Transformational leadership and its influence on pupils' academic achievement in primary schools in Tanzania

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Abstract. In this study, we explored the influence of transformational leadership style on pupils' academic performance in primary schools in Tanzania. A mixedmethods research approach and convergent parallel design were employed. The study involved 382 participants, i.e., 356 primary school teachers and 14 headteachers, and 12 Ward Education Officers (WEOs). Data was collected through questionnaires and interviews, and analysed through descriptive and regression models for quantitative, and thematically for qualitative. The results indicate a strong correlation between transformational leadership practices and the academic achievement of pupils in primary schools. The results suggest that individualised consideration and intellectual stimulation significantly contributed to positive pupils' achievement. The results again showed a notable association between personalised approaches and satisfactory academic performance. In addition, the results indicate that an environment characterised by intellectual stimulation increases the likelihood of achieving satisfactory performance. The results, however, indicate no direct relationship between inspirational motivation and pupils' academic achievement. The key argument in this study is that school leaders need to use a transformational leadership style to motivate teachers to work hard for effective pupil learning. For this to occur in reality, school leaders and their teachers need training to create an engaging and supportive learning environment conducive to improving pupils' achievement.

Keywords: academic achievement, primary schools, transformational leadership

1. Introduction

Leadership is a pivotal element in the management of any organisation, directly influencing its overall performance and effectiveness [12, 25]. An organisation's success or failure significantly hinges on its leaders' quality, highlighting the necessity for strong leadership to harness resources and drive the organisation towards its goals. Effective leadership is vital for achieving educational objectives and fostering a positive learning environment [25]. Transformational leadership style worldwide aims to enhance performance standards and improve the quality of teaching and learning opportunities for all pupils [5, 10, 11]. This global movement recognises that educational systems require continuous evaluation and adaptation to meet changing societal needs [32]. When schools experience challenges or underperformance, the principal faces scrutiny as the institution's key figure. Adangabe and Boateng [3] emphasised that inadequate leadership can lead to the downfall of many schools, illustrating the critical importance of effective leadership in educational settings.

Transformational leadership is increasingly highlighted as a promising approach due to its potential to motivate and inspire both teachers and pupils [9, 11, 12, 16, 21].

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Most studies concentrate on leadership styles and are not specific to transformational leadership styles [1, 8, 13, 23]. Most of these studies have been conducted in Ethiopia, Greece, Jordan, Kenya, Indonesia, Turkey, and the United Arab Emirates (UAE). While research indicates a strong correlation between transformational leadership and improved academic performance [8], there is insufficient exploration of the contextual factors that may either facilitate or hinder the effectiveness of transformational leadership style in the Tanzanian context. A study by Semwenda and Solomon [22] in Tanzania focused on transformational leadership, but it was confined to a single district.

However, the existing literature has not sufficiently explored how transformational leadership, such as intellectual stimulation, individualised consideration, inspirational motivation, and idealised influence, manifests in unique cultural and structural contexts of Tanzanian primary schools. Understanding these dynamics is crucial for developing targeted interventions that can enhance the educational experience for pupils where educational challenges are pronounced. This study was intended to examine the transformational leadership and its influence on pupils' academic achievement in primary schools in Tanzania. The key research question was: *How does transformational leadership influence academic achievement in primary schools?*

1.1. What is transformational leadership?

Defining transformational leadership as a concept sometimes is difficult, as individuals have their own ways of conceptualising it. According to Uthman, Bn Don and Kasim [30, p. 100], transformational leadership "is a leadership style that inspires and motivates followers to demonstrate commitment to a shared vision". To Abdallah and Alkhrabsheh [1, p. 94], transformational leadership refers to "a process by which leaders change their followers' awareness and move them to see themselves the opportunities, and challenges of their environment in a new way". In this study, transformational leadership can be conceptualised as a process through which leaders inspire and motivate their subordinates or followers to be committed to achieving common goals. This differs from autocratic leadership, where the leader is regarded as superior and commands the subordinate to do things without their participation in planning.

1.2. Transformational leadership in Tanzania

In Tanzania, the emphasis on effective leadership has gained traction, particularly with the introduction of new policies to address educational shortcomings. The government has initiated different programmes to strengthen the basic education system, enhancing teaching quality and pupils' performance and achievement [2]. Despite the potential advantages of transformational leadership, challenges such as resource limitations, resistance to change, and insufficient training for educational leaders remain prevalent [22]. The Ministry of Education (MoEST) has called for increased investment to support effective leadership practices. Snape [26] stipulated that all educational leaders need to coordinate school planning, management, and administration. Leaders are also responsible for effectively managing and monitoring teachers to improve pupils' academic performance and achievement. The process is hoped to help inspire teachers, making them committed towards teaching for effective pupil learning.

2. Methodology

2.1. Research approach and design

A mixed-methods research approach guided the study. The mixed-methods research approach enhances the collection of quantitative and qualitative data to offset the

weaknesses of one another [17]. As Creswell and Plano Clark [7] outlined, this approach improves the reliability of field data and is particularly effective for addressing complex research problems. A convergent parallel research design was employed in this study to integrate both data types at various stages, for facilitating a comprehensive understanding of the research on transformative leadership [6]. This design aligns with the theoretical underpinnings of pragmatism and is an efficient method for merging diverse research methodologies [7]. By using simultaneous data collection and analysis, the convergent research design enables a detailed and nuanced exploration of transformational leadership style, ultimately enhancing the validity of the results through triangulation and leveraging the strengths of quantitative and qualitative approaches, which is particularly critical in educational leadership. However, a mixed-methods research approach faces the limitation that it is always challenging to balance quantitative and qualitative data during the presentation and analysis. It is also time-consuming. It was necessary, therefore, to ensure that both datasets were considered.

2.2. Study location, sampling procedures, and sample size

The study was conducted in the Lindi Region in Tanzania. The region was selected because it is one of the leading regions that are geographically located in a peripheral area and is faced with a shortage of teaching and learning materials, and is regarded as one of the poorest regions in the country with limited economic development [29]. The region was also among the poor-performing regions for the Primary School National Examinations (PSNE) for about five (5) years from 2016 to 2020, inconsistent with NECTA results.

Respondents were selected randomly, especially teachers, as the study's target group, as they are mainly affected by leadership style. According to Lelissa [14], simple random sampling adheres to the law of statistical regularity, indicating that a well-chosen random sample will reflect the same characteristics as the larger population. Teachers had to count the numbers from one to ten and repeat the same. All those who counted odd numbers were included in the study. The headteachers and WEOs were selected purposively as they were believed to have experience in school leadership and might have used a transformational leadership style. The study involved 382 participants, consisting of 356 primary school teachers, 14 headteachers, and 12 WEOs. The distribution of the study participants is as indicated in table 1.

Table 1 Study participants by gender.

Participants	Males	Females	Total
Teachers	166	190	356
Headteachers	9	5	14
WEOs	8	4	12
Total	183	199	382

2.3. Data collection methods and analysis

The data for this study were collected through questionnaires and interviews.

2.3.1. Questionnaires

In this study, the questionnaires were given to teachers because they were the study's target group. Usually, questionnaires are acknowledged to help collect large amounts of information within a short time, and people are free to respond according to their understanding. However, questionnaires face criticism for having a low rate

of return, especially when they are sent through mail or the postal service. It was important, therefore, to administer them personally.

2.3.2. Interviews

Interviews were used to collect data from the WEOs and headteachers as educational leaders. Interviews are recognised for helping the collection of data with a deeper understanding of the issue under investigation, and sometimes, it is easy to rephrase the questions in case the interviewee does not understand them. However, they are also criticised for being time-consuming, and sometimes, it is easy to induce personal views from the researcher.

2.3.3. Data analysis and ethical concerns

Quantitative data was analysed through inferential statistics such as chi-square and binary logistic regression. The thematic analysis using Braun and Clarke [4] six steps was employed to analyse the qualitative data. The process began with familiarisation of data, coding, checking the similarities of the content, and labelling those with similar meaning. It was easy to identify the themes based on the repeated information. Reading the information to understand its relevance to the study context and communicating the results by writing the report. All research ethical concerns were followed, including the application for research clearance and ethical approval letters from the University of Dodoma under the office of the Deputy Vice-Chancellor, Academic-Research and Consultancy (DVC-ARC), through its Research and Publication Committee (RPC). All participants were to consent to be involved in the study and were assured that their involvement was voluntary. Plagiarism of ideas was greatly avoided by acknowledging the source of information and writing the references in the reference section. Where possible, the direct quotes, especially for the definitions of the terms, were taken as they are by giving the quotation marks and page numbers.

3. Results

3.1. Relationship between transformational leadership and pupils' performance

This study aimed to understand the relationship between transformational leadership style and pupils' academic performance in the selected primary schools. The results indicated that the teachers' responses were about 80% for all variables when combining both 'agree' and 'strongly agree'. The leading one was that the headteacher communicated to teachers with a convincing vision for academic success to motivate pupils, where 183 (more than 51%) of teachers agreed and 101 (28.37%) strongly agreed about the matter, making up about 80%. This was followed by the statement indicating that headteachers helped teachers to accomplish the tasks and meet their expectations, in which 207 (58.15%) of teachers agreed and 76 (21.35%) strongly agreed with a total of 79.5% on the practice (table 2).

The results from headteachers indicated that transformational leadership enhanced both teacher effectiveness and pupils' performance. One of the headteachers from school A stated during the interview:

You know, good leadership has an impact on the performance of pupils because it is responsible for motivating teachers so as to work hard for the purpose of attaining the goals and objectives of the school. (Headteacher of School A, 19th February 2025)

Another headteacher from school E also stated the importance of transformational leadership, and he stated:

Table 2The relationship between transformational leadership and pupils' performance.

	Levels of agreement						
Inspirational motivation	Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
The headteacher helps teachers to accomplish the tasks and meet their ex- pectations		11 (3.09%)	39 (10.96%)	207 (58.15%)	76 (21.35%)		
The headteacher influences the learning process by considering what, when, and how to learn		17 (4.78%)	36 (10.11%)	207 (58.15%)	71 (19.94%)		
The headteacher encourages pupils to set high academic goals for themselves	•	16 (4.49%)	33 (9.27%)	162 (45.51%)	120 (33.71%)		
The headteacher communicates a convincing vision for academic success to motivate teachers and pupils		24 (6.74%)	36 (10.11%)	183 (51.4%)	101 (28.37%)		
Headteachers' actions in- spire confidence in teach- ers to support pupils' per- formance	•	11 (3.09%)	52 (14.61%)	167 (46.91%)	111 (31.18%)		
Total	22 (6.18%)	15 (4.21%)	56 (15.73%)	185 (51.97%)	78 (21.91%)		

Transformational leadership style usually inspires teachers in their daily activities. Consequently, they are likely to be intrinsically motivated to perform work with minimal supervision to meet the goals of the school. This also makes pupils motivated to learn, and hence motivated to perform better academically. (Headteacher of School E, 24th February 2025)

As can be seen from the results, transformational leadership inspires and motivates teachers to work hard to improve pupils' performance.

3.2. Inspirational motivation and pupils' academic performance

The results indicated that 161 (about 45%) agreed and 125 (about 35%) strongly agreed that headteachers appreciated the efforts of teachers and pupils in academic success. If 'agree' and 'strongly agree' are combined, then more than 80% of teachers were happy with their headteachers as their leaders in instilling a sense of responsibility on individualised consideration to improve pupils' academic performance (table 3). However, the overall responses of teachers on this matter were above 70%, indicating that teachers received adequate support from their school leaders.

These results were supported by headteachers and WEOs who tried to provide individualised support to help teachers perform. One of the headteachers had this to say during the interview:

When we, as school leaders, provide personalised support and guidance to teachers, we empower them to develop their work performance skills, leading to more effective and motivated teaching that can enhance pupils' academic performance. (Headteacher of School B, 20th February 2025)

Table 3 Individualised consideration and pupils' academic performance.

	Levels of agreement					
Individualised consideration	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
The headteacher supports teachers through guidance and coaching tips	22 (6.18%)	15 (4.21%)	56 (15.73%)	185 (51.97%)	78 (21.91%)	
The headteacher helps to shape teachers' be- haviours		20 (5.26%)	37 (10.39%)	167 (46.91%)	112 (31.46%)	
The headteacher treats followers as significant participants		14 (3.93%)	68 (19.1%)	182 (51.12%)	73 (20.51%)	
The headteacher provides support to teachers to en- hance their teaching skills		24 (6.74%)	55 (15.45%)	183 (51.4%)	80 (22.47%)	
The headteacher appreciates the effort of teachers and pupils in achieving academic success		12 (3.37%)	32 (8.99%)	161 (45.22%)	125 (35.11%)	

The WEO also commented that recognition and appreciation of the teachers' work and support for them foster commitment towards teaching to improve the pupils' academic performance. The WEO commented during the interview, saying:

Recognising and appreciating the contributions of both teachers and pupils fosters a culture of collaboration and commitment, essential for academic success. (WEO5, 20th February 2025)

These quotations emphasise the importance of individualised consideration and support in enhancing educational outcomes. The results underscore the critical role of personalised support from school leaders in fostering teacher development and motivation, ultimately enhancing pupils' academic performance. WEOs emphasised that recognising and valuing the efforts of both teachers and pupils cultivates a collaborative culture, which is vital for achieving academic success. Together, these insights highlight the importance of supportive leadership and appreciation in creating an environment conducive to educational excellence.

3.3. Intellectual stimulation and pupils' academic performance

The results indicated 191 (about 54%) agreed and 105 (about 29%) strongly agreed that headteachers promoted problem-solving skills among teachers and pupils. If 'agree' and 'strongly agree' are combined, then more than 83% of teachers supported that the headteachers handled those matters. This was followed by 198 (about 56%) who agreed and 87 (about 24%) who strongly agreed that the headteacher supported professional development programmes for teachers. If combined, then 80% agreed on the matter related to professional development programmes for teachers (table 4).

The same results were revealed from headteachers and WEOs who commented that school leaders encouraged professional growth and instilled problem-solving among them. One of the headteachers stated during the interview:

Table 4Intellectual stimulation and pupils' academic performance.

	Levels of agreement					
Intellectual stimulation	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
The headteacher allows teachers to practice innovations		15 (4.21%)	48 (13.48%)	190 (53.37%)	76 (21.35%)	
Headteacher supports pro- fessional development pro- grammes		12 (3.37%)	44 (12.36%)	198 (55.62%)	87 (24.44%)	
The headteacher allows teachers to challenge their own beliefs through inno- vative ways		18 (5.06%)	69 (19.38%)	192 (53.93%)	63 (17.7%)	
The headteacher promotes problem-solving skills among teachers and pupils	15 (4.21%)	18 (5.06%)	27 (7.58%)	191 (53.65%)	105 (29.49%)	
The headteacher set strategies for pupils to continuously keep on learning		12 (3.37%)	45 (12.64%)	187 (52.53%)	92 (25.84%)	

When we, as school leaders, encourage professional growth, we create an environment where teachers feel confident to explore new ideas, ultimately benefiting pupils' learning. (Headteacher of School A, 19th February 2025)

The WEO also had this to say during the interview:

Empowering teachers to challenge their beliefs and develop problem-solving skills fosters a culture of continuous improvement that enhances the educational experience for everyone involved. (WEO2, 19th February 2025)

Overall, these results suggested that headteachers are instrumental in creating a dynamic and innovative educational environment that benefits both teachers and pupils. These quotations also highlighted the positive impact of headteachers on intellectual stimulation and professional development for teachers.

3.4. Idealised influence and pupils' academic performance

The results on idealised influence indicated that 191 (about 54%) agreed and 98 (about 28%) strongly agreed that headteachers received respect and trust from teachers, pupils, and parents. If combined, then more than 81% of teachers agreed on this matter. This was followed by 186 (about 52%) who agreed and 100 (about 28%) who strongly agreed that headteachers respected the teachers. If 'agree' and 'strongly agree' are combined, more than 80% of teachers acknowledged that headteachers had a clear vision about the schools and respected their subordinates (table 5).

WEOs and headteachers supported these results, and they commented that school leaders inspired confidence and involved teachers in decision-making on improving pupils' learning. One of the headteachers commented during the interview:

Effective school leaders not only inspire confidence in teachers but also need to model the behaviours and values that foster a respectful and collaborative learning environment. (Headteacher of School D, 20th February 2025)

Table 5 Idealised influence and pupils' academic performance.

	Levels of agreement					
Idealised influence	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
The headteacher appropriately encourages teacher competence	12 (3.37%)	19 (5.34%)	53 (14.89%)	193 (54.21%)	79 (22.19%)	
The headteacher serves as a role model for both teach- ers and pupils in academic affairs		14 (3.93%)	52 (14.61%)	186 (52.25%)	91 (25.56%)	
The headteacher respects the teachers	15 (4.21%)	16 (4.49%)	39 (10.96%)	186 (52.25%)	100 (28.09%)	
The headteacher receives respect and trust from teachers, pupils and parents		11 (3.09%)	43 (12.08%)	191 (53.65%)	98 (27.53%)	
The headteacher makes proper decision that ben- efits teachers and pupils		21 (5.9%)	44 (12.36%)	165 (46.35%)	112 (31.46%)	

One of the WEOs also has this to say during the interview:

You know, when headteachers make decisions that prioritise the needs of both teachers and pupils, they build a foundation of trust that enhances the overall academic experience. (WEO1, 19th February 2025)

These results signify the idealised influence of headteachers on teachers' confidence, trust, and the overall school culture. The data illustrate the pivotal role of headteachers in shaping an effective educational environment through idealised influence. By being committed to the school vision, headteachers serve as role models and foster trust and respect, thus emphasising the importance of leadership in promoting collaboration and academic excellence in schools.

3.5. The relationship between transformational leadership style and academic performance

Several significant results emerged based on the chi-square test results assessing the relationship between transformational leadership styles and pupils' academic performance in public primary schools. Firstly, for inspirational motivation, there was a statistically insignificant association ($\chi^2=5.84,\ p=0.016$), indicating that inspirational motivation has no direct relationship with pupils' academic performance (table 6). Thus, a higher proportion of pupils reported unsatisfactory academic performance than when it was practised.

Individualised consideration showed a strong association with academic performance (χ^2 = 14.14, p < 0.0001). When leaders provided individualised consideration, a greater proportion of pupils achieved satisfactory academic outcomes compared to when this practice was not observed. Similarly, intellectual stimulation exhibited a significant relationship with academic performance (χ^2 = 11.78, p = 0.001). Schools where intellectual stimulation was practised had a higher percentage of pupils achieving satisfactory academic results. Conversely, idealised influence did not show a

significant association with academic performance (χ^2 = 0.74, p = 0.39), suggesting that whether idealised influence was practised or not practised did not notably affect pupils' academic outcomes in this study.

Table 6The relationship between transformational leadership style and pupils' academic achievement.

Transformational	Category	Perceived academic pe	χ^2	р	
leadership style	cutogory	Unsatisfactory	Satisfactory	λ	P
Inspirational motivation	Not practiced Practiced	24 (38.71%) 38 (61.29%)	70 (23.81%) 224 (76.19%)	5.84	0.016
Individualised consideration	Not practiced Practiced	32 (51.61%) 30 (48.39%)	80 (27.21%) 214 (72.79%)	14.14	<0.0001
Intellectual stimulation	Not practiced Practiced	36 (58.06%) 26 (41.94%)	102 (34.69%) 192 (65.31%)	11.78	0.001
Idealised influence	Not practiced Practiced	22 (35.48%) 40 (64.52%)	88 (29.93%) 206 (70.07%)	0.74	0.39

3.6. Associations between transformational leadership style and academic performance

The associations between transformational leadership styles and pupils' academic performance were examined by binary logistic regression analysis, focusing on Adjusted Odds Ratios (AOR) to account for potential confounders.

The results revealed that individualised consideration had a significant positive association with pupils' academic performance. Pupils in schools where individualised consideration was practised were 2.27 times more likely to achieve satisfactory academic outcomes compared to those where it was not practised (AOR = 2.27, 95% CI: 1.19-4.35, p = 0.013). Similarly, intellectual stimulation was significantly associated with better academic performance, with pupils being 2.08 times more likely to have satisfactory academic results when intellectual stimulation was practised [AOR = 2.08, 95% CI: 1.09-4.71, p = 0.027] (table 7).

On the other hand, inspirational motivation showed a positive but statistically non-significant relationship with academic performance after adjusting for confounders (AOR = 1.75, 95% CI: 0.88–3.50, p = 0.108). Likewise, idealised influence did not demonstrate a significant association with academic performance (AOR = 0.43, 95% CI: 0.21–0.95, p = 0.19).

The chi-square test and binary logistic regression results provide compelling insights into how specific transformational leadership styles influence pupils' academic performance in public primary schools. The chi-square results indicate that practices, such as inspirational motivation, individualised consideration, and intellectual stimulation, are significantly associated with improved academic outcomes. For instance, the strong association found with individualised consideration ($\chi^2 = 14.14$, p < 0.0001) suggests that when school leaders actively engage with pupils on a personal level, tailoring their approaches to meet individual needs, pupils are not only more likely to achieve satisfactory performance but also develop a deeper connection to their learning environment. This aligns with the binary regression analysis, which shows that pupils in settings where individualised consideration is practised are 2.27 times more likely to succeed academically (AOR = 2.27, p = 0.013). Similarly, the notable association with intellectual stimulation ($\chi^2 = 11.78$, p = 0.001), where pupils are

Table 7The associations between transformational leadership style and academic performance.

Transformational leadership style	Response	COR (95%CI)	p	AOR (95%CI)	p
Inspirational motivation	Not practiced	Ref	Ref	Ref	Ref
mspirational motivation	Practiced	2.02 (1.13,3.59)	0.017	1.75 (0.88,3.50)	0.108
Individualised consideration	Not practiced	Ref	Ref	Ref	Ref
muvidualised consideration	Practiced	2.08 (1.63,4.99)	<0.0001	2.27 (1.19,4.35)	0.013
Intellectual stimulation	Not practiced	Ref	Ref	Ref	Ref
intenectual sunitation	Practiced	2.61 (1.49,4.56)	0.001	2.08 (1.09,4.711)	0.027
Idealised influence	Not practiced	Ref	Ref	Ref	Ref
racensed inflactice	Practiced	1.29 (0.72,2.29)	0.391	0.43 (0.21,0.95)	0.19

encouraged to think critically and creatively, reinforces that an engaging learning atmosphere fosters better academic outcomes.

Conversely, the results regarding idealised influence are particularly noteworthy, as they reveal a lack of significant association with academic performance (χ^2 = 0.74, p = 0.39), suggesting that simply modelling behaviour or maintaining high standards may not directly impact pupils' academic success. This is further supported by the logistic regression analysis, where idealised influence was associated with a decreased likelihood of satisfactory performance (AOR = 0.43, p = 0.19). Inspirational motivation also showed a positive correlation but was not statistically significant when adjusted for confounders (AOR = 1.75, p = 0.108). This indicates that while encouraging and uplifting leadership can be beneficial, it may not be as impactful as personalised or intellectually stimulating approaches. These results underscore the critical importance of adaptive leadership styles in educational settings, emphasising that effective leadership must prioritise individualised support and engagement to optimise student performance. One of the headteachers stated during the interview:

There is indeed a relationship between effective leadership and the performance of pupils in public schools, particularly primary schools. Transformational leadership focuses on transformation/change; hence, workers, including teachers, are working for change, and they focus on making achievements. (Headteacher of School C, 19th February 2025)

The other headteacher also commented during the interview:

Good leadership is important in any achievement. In schools, an effective administrative system, such as the use of transformation leadership style, has a close relationship with the academic performance of pupils. (Headteacher of School E, 27th February 2025)

The chi-square test and binary logistic regression results provide critical insights into the impact of transformational leadership styles on academic performance. Specifically, the significant relationships were identified with individualised consideration and intellectual stimulation.

4. Discussion of results

The results indicated a strong positive correlation between individualised consideration and intellectual stimulation with academic performance. This is echoed by the results of Prasetia [20] study in Indonesia, which found that effective leadership fostered an environment conducive to both teachers' and pupils' growth. The results align with the assertions made by Abdallah and Alkhrabsheh [1] study in the UAE and Jordan, who advocate for leadership styles that foster collaboration and engagement as essential for mitigating educational crises. The results also suggested that personalised support and fostering critical thinking significantly enhanced pupils' achievement. It was, however, found that there was no significant relationship between transformational leadership and academic outcomes, although there was a positive correlation, suggesting that role modelling alone may be insufficient to influence pupils' academic performance. As observed by Matete [15] study in Tanzania, schools need governmental financial support, incentives, and training programmes, including proper school supervision for teachers to improve their commitment towards teaching for improved pupils' performance. The results also support what Sims et al. [24] emphasised in their study in the United Kingdom (UK) on the importance of professional development programmes for teachers to achieve and yield higher educational outcomes. The strong association between individualised consideration suggests that when school leaders tailor their approaches to meet individual pupils' needs, they enhance not only academic performance but also pupils' engagement, reinforcing the notion that personalised attention is a cornerstone of effective educational leadership.

Conversely, the lack of significant association for idealised influence raises important questions about the efficacy of traditional leadership traits that emphasise role modelling without actionable engagement. These results resonate with Koech and Namusonge [13] study results in Kenya, which highlighted that merely exemplifying high standards without fostering direct interactions may lead to superficial impacts on educational outcomes. A positive yet non-significant relationship for inspirational motivation to pupils' academic performance suggests that motivation alone may not suffice to drive substantial improvements. This is also supported by Rizkie, Suriansyah and Sulistiyana [21] study in Indonesia, which found that intrinsic factors such as individualised support and intellectual engagement were more impactful towards teachers' commitment to teaching. This indicates a need for educational leaders to focus on dynamic, interactive approaches rather than solely inspirational rhetoric.

These results underscore educational leaders' need to prioritise leadership training programmes that emphasise adaptive strategies, such as individualised consideration and intellectual stimulation. As observed by Karakose et al. [11] in Turkey and Greece, transformational leadership in the educational administration field is considered a viable tool for greater school effectiveness. As noted further by Semwenda and Solomon [22] study in Tanzania, effective leadership directly correlates with enhanced academic performance, advocating for a shift from traditional hierarchical models to more collaborative and responsive frameworks. Furthermore, the insights from this study suggest that educational leaders should be equipped with the tools and knowledge to implement balanced professional development designs that include mechanisms addressing insight, motivation, technique, and practice (the IGTP model). Again, these arguments align with the recommendations by Rizkie, Suriansyah and Sulistiyana [21] study in Indonesia, who stressed the importance of comprehensive, evidence-based strategies in educational leadership, aiming to foster an environment where both teachers and pupils benefit.

The results from the chi-square test and binary logistic regression analyses revealed a critical policy gap in the emphasis placed on transformational leadership

styles, particularly the lack of support for individualised consideration and intellectual stimulation in professional development programmes for school leaders. While the data indicate that these leadership practices significantly enhance pupils' academic performance, current educational policies in Tanzania often prioritise generic training programmes that focus on idealised influence and inspirational motivation [27], which have shown limited impact on actual academic outcomes. As observed by Mphale [18] in Botswana, this misalignment underscores the need for policymakers to rethink the design and implementation of professional development initiatives, ensuring they incorporate evidence-based mechanisms that foster personalised engagement and critical thinking among pupils. By failing to address the proven effects of adaptive leadership practices adequately, educational policies risk perpetuating a cycle of underperformance and disengagement in schools, ultimately undermining the potential for meaningful improvement in pupils' achievement. This gap again calls for a strategic shift towards tailored leadership training programmes that prioritise effective practices proven to enhance educational outcomes, thereby bridging the gap between policy intentions and actual classroom practices.

The results from the chi-square test and binary logistic regression analyses reveal significant gaps in international frameworks such as those of the World Bank, UN-ESCO, and the Dakar Conference, particularly in their commitment to educational leadership and professional development [28]. While these organisations emphasise broad policy goals such as access to quality education and the promotion of equitable learning opportunities, they often fail to address the specific leadership practices that are crucial for enhancing teaching quality and ultimately improving pupils' academic performance. For example, UNESCO's framework advocates for inclusive education but does not adequately highlight the importance of transformational leadership styles, particularly individualised consideration and intellectual stimulation [31]. These styles have been shown to foster more engaging learning environments. Yet, current international policies lack concrete guidelines or mechanisms to integrate these practices into the professional development of school leaders.

According to Ochieng and Yeonsung [19], results in Tanzania, frameworks such as the Dakar Conference's Education for All (EFA) initiative primarily focused on increasing access to education, often neglecting the qualitative aspects of educational leadership that can significantly impact pupils' academic outcomes. This oversight can create a disconnect between policy intentions and the realities faced in schools, where ineffective training programmes fail to equip leaders with the necessary skills to implement evidence-based strategies effectively. Moreover, Abdul-Hamid [2], while there is a strong emphasis on accountability and assessment metrics for teaching within these frameworks, they frequently overlook the transformative leadership practices that the results suggest are essential for pupils' success. As observed by Yirci et al. [32], by incorporating insights from studies like this one, international organisations can develop comprehensive leadership models that not only prioritise access but also ensure that educational leaders are well-prepared to foster an environment conducive to high pupils' academic achievement.

5. Conclusion and implications

In this study, we examined transformational leadership and its influence on pupils' academic achievement in primary schools in Tanzania. The results established a strong link between transformational leadership practices and the academic achievement of pupils in primary schools. Key components, such as individualised consideration and intellectual stimulation, significantly contributed to positive pupils' outcomes. The results again suggested a satisfactory pupil academic performance when leaders

personalised their approaches to address the diverse needs of pupils. This personalised engagement enhanced academic achievement and fostered a deeper connection to the learning process. In addition, the binary logistic regression analysis indicated that an environment characterised by intellectual stimulation further increased the likelihood of achieving satisfactory results. These outcomes highlighted the critical role of adaptive leadership styles that prioritise engagement and individualised attention, contrasting with traditional autocratic methods that may inhibit innovation and collaboration.

The results indicated that individualised consideration and intellectual stimulation significantly contributed to positive pupils' achievement. It is recommended that educational policymakers prioritise developing and implementing professional training programmes for school leaders that specifically focus on transformational leadership practices, particularly individualised consideration and intellectual stimulation. These training programmes should equip headteachers with the necessary skills to engage with pupils personally, tailoring their leadership approaches to meet diverse learning needs. Moreover, workshops and mentorship opportunities should emphasise and foster an environment that promotes critical thinking, creativity, and collaboration among both teachers and pupils. As the results again suggested a notable association between personalised approaches and satisfactory academic performance, headteachers need to prioritise adaptive leadership strategies to cultivate a more inclusive and motivating school culture that focuses on academic performance and achievement and supports teachers professionally. Furthermore, ongoing evaluation and feedback mechanisms should be established to assess the effectiveness of these leadership practices in real-world classroom settings, ensuring that educational leaders are continuously encouraged to adapt and improve their approaches to meet the evolving demands of their pupils.

6. Limitations of the study

In this study, we did not involve the teachers in interviews so that they could air out their views about the type of leadership style applicable in the schools. The study focused on public primary schools and did not focus on other categories of schools, such as private primary schools and other levels of schools. However, they also need transformational leadership styles that facilitate the inspiration of educational leaders to teachers to work harder for the improvement of pupils' academic performance. Future research could consider involving the teachers in interviews to gain insights into their experience and what leadership styles are practised at the school level. Other studies could consider private schools and the educational level of secondary school education.

Funding: This research received no external funding.

Data availability statement: The data will be available in the public portal after publication.

Acknowledgments: The authors would like to thank everyone who participated in this study. The University of Dodoma is appreciated for providing an enabling environment that enabled the preparation of this work.

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