5	17.5	2.68	1.49
Workload manageable and reasonable	32.5	20.0	20.0	12.5	15.0	2.58	1.45
Composite						2.81	1.33

Source: Field Data (2026)

Teachers exhibited a wider spread of responses, with a composite mean of 2.81 ($SD = 1.33$). Staff relations and teamwork drew the most favourable assessment: 17 teachers (42.5%) selected agree or strongly agree. Workload manageability received the most negative response, with 21 teachers (52.5%) disagreeing or strongly disagreeing that their workload is manageable.

Qualitative findings

Teacher shortage was the single most frequently mentioned challenge, surfacing in the open-ended responses of eight of eleven TICs and in multiple teacher questionnaires. One TIC captured the dual burden succinctly: "Being a class teacher with a high population of learners and performing my administration duties; inadequate teachers with no support staff." Another TIC identified unqualified personnel and excessive workload as interconnected problems that could not be addressed separately.

From the classroom perspective, teachers confirmed that staffing deficits translated directly into compromised learning quality. One teacher stated: "With less teachers, some of the children are not attended to well based on their level of understanding." Another described the personal toll: "I get fatigued and end up not delivering to my best." These accounts document the mechanism through which personnel shortages reach the child: not through any single dramatic failure, but through the cumulative erosion of teacher capacity to provide individualised attention across oversized classes.

Retention challenges were equally prominent at the strategic level. The Sub-County Coordinator identified two primary retention barriers: "distance from family/home and retirement or death without replacement." Both County Directors emphasised that employing ECE teachers on permanent and pensionable terms was the single most critical policy intervention. One Director attributed retention failures directly to "poor or low payment of teachers' salary," a structural constraint well beyond the reach of centre-level management.

Inferential findings

Table 3: Correlations Between Personnel Management and ECE Centre Growth

Sample	Pearson r	Spearman ρ	p-value
TIC ($n = 11$)	.787**	.794**	.004
Teacher ($n = 40$)	.903***	.901***	< .001

Note. ** $p < .01$; *** $p < .001$. Source: Field Data (2026)



Personnel management produced the strongest bivariate correlation with centre growth at both levels, outperforming funding (TIC $r = .183$; teacher $r = .404$), infrastructure (TIC $r = .384$; teacher $r = .708$), and policy (TIC $r = .801$; teacher $r = .828$).

Table 4: Multiple Regression Results, Teacher Sample ($n = 40$)

Variable	B	SE	Beta	t	p	VIF
(Constant)	0.390	0.191	--	2.045	.048	--
Funding	0.021	0.084	.024	0.246	.807	2.436
Infrastructure	0.239	0.106	.256*	2.249	.031	3.307
Personnel	0.912	0.170	1.023***	5.367	< .001	9.273
Policy	-0.276	0.173	-.304	-1.595	.120	9.298

Note. $R^2 = .863$; $F(4, 35) = 55.16$, $p < .001$; Durbin-Watson = 2.077. * $p < .05$; *** $p < .001$. Source: Field Data (2026)

Personnel management was the single dominant predictor (Beta = 1.023, $t = 5.367$, $p < .001$), followed by infrastructure (Beta = .256, $p = .031$). Neither funding ($p = .807$) nor policy ($p = .120$) reached individual significance. The high VIF values for personnel and policy (both exceeding 9.0) reflect their strong intercorrelation and warrant cautious interpretation of individual beta weights.

At the TIC level, the model was also significant ($p = .034$), explaining 78.4% of growth variance. No individual predictor reached significance at $p < .05$, a limitation attributable to the small sample size ($n = 11$) rather than the absence of genuine predictive relationships.

DISCUSSION

That personnel management emerged as the strongest single predictor of ECE centre growth in Jomvu Sub-County carries important implications for theory, policy, and practice. The bivariate correlation ($r = .903$) in the teacher sample ranks among the strongest reported in ECE administrative research in East Africa. This result aligns with Banda et al. (2025), who found teacher-related factors more strongly associated with learning outcomes than either funding or infrastructure, and with Ragadu and Rothmann (2025), who identified working conditions as the principal determinants of ECE sustainability in southern Africa. What the present study adds is specificity: it traces the statistical association to concrete operational mechanisms documented through qualitative data, including the TIC's dual burden, the non-replacement of departing teachers, and the erosion of instructional quality that flows from unsustainable class sizes.

Qualitative data revealed a cascade that statistical models cannot fully capture. When a Teacher in Charge spends the entire school day teaching a class of 40 or more children alone, no time remains for classroom observation, peer mentoring, or strategic planning. These are the core functions of instructional leadership that Legede et al. (2024) identified as critical to teacher development and programme quality. The dual burden is not merely a workload issue; it represents a structural incompatibility between the TIC role as designed and the personnel resources available to fulfil it.

Retention patterns in Jomvu Sub-County confirm the erosion trajectory described by Odongo et al. (2025) and Isakova (2021). The Sub-County Coordinator's observation that teacher positions are not filled after retirement or death reveals a structural ratchet: attrition is permanent, and the system only shrinks. Each unreplaced departure increases the workload on remaining teachers, further reducing retention attractiveness and creating a self-reinforcing cycle. Both County Directors identified permanent and pensionable employment as the single most consequential intervention, a view consistent with Shumba et al.'s (2020) finding that contract-based employment in devolved systems undermines the stability ECE programmes require.

Ecological Systems Theory provides a productive lens for these findings. The personnel challenge does not originate at the microsystem level where children and teachers interact daily; rather, it cascades downward from the exosystem, where county government makes recruitment and budget allocation decisions. A TIC's



capacity to support teacher development (microsystem) depends on whether the county provides adequate teaching staff (exosystem), which in turn depends on national workforce investment policies (macrosystem).

Resource Dependence Theory offers the clearest explanation for why personnel management outperforms the other three challenge dimensions as a growth predictor. Centres depend on qualified teachers in a way that permits no substitution. Infrastructure deficits can be partially compensated through creative use of outdoor spaces; funding gaps can be partially bridged through community contributions; policy confusion can be partially managed through informal networks. But there is no alternative to a trained teacher in the classroom. The county government's control over teacher recruitment and deployment constitutes the critical dependency that Pfeffer and Salancik (1978) predicted would most severely constrain organisational performance.

One finding that warrants careful interpretation is the positive teacher rating on staff relations and teamwork ($M = 3.10$, with 42.5% rating positively), which stands in contrast to the otherwise negative personnel assessments. This result suggests that collegial solidarity among teachers functions as a coping resource that buffers against the worst consequences of systemic under-resourcing. Garrett and Gibbs (2025) documented similar dynamics in Australian early childhood settings, where relational leadership practices partially offset broader workforce pressures. The practical implication is that interventions aimed at strengthening peer support structures may yield disproportionate returns relative to their cost, because they leverage an existing source of resilience.

CONCLUSION AND RECOMMENDATIONS

Conclusions

This study established that personnel management challenges are the most consequential administrative constraint on the institutional growth of public ECE centres in Jomvu Sub-County. The association between personnel management and centre growth was strong and statistically significant at both the TIC level ($r = .787$, $p = .004$) and the teacher level ($r = .903$, $p < .001$), and personnel management was the dominant predictor in the multiple regression model ($\text{Beta} = 1.023$, $p < .001$). Qualitative evidence traced the mechanism through which staffing deficits constrain growth: the TIC's dual burden as classroom teacher and centre manager leaves no capacity for instructional leadership, teacher attrition goes unreplaced, and remaining staff carry workloads that progressively erode both motivation and instructional quality. These findings confirm that the personnel challenge is structural rather than managerial, originating in county-level recruitment decisions rather than in TIC competence or teacher effort.

Recommendations

For the County Government of Mombasa, the most consequential action is to recruit and deploy additional ECE teachers on permanent and pensionable terms, beginning with the most understaffed centres. The county should also ensure that positions vacated through retirement or attrition are filled within one academic term.

For ECE Teachers in Charge, prioritising peer support structures, including collaborative planning, shared classroom observation, and mutual problem-solving, can partially buffer against staffing shortages. TICs should also advocate for dedicated non-teaching time to fulfil their administrative and instructional leadership responsibilities.

For national policymakers, the study highlights the need to align Competency-Based Education implementation expectations with county-level workforce realities. The Ministry of Education should develop minimum staffing standards for ECE centres that are enforceable at the county level.

A longitudinal study tracking how changes in staffing levels over time relate to growth trajectories would provide stronger evidence for the direction of these associations than this cross-sectional design permits. Replication across multiple coastal sub-counties would test whether the patterns observed in Jomvu generalise across Kenya's coastal region.



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