Combating gender stereotypes in schools: Gender, education level, and teaching experience of heads of schools as moderating factors

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Abstract

Gender stereotypes are common in societies. Since schools are social entities, they are susceptible to gender stereotypes. Promoting gender equity can combat gender stereotypes. Gender equity is significant for a patriarchal society such as Tanzania. Gender, education level, and teaching experience of heads of schools can influence how they combat gender stereotypes. However, little is known about the extent to which gender, education level, and teaching experience of heads of schools can influence their behaviour in combating gender stereotypes in schools. Based on this background, this study examined the extent to which gender, education level, and teaching experience of heads of schools can influence their behaviour in combating gender stereotypes in their schools. Using a quantitative research approach, data were collected through a survey and analysed using SPSS. Findings suggest that gender, education level, and teaching experience matter in combating gender stereotypes. It is recommended that the recruitment of heads of schools should consider these factors. Further research may involve longitudinal studies that gauge how perceptions of heads of schools on gender stereotypes change over time.

Keywords: education level; gender; gender stereotypes; heads of schools; teaching experience

Introduction

Heads of schools perform several functions. Among other functions, they engage in instructional leadership. As heads of schools engage in instructional leadership, they may address issues of gender equity. Promoting gender equity may require combating gender stereotypes. Gender stereotypes are a generalised view or preconception about the attributes and characteristics of a particular group (Danby & Ciesielska, 2021). Gender stereotypes are prevalent in Tanzanian schools. Amongst other ways, gender stereotypes can manifest themselves through sexual and verbal abuse. In sexual abuse, it has been reported that male teachers abuse female students in Tanzania (Iddy, 2018; Mitchem, 2021; Stein & Bockwoldt, 2016). Other than teachers, boys also sexually abuse girls (Goessmann et al., 2020; Iddy, 2018). Similarly, there are cases of teachers abusing language, especially girls (Iddy, 2018). Therefore, this calls for the need to combat gender stereotypes in schools.

In principle, the education system is expected to promote gender equity. However, in practice, there is evidence that it also fuels gender stereotypes through some teachers' abusive behaviour towards female students (Mitchem, 2021), teachers' pedagogical practices (Ortega et al., 2021), and textbooks (Ismael & Mohammadzadeh, 2022; Määttä & Uusiautti, 2020). Thus, to promote gender equity, gender stereotypes need to be combated. In the school context, heads of schools need to take the lead in combating gender stereotypes. Factors such as discrimination in leadership, career satisfaction, and

job performance may differ by gender (O'Brien et al., 2023; Pudrovska & Karraker, 2014; Wolle, 2023). These factors, in turn, may influence how female and male heads of schools react and engage in combating gender stereotypes in schools. Gender sensitivity amongst heads of schools may differ based on gender (Ford & Morgan, 2023), education level, and the number of years in teaching (Gråstén et al., 2022). Female and male heads of schools are likely to respond differently to issues related to combating gender stereotypes. Therefore, given the prevalence of gender stereotypes in schools in Tanzania, there is a need to examine the extent to which gender, education level, and teaching experience of heads of schools can influence their behaviour in combating gender stereotypes in schools. Gender stereotypes can differ by gender.

Gender stereotypes amongst leaders

In the context of schools, gender stereotypes are still dominant (Lee et al., 2019). On the one hand, female teachers are perceived to be soft, gentle, caring, accepting (Miyajima, 2008), compassionate, kind, and nurturing (Ford & Morgan, 2023). On the other hand, male teachers are viewed as protectors (Miyajima, 2008), competitive, dominant, assertive, and ambitious (Ford & Morgan, 2023). These gender stereotypes can influence how female and male heads of schools deal with issues related to combating gender stereotypes. It can also be assumed that female and male heads of schools approach combating gender stereotypes in different ways.

Gender stereotypes are promoted by both female and male teachers. This can be either through how they characterise other people or how they characterise themselves. Men characterise women as less agentic than men, while women characterise women as less assertive than men (Hentschel et al., 2019). In terms of self-characterisation, women characterise themselves as less agentic than men, while men characterise themselves as less communal than women (Hentschel et al., 2019). These forms of characterisation can also influence how they deal with issues of combating gender stereotypes in their schools.

Gender stereotypes can also be reflected in leadership. In fulfilling their leadership roles, men and women are likely to behave in ways that other people stereotype them. With such perceptions, male leaders are likely to be unfriendly, arrogant, and domineering; while female leaders are likely to be friendly and humble. With differences in behaviours, female and male leaders are likely to exercise their leadership roles differently depending on how they want to fulfil their self-prophecies. This view may suggest that female and male heads of schools will respond differently when combating gender stereotypes.

Flexibility and sensitivity to interpersonal relationships among heads of schools can be key characteristics in combating gender stereotypes. Female leaders are more communal and sensitive to interpersonal relationships than male leaders (Larsson & Alvinius, 2019; Shaked et al., 2018). Female heads of schools believe that interpersonal relationships are connected to instructional leadership, where their duty as leaders is to engage in partnership and empower colleagues in the workplace (Shaked et al., 2018) and to exercise nurturing leadership (Guramatunhu-Mudiwa & Bolt, 2012). Since female leaders are inclined to maintain a positive relationship with colleagues, they are likely to be flexible in using different leadership styles as the context may call for (Larsson & Alvinius, 2019). In combating gender stereotypes, a positive interpersonal relationship is required because it can help leaders maintain harmony, collegiality, and a sense of trust

within institutions. Provided that female leaders are more social and sensitive to interpersonal relationships than male leaders, it can be assumed that there can be variations in the way female and male heads of schools address issues of gender stereotypes.

Gender inequity can also exist in the selection of teachers for various leadership positions. The gender of the school leader can determine the gender of the teachers who are given leadership positions. In female-led institutions, Addi-Raccah (2006) affirms that there were more female administrative leaders than in male-led institutions. This finding suggests that top leaders in the organisations tended to favour teachers of their gender for leadership positions. In such institutions, this can result in gender imbalance in combating gender stereotypes. In case decision-making is done in such institutions, there is a likelihood of making decisions that favour a particular gender.

Discrimination in leadership

Discrimination in leadership also can depend on gender. Female teachers are more likely than male leaders to experience discrimination in leadership, especially in terms of professional development, promotion, decision-making, leadership tenure, and in being subjected to depression. In some cases, the career development path in leadership for female leaders is unclear and limited (O'Brien et al., 2023). Combating gender stereotypes may require some form of professional development. With such limited professional development, female heads of schools may have inadequate abilities to engage in combating gender stereotypes.

There are also gender differences in terms of promotion to leadership positions. During crisis, in male-dominated institutions, women are more likely to be promoted to high-risk leadership positions than men (Glass & Cook, 2016). This can possibly be a conspiracy by men to prove women's failure in leadership. This can impact how they address issues of combating gender stereotypes. They can focus more on the crisis at hand, and forget issues surrounding gender stereotypes. Similarly, even when women are promoted, it has been perceived that their promotions are not based on merit, but on their gender (O'Brien et al., 2023). Though there seems to be no difference between female and male leaders in risk-taking attitudes (Trzeinski & Holst, 2012); by taking high-risk leadership positions, women have proved themselves to be courageous and great leaders (Glass & Cook, 2016).

Collective decision-making and support in institutions can be significant in combating gender stereotypes. Research suggests that more women than men have experienced exclusion from decision-making and have received inadequate support from peers, supervisors, and subordinates (Glass & Cook, 2016). In institutions where collective decision-making and support are inadequate, female leaders can encounter challenges in combating gender stereotypes.

Combating gender stereotypes may require a substantial amount of time. The tenure in leadership has been different between men and women. Once given leadership, female leaders are more likely to be given a shorter tenure than men because they are likely to be forced to resign, to be fired, to retire, or to move to other institutions (Glass & Cook, 2016). With such mobility and limited time in leadership positions, female heads of schools may be unable to tackle some of the issues related to gender stereotypes.

Combating gender stereotypes may require a peaceful, sound, and stable state of mind. In some cases, leadership positions can be associated with depression. While leadership increases depression for female leaders, it decreases depression for male leaders (Pudrovska et al., 2013; Pudrovska & Karraker, 2014). Likewise, more female leaders with the power to hire, fire, or influence pay are more depressed than male leaders with the power to hire, fire, or influence pay (Pudrovska & Karraker, 2014). Depression among female leaders in high positions can also expose them to higher risks such as getting breast cancer than to women in low leadership positions (Pudrovska et al., 2013). Teaching as a care work profession is more stressful than other professions, except for nursing (Pudrovska et al., 2013). Subject to such an unsound and unstable state of mind, female heads of schools can fail to successfully carry out their leadership responsibilities, including combating gender stereotypes.

Career satisfaction and performance of leaders

Career satisfaction can increase motivation among heads of schools. The level of career satisfaction can vary between men and women in leadership positions. Though women in leadership are satisfied because of more education, higher income, and more prestigious jobs (Pudrovska & Karraker, 2014), their level of satisfaction may decrease over time (Glass & Cook, 2016). Thus, a decrease in motivation can also decrease their job performance. This assertion may suggest that heads of schools who have higher levels of job satisfaction are likely to combat gender stereotypes.

There appear to be differences between men and women in terms of performance in leadership roles. In many cases, female leaders perform better in instructional and nurturing leadership than male leaders (Grobler, 2013; Guramatunhu-Mudiwa & Bolt, 2012; Wolle, 2023). Several reasons can account for better performance among female leaders. First, since women are given lower leadership positions such as pedagogic leadership (Larsson & Alvinius, 2019), this is likely to help them gain experience that boost them when they become heads of schools.

Second, teaching is among the caring professions. Given that women are more communal than men (Larsson & Alvinius, 2019; Shaked et al., 2018), they are more likely to be friendly and humble as they work with colleagues than men who tend to be more arrogant, domineering, and assertive (Ford & Morgan, 2023). With these characteristics, female leaders are likely to gain more respect, influence, and support from colleagues than male leaders. Finally, since during crisis female leaders are more likely than male leaders to be subjected to higher-risk leadership positions (Farag & Mallin, 2016; Glass & Cook, 2016), this experience can give them the stamina to persevere even in times of crisis.

The role of experience

Experience can be significant in combating gender stereotypes. For heads of schools to be effective leaders, years of experience as teachers matter (Grobler, 2013). Prior experience in teaching can help heads of schools get practical knowledge related to instructional leadership (Addi-Raccah, 2006; Shaked et al., 2018). Similarly, experience in teaching may be related to gender stereotypes. Teachers with short teaching experience are more gender biased compared to those with many years in teaching (Gråstén et al., 2022). This can imply that more experienced heads of schools are more likely to combat gender stereotypes than those heads of schools with less experience.

Combating gender stereotypes may be a risk-taking task. Experience is also significantly related to job risk-taking. Leaders with more experience in their profession are likely to be better risk-takers than those with less experience (Farag & Mallin, 2016). Thus, it can be suggested that experience is related to effective leadership, gender bias, and risk-taking behaviours. These factors are important for combating gender stereotypes. In line with this view, Hitt and Player (2018) suggest further research that examines the role of experience in promoting effective leadership practices.

Education level in leadership

In many institutions, the education level can matter for promotion to a leadership position. Amongst other things, education level can increase an individual's level of sensitivity to different issues. The level of sensitivity appears to differ by gender. Female teachers with master's degrees are more gender-sensitive than male teachers and other teachers with lower degree qualifications (Gråstén et al., 2022). This view may imply that highly educated heads of schools are more likely to combat gender stereotypes than those who are less educated.

Equally, highly educated leaders are likely to be risk-takers. They, thus, can be open to innovation if they know their work environment (Farag & Mallin, 2016). Since individuals with higher education level are likely to be more risk-takers than those with lower education levels, it can be hypothesised that those with higher level of education can be willing to combat gender stereotypes than those with lower education level.

Overall, prior research studies on gender stereotypes amongst heads of schools suggest that there are differences between female and male heads of schools. These differences can be in terms of discrimination in leadership positions, career satisfaction, teaching experience, and education level. Based on these differences, there is a likelihood that female and male heads of schools react differently to issues related to combating gender stereotypes. Furthermore, the school system is known for breeding gender stereotypes. However, in the context of Tanzania, little is known about the extent to which gender, education level, and teaching experience of heads of schools can influence their behaviour in combating gender stereotypes in schools. Tanzania being a patriarchal society, a deeper understanding of heads of schools in combating gender stereotypes can be significant in shedding light on how to promote gender equity. Therefore, the main objective of this study was to examine the extent to which gender, education level, and teaching experience of heads of schools can influence their behaviour in combating gender stereotypes in schools.

Research questions

This research study was guided by three research questions, namely:

- i. What are gender stereotypes amongst heads of schools about combating gender stereotypes in schools?
- ii. Is there any significant relationship between the education level of heads of schools and their behaviour in combating gender stereotypes in schools?
- iii. Is there any significant relationship between the teaching experience of heads of schools and their behaviour in combating gender stereotypes in schools?

Methodology

Research approach, research design, sample, method of data collection, and data analysis are described in this section.

Research approach and design

The current study used a quantitative research approach. This research approach was preferred because the study depended most on the collection and analysis of numerical data (Johnson & Christensen, 2020). This study used a cross-sectional survey design. The focus was to collect teachers' opinions about gender stereotypes. In this design, the survey was administered to a population once and data were collected from heads of schools at a single point in time (Bryman & Bell, 2019; Mills & Gay, 2019). Among other advantages, it was cost-effective in terms of quick collection of data (Creswell & Creswell, 2023).

Population, sample, and sampling procedures

The population involved in the study was 205 heads of schools from primary and secondary schools in Dar es Salaam, Pwani, and Tanga regions. Purposive sampling was used to select the regions. Thus, the selection was based on the eastern zones. Of special interest were Pwani and Tanga regions because they have relatively higher cases of school dropouts related to pregnancy and truancy in Tanzania. A summary in Table 1 shows the trend of these cases from 2019 to 2021. Overall, most of the cases of dropout from both primary and secondary schools are related to truancy. For example, in 2021, as reported by the Ministry of Education, Science and Technology (MoEST), cases of dropout due to truancy in primary schools accounted for 98.1% (MoEST, 2021).

Table 1: Pregnancy and Truancy Cases for Dar es Salaam, Pwani, and Tanga From 2019 to 2021

School Level	Regions		l Level Regions Pregnancy				Truancy			
			2019	2020	2021	2019	2020	2021		
Primary Schools	Dar	es	7	446		5	427			
·	Salaam									
	Pwani		64	960		51	1977			
	Tanga		103	2629		97	6563			
Secondary	Dar	es	83	89	105	2434	2492	1677		
Schools	Salaam									
	Pwani		182	158	174	1582	1711	1930		
	Tanga		315	234	195	3972	4592	4973		

Source: National Basic Statistics in Education (MoEST, 2019, 2020, 2021)

Data collection method

This study used a survey to collect data from heads of schools in three regions, namely: Dar es Salaam, Pwani, and Tanga. The preference for the use of the survey is because it is less expensive, easy to administer, and quick to collect data (Creswell & Creswell, 2023). The questionnaire used for the survey was adapted from Korin et al. (2021). Some of the questionnaire items were rephrased to reflect the context of the research problem. A five-point Likert scale (Strongly Disagree, Disagree, Not Sure, Agree, and Strongly Agree) was used to capture the opinions of heads of schools about combating gender stereotypes.

Data analysis

Data were processed through a statistical package for social sciences (SPSS) version 27. Both descriptive and inferential statistics were generated. These data have been presented in tables.

Results

The purpose of the study was to examine how heads of schools combated gender stereotypes in their schools. The findings from demographic information of the research participants and research questions have been presented in this section. The study's findings have been organised according to research questions.

Demographic information

As illustrated in Tables 2 and 3, a total of 205 heads of schools were involved in the study. Their age ranged from 22 to 59 years, with a mean age of 45.10 and a standard deviation of 7.69. However, some of them did not disclose either their gender, education level, or teaching experience. In terms of percentages, 64% were female, while 36% were male. Twenty-three (23) percent were certificate holders and 24% had diploma. 42% and 11% were holders of bachelor's and master's degrees respectively. Heads from primary schools were 132 (66%), 62 (31%) from secondary schools, and 6 (3%) from schools that had primary and secondary levels in the same compound.

Table 2: Education level, school level, and school ownership by gender

Characteristics	Ger	ıder	Total	
		Female	Male	
Education Level	Certificate	39	4	43
	Diploma	27	20	47
	Bachelor	47	36	83
	Master	13	9	22
	Total	126	69	195
School Level	Primary	73	54	127
	Secondary	49	13	62
	Combined	5	1	6
	Total	127	68	195
School Ownership	Government	91	64	155
	Private	36	5	41
	Total	127	69	196

Note: N = 205. 10 heads of schools did not indicate either their level of education or their gender and 9 did not indicate either their school ownership or gender.

As indicated in Table 3, in terms of education level, the age group 16 to 20 had heads of schools with the highest education level, followed by the age group of 21 to 25. Heads of schools from government schools had relatively higher education levels than those from private schools. While a higher proportion of heads of schools from primary schools had lower education levels (certificate & diploma) than heads from secondary schools, heads from primary schools had higher education levels than heads from secondary schools (bachelor & master), except for PhD level.

Table 3: Participants' education level, teaching experience, and school ownership

Charact	eristics					Total
			Education	n Level (%)		(%)
		Certifi				
		cate	Diploma	Bachelor	Master	
	1-5	0.0	2.4	2.7	0.0	1.7
	6-10	23.8	7.1	13.5	5.0	13.5
	11-15	19.0	19.0	18.9	15.0	18.5
	16-20	21.4	26.2	36.5	40.0	30.9
Teaching	21-25	23.8	14.3	14.9	25.0	18.0
Experience	26-30	7.1	19.0	12.2	10.0	12.4
in Years	31-35	2.4	9.5	0.0	5.0	3.4
	36-40	2.4	2.4	1.4	0.0	1.7
	Total	100.0	100.0	100.0	100.0	100.0
	Government	64.4	74.5	85.4	95.5	78.7
School	Private	35.6	25.5	14.6	4.5	21.3
Ownership	Total	100.0	100.0	100.0	100.0	100.0
	Primary	63	70	67	67	0
School Level	Secondary	37	30	33	33	100
	Total	100	100	100	100	100

Gender stereotypes by gender

The first research question focused on how heads of schools combated gender stereotypes in their schools. To determine if there were statistically significant differences in combating gender stereotypes amongst female and male heads of schools, a Mann-Whitney U test was performed. Though the sample for this study was relatively large, this non-parametric test was used because the sample was selected purposively, and the assumptions of equal variances and homogeneity were violated. The results are presented in Table 4. There were statistically significant differences in terms of encouraging teachers to be gender responsive and in creating a safe and supportive environment for female students. In both cases, male heads of schools had higher mean rank than female heads of schools.

Further analysis was carried out through the Mann-Whitney U test to establish whether these differences were statistically significant by school level (primary & secondary) and school ownership (government & private). The findings revealed that for encouraging teachers to be gender responsive and discussing how to overcome barriers faced by female students, heads of schools in primary schools had a higher mean rank than heads in secondary schools. Similarly, for encouraging discussions on overcoming barriers related to gender stereotypes and encouraging teachers to be gender-responsive, heads of schools in government-owned schools had a higher mean rank than those from private schools.

There were no statistically significant gender differences in terms of treating boys and girls fairly and equally, discouraging gender-stereotyped behaviour, and giving guidance, resources, and training to effectively promote gender equity.

Table 4: A Mann-Whitney U test of heads' perceptions of gender stereotypes by gender

	Statements	Mean	Rank	U	p
		Female	Male		
1	I encourage teachers to discuss how to overcome barriers related to gender stereotypes	85.12	93.00	3232.000	.290
2.	I encourage teachers to be gender-responsive	81.64	103.64	2846.500	.003*
3.	I encourage teachers to treat boys and girls fairly and equally	83.83	94.56	3192.000	.149
4.	I discourage gender-stereotyped behaviour	84.39	92.47	3251.500	.288
5.	I give guidance, materials, and training to effectively promote gender equity	87.01	89.64	3489.000	.722
6.	I have created a safe and supportive classroom environment for female students	82.21	107.83	2750.500	.001*

Statistically significant at .05. * Denotes statistically significant findings

Education level

The second research question examined whether the education level of heads of schools had a significant influence in combating gender stereotypes within the schools. As illustrated in Table 5, the Kruskal-Wallis 1-way ANOVA was used to establish if there were statistically significant differences by education level. This non-parametric statistical test was used because the independent samples were selected purposively and the assumptions of equal variances and homogeneity were violated. The findings indicate that there were statistically significant differences in all the items, except for giving guidance, resources, and training to effectively promote gender equity.

Table 5: Kruskal-Wallis H test for perceptions of heads by education Level

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	Statements	Mean Rank	s by Educat	ion Level		H	p
		Certificate	Diploma	Bachelor	Master		
1.	I encourage teachers to discuss how to overcome barriers related to gender stereotypes	65.50	94.95	97.54	90.34	13.085	.004*
2.	I encourage teachers to be gender-responsive	64.51	91.45	101.71	103.18	16.842	.001*
3.	I encourage teachers to treat boys and girls fairly and equally	69.64	94.04	93.50	88.81	8.168	.043*
4.	I discourage gender-stereotyped behaviour	71.12	81.94	100.38	91.67	10.070	.018*
5.	I give guidance, materials, and training to effectively promote gender equity	72.05	94.99	95.17	89.31	6.548	.088
6.	I have created a safe and supportive classroom environment for female students	66.33	98.18	103.02	98.80	15.083	.002*

Note: Statistically significant at .05. * Denotes statistically significant findings

Kruskal-Wallis H test with Dunn post hoc test was used to further verify pairwise differences by education level. The results are displayed in Table 6. The findings were statistically significant.

Table 6: Dunn Post Hoc test of heads' perceptions of gender stereotypes by education level

Item	Paired Samples	Signif	icance Levels
	(Education Level)	Significance	Adjusted significance
1. I encourage teachers to discuss	Certificate & Master	.061	.606
how to overcome barriers related	Certificate &	.005	.048*
to gender stereotypes	Diploma		
	Certificate &	.001	.005*
	Bachelor		
	Master & Diploma	.728	1.000
	Master & Bachelor	.559	1.000
	Diploma & Bachelor	.780	1.000
2. I encourage teachers to be gender	Certificate & Master	.012	.119
responsive	Certificate &	.000	.001*
	Diploma		
	Certificate &	.005	.045*
	Bachelor		
	Master & Diploma	.271	1.000
	Master & Bachelor	.385	1.000
	Diploma & Bachelor	.906	1.000
4. I discourage gender stereotyped	Certificate & Master	.321	1.000
behaviour	Certificate &	.144	1.000
	Diploma		
	Certificate &	.003	.028*
	Bachelor		
	Master & Diploma	.483	1.000
	Master & Bachelor	.050	.503
	Diploma & Bachelor	.501	1.000
6. I have created a safe and	Certificate & Master	.008	.063
supportive classroom environment	Certificate &	.015	.148
for female students	Diploma		
	Certificate &	.000	.002*
	Bachelor		
	Master & Diploma	.842	1.000
	Master & Bachelor	.474	1.000
	Diploma & Bachelor	.730	1.000

Note: Only items with statistically significant findings have been indicated.

In all the cases, heads of schools with certificate levels had the lowest mean ranks (see Table 5). A pairwise comparison between certificate and diploma holders revealed that certificate holders had a lower mean rank in encouraging teachers to discuss how to overcome barriers related to gender stereotypes and in encouraging teachers to be gender-responsive. Similarly, a pairwise comparison between certificate and bachelor holders indicated that certificate holders had lower mean rank in encouraging teachers to discuss how to overcome barriers related to gender stereotypes, encouraging teachers to be gender-responsive, discouraging gender-stereotyped behaviour, and creating a safe and supportive classroom environment for female students.

^{*} Denotes items with statistically significant findings

Teaching experience

The final research question focused on examining the role of teaching experience among heads of schools in combating gender stereotypes within the schools. Kruskal-Wallis H test was used to determine if there were statistically significant differences in perceptions of heads of schools by their teaching experience. As indicated in Table 7, there were statistically significant differences in perceptions in terms of encouraging teachers to discuss how to overcome barriers related to gender stereotypes, encouraging teachers to be gender-responsive, and in giving guidance, resources, and training to effectively promote gender equity.

Table 7: Kruskal-Wallis H test mean ranks of heads of schools by teaching experience

	Item		Mean l	Ranks by	y Teach	ing Expe	erience i	n Years		Н	P
		1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40		
1	I encourage teachers to overcome barriers related to gender stereotypes	88.5	62.2	79.5	88.2	64.3	95.3	125.8	107.2	19.2	.008
2	I encourage teachers to be gender-responsive	107.2	72.0	73.2	96.8	63.3	97.2	107.2	87.0	18.1	.012
5	I give guidance, materials, and training to effectively promote gender equity	102.2	60.0	73.2	90.7	73.2	90.8	102.2	141.5	16.0	.026

Note: Only items with statistically significant findings have been indicated.

To further establish pairwise differences, a Dunn post hoc test was performed. Table 8 displays results only for the items that indicated statistically significant differences. For encouraging teachers to discuss how to overcome barriers related to gender stereotypes, the differences were statistically significant between heads with teaching experience of 6 to 10 and those of 31 to 35. Heads of schools with teaching experience between 31 and 35 had a higher mean rank than those between 6 and 10. For encouraging teachers to be gender-responsive, heads of schools with teaching experience ranging from 16 to 20 had a higher mean rank than those ranging from 21 to 25.

Table 8: Dunn Post Hoc test of teaching experience of heads of schools

Items	Paired Samples	Significance Levels		
	(Teaching Experience in Years)	Significance	Adjusted significance	
I encourage teachers to discuss how to overcome barriers related to gender stereotypes	6 -10 & 31 - 35	.002	.048	
2. I encourage teachers to be gender-responsive	16 - 20 & 21 - 25	.001	.031	

Note: Only items with statistically significant findings have been indicated.

Summary of research findings

Overall, in terms of gender, the results indicate that male heads of schools had higher mean ranks than female heads. For the school level, heads of schools in primary schools had a higher mean rank than heads in secondary schools. In terms of school ownership, heads from government-owned schools had higher mean ranks than those from private schools. For education level, heads of schools with certificate level had the lowest mean ranks compared to other qualifications. In terms of teaching experience, heads of schools with teaching experience between 31 and 35 had a higher mean rank than those between 6 and 10. Similarly, heads of schools with teaching experience ranging from 16 to 20 had a higher mean rank than those ranging from 21 to 25.

Discussion

This study examined the extent to which gender, education level, and teaching experience heads of schools can influence their behaviour in combating gender stereotypes in schools. The discussion is organised according to themes related to the research questions.

Gender stereotypes

The first research question examined how female and male heads of schools combated gender stereotypes in their schools. The discussion focuses on how heads of schools encouraged teachers to be gender-responsive, to create a safe and supportive environment for female students, and to discuss how to overcome barriers related to gender stereotypes.

Encourage teachers to be gender-responsive

In encouraging teachers to be gender-responsive, male heads of schools had higher mean ranks than female heads of schools. This finding suggests that male heads of schools were more sensitive to gender stereotypes than female heads. The finding implies that some female heads of schools did not address issues related to gender stereotypes. Given that encouraging teachers to be gender-responsive may require heads of schools who are agentic and assertive (Ford & Morgan, 2023), this could be the reason why male heads of schools were more gender-sensitive to gender stereotypes than female heads of schools.

A comparison between heads from primary and secondary schools revealed that primary schools had higher mean rank than those from secondary schools. This finding seems to suggest that heads from primary schools were more gender sensitive than those from secondary schools. This can imply that issues of gender stereotypes were more common in secondary schools than in primary schools. Secondary school teachers seem to be laissez-faire in dealing with issues related to gender stereotypes. A plausible reason is that in primary schools, teachers tend to interact more with pupils than is the case with secondary school teachers (Klunder et al., 2022). With more pupil-teacher interaction, it can be assumed that primary school teachers are close to learners and know them better. Therefore, they can assist them. This may not be the case for secondary schools. This finding is consistent with previous research, where some secondary school teachers were labelled by calling students names such as gangsters (Sifuna & Kaime, 2007).

Overall, there is a need to have shared leadership between female teachers and male teachers. For example, in a school, if the head of the school is male; then the second head of the school should be female and vice versa. This gender balance in leadership is likely to help leaders combat gender stereotypes with ease. Likewise, this situation will help both male and female heads to get the opportunity to learn from each other.

Create a safe and supportive environment for female students

Male heads of schools were more sensitive than female heads in terms of creating a safe and supportive environment for female students. Under normal circumstances, it could be expected that women will have more personal attachment to female students. This finding is inconsistent with previous research, where women have been considered to be more communal and sensitive to personal relationships (Larsson & Alvinius, 2019; Shaked et al., 2018). Since gender sensitivity is partly related to education level, this can account for the difference between female and male heads of schools. In the current study, most female heads of schools (90%) had a certificate in teaching. Therefore, less sensitivity to gender stereotypes by female heads of schools can be attributed to their level of education. Thus, to effectively combat gender stereotypes, more awareness of female heads of schools is needed. Additionally, there should be in-service capacity building related to gender equity amongst recruited heads of schools.

Overcome barriers related to gender stereotypes

For encouraging discussions on overcoming barriers related to gender stereotypes and encouraging teachers to be gender-responsive, heads of schools in government-owned schools had a higher mean rank than those from private schools. This finding implies that heads of government schools were more gender sensitive than heads of private schools. One plausible reason is that some private schools have been promoting gender-biased practices that contravene the cultural norms of Tanzania such as entertaining lesbian, gay, bisexual, transgender, and queer (LGBTQ) in schools (Mtanzania, 2018). Promoting such practices in a country that is against such norms can be interpreted as being immoral and gender insensitive. Both private and government schools need to be censored, especially on school practices that violate the sociocultural norms of Tanzania. In response to this issue, recently, the Ministry of Education, Science and Technology has banned books that promote LGBTQ in schools (Mikofu, 2023).

Another possible explanation could be the level of education. In the current study, heads of schools from private schools had less qualifications (21.3%) compared to those from government schools (78.7%). Consistent with previous research, teachers with higher education levels are more gender-sensitive than those with low education level (Gråstén et al., 2022).

Education level

The level of education matters in combating gender stereotypes in schools. The findings revealed that heads of schools with certificate levels had the lowest mean ranks. They had the lowest mean rank especially in terms of encouraging teachers to discuss how to overcome barriers related to gender stereotypes, encouraging teachers to be gender-responsive, discouraging gender-stereotyped behaviour, and creating a safe and supportive classroom environment for female students. This finding implies that heads

of schools with lower academic qualifications such as a certificate were less sensitive to gender stereotypes than those heads with higher academic qualifications.

Several reasons can account for this difference. First, heads with lower academic qualifications may have either limited exposure, awareness, or understanding of issues related to gender stereotypes. Another possible reason could be that those issues related to gender stereotypes demanded heads of schools who had the power to influence colleagues to take the needed actions. Heads with such authority could be more easily accepted and trusted by colleagues than those who commanded less academic authority.

Teaching experience

Teaching experience is significant for helping heads of schools discuss how to overcome barriers related to gender stereotypes and gender responsiveness.

Discuss to overcome gender stereotype-related barriers

Heads of schools with teaching experience between 31 and 35 had a higher mean rank than those between 6 and 10 in encouraging teachers to discuss how to overcome barriers related to gender stereotypes. This finding suggests that heads of schools with more years of teaching were more gender sensitive than heads with fewer years of teaching. Several reasons can support this view. First, it can be assumed that because of their longer teaching experience, heads of schools had gained more knowledge accumulated over the years. In line with previous research, teachers with more years of teaching are considered to be effective leaders (Grobler, 2013) and more gender-sensitive compared to those with fewer years of teaching (Gråstén et al., 2022).

Another plausible reason for heads of schools with more teaching experience to be more gender-sensitive can be associated with the socio-cultural practices of Tanzania. Tanzania is a patriarchal society. In this case, older heads tend to be more respected, acceptable, and influential. Therefore, they are likely to engage colleagues in discussing how to overcome barriers related to gender stereotypes compared to those heads of schools with fewer years in teaching.

Encourage teachers to be gender responsive

Findings revealed that heads of schools with teaching experience ranging from 16 to 20 had a higher mean rank than those ranging between 21 to 25. The finding suggests that heads of schools with teaching experience ranging from 16 to 20 years were more gender sensitive than those with teaching experience between 21 and 25. Further analysis of the data revealed that the difference could be due to the level of education. A higher percentage (40%) of heads of schools with teaching experience between 16 and 20 had higher academic qualifications compared to those with experience ranging from 21 to 25. The education level is important for combating gender stereotypes. Consistent with previous findings, teachers with higher education levels are more gender-sensitive than teachers with lower education levels (Gråstén et al., 2022). Thus, education level matters for combating gender stereotypes in schools.

Conclusion and recommendations

Combating gender stereotypes is important for promoting gender equity in schools. The findings from this study have practical implications for teachers, policy-makers, and other stakeholders. Provided that the level of education appears to be a very significant

factor in combating gender stereotypes in schools, it is recommended that when recruiting heads of schools, their education level should be a priority. Similarly, there should be in-service training for heads of schools on gender equity. Failure of female heads of schools to combat gender stereotypes, differences in combating gender stereotypes between heads from primary and secondary schools, and the response in combating gender stereotypes between government and private schools have been mainly due to the level of education.

Within a school, there is a need to have both a female and a male leader. Given that there are differences in the ways female and male heads react to gender stereotypes, shared leadership is likely to promote gender equity. Shared leadership can allow heads of schools to learn from each other. This is likely to create an environment that cultivates open-mindedness. Such an environment can help each leader to learn from each other. Therefore, combating gender stereotypes needs collective efforts among heads of schools, teachers, and other stakeholders.

The number of years in teaching is significant for combating gender stereotypes. For effective school leadership, the recruitment of heads of schools needs to consider their number of years in teaching. Knowledge, skills, and attitudes gained over time can help heads of schools solve issues related to gender stereotypes. More intervention should focus on female heads of schools in combating gender stereotypes. Female heads of schools have displayed less sensitivity to gender stereotypes. This can be attributed mainly due to education level and their degree of assertiveness. Though women are known to be communal and sensitive to interpersonal relationships, combating gender stereotypes, especially in a patriarchal society such as Tanzania, may require assertive, influential, and respected heads of schools.

The focus of this study was to examine the extent to which gender, education level, and teaching experience of heads of schools can influence their behaviour in combating gender stereotypes in their schools. The contribution of this research is that gender, education level, and teaching experience matter a lot in combating gender stereotypes in schools. Male heads of schools seem to address issues of gender stereotypes differently compared to female heads. Thus, shared leadership, where both female and male teachers are given leadership positions is recommended. This will help them have combined efforts that are likely to facilitate gender equity in schools.

Despite the findings demonstrated in this study, there are significant limitations. One of the limitations is that the sample of this study was limited to schools in three regions of Tanzania. Thus, the findings may not be generalizable to a wider population. This calls for further research in other regions of Tanzania or other sociocultural contexts. Another limitation is that perceptions of heads of schools in combating gender stereotypes were measured at one time. It is, therefore, recommended that further research may involve a longitudinal study, where perceptions of heads of schools may be measured over time. This can give more insight on how their perceptions change over time. Furthermore, there is a need to conduct an intervention study to address issues of gender stereotypes, especially amongst female heads of schools.

References

- Addi-Raccah, A. (2006). Accessing internal leadership positions at school: Testing the similarity-attraction approach regarding gender in three educational systems in Israel. *Educational Administration Quarterly*, 42(3), 291-323. https://doi.org/10.1177/0013161X05284042
- Bryman, A., & Bell, E. (2019). Social research methods (8th ed.). Oxford University Press.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (7th ed.). SAGE.
- Danby, G., & Ciesielska, M. (2021). Gender bias in organisations: From the arts to individualised coaching. Routledge.
- Farag, H., & Mallin, C. (2016). The influence of CEO demographic characteristics on corporate risk-taking: Evidence from Chinese IPOs. *The European Journal of Finance*, 1-30. https://doi.org/10.1080/1351847X.2016.1151454
- Ford, J., & Morgan, J. (2023). Critiquing leadership and gender research through a feminist lens. In D. Schedlitzki, M. Larsson, B. Carroll, M. C. Bligh, & O. Epitropaki (Eds.), *The SAGE handbook of leadership* (pp. 247-261). Sage.
- Glass, C., & Cook, A. (2016). Leading at the top: Understanding women's challenges above the glass ceiling. *The Leadership Quarterly*, 27, 51-63. https://doi.org/10.1016/j.leaqua.2015.09.003
- Goessmann, K., Ssenyonga, J., Nkuba, M., Hermenau, K., & Hecker, T. (2020). Characterizing the prevalence and contributing factors of sexual violence: A representative cross-sectional study among school-going adolescents in two East African countries. *Child Abuse & Neglect*, 109, 104711. https://doi.org/https://doi.org/10.1016/j.chiabu.2020.104711
- Gråstén, A., Kokkonen, J., & Kokkonen, M. (2022). Gender bias and gender equality beliefs in teaching efficacy profiles of Finnish physical education teachers. *Teachers and Teaching*, 28(2), 246-262. https://doi.org/10.1080/13540602.2022.2062714
- Grobler, B. (2013). The school principal as instructional leader: A structural equation model. *Education as Change*, 17(S1), 177-199.
- Guramatunhu-Mudiwa, P., & Bolt, L. L. (2012). Does the gender of school personnel influence perceptions of leadership? *School Leadership & Management*, 32(3), 261-277. https://doi.org/10.1080/13632434.2012.688742
- Hentschel, T., Heilman, M. E., & Peus, C. V. (2019). The multiple dimensions of gender stereotypes: A current look at men's and women's characterizations of others and themselves. *Frontiers in Psychology*, 10. https://doi.org/10.3389/fpsyg.2019.00011
- Hitt, D. H., & Player, D. W. (2018). Identifying and predicting effective leader practices: Examining principal experience and prior roles. *Leadership and Policy in Schools*, 1-20. https://doi.org/10.1080/15700763.2017.1384502
- Iddy, H. (2018). *Girls and secondary education in rural Tanzania: Perceptions, obstacles, and future possibilities* The University of Newcastle]. New South Wales.
- Ismael, S. M. I., & Mohammadzadeh, B. (2022). Gender representation in EFL textbooks used in state schools in Northern Iraq and teachers' perceptions of gender role stereotypes. *Interactive Learning Environments*, 1-18. https://doi.org/10.1080/10494820.2022.2029495

- Johnson, R. B., & Christensen, L. (2020). *Educational research: Quantitative, qualitative, and mixed approaches* (7th ed.). Sage.
- Klunder, S., Saab, N., & Admiraal, W. (2022). A teacher perspective on using a hybrid virtual classroom for students with a chronic illness in mainstream primary and secondary schools. *Technology, Pedagogy and Education*, 1-16. https://doi.org/10.1080/1475939X.2022.2033824
- Korin, A., Naylor, R., & Page, E. (2021). Teachers as agents of change: How teachers are working in schools to improve girls' education and gender equity in two states in Nigeria.

 T.

 B.

 Council.

 https://www.britishcouncil.org/sites/default/files/teachers_as_change_agents.pdf
- Larsson, G., & Alvinius, A. (2019). Comparison within gender and between female and male leaders in female-dominated, male-dominated and mixed-gender work environments. *Journal of Gender Studies*, 1-12. https://doi.org/10.1080/09589236.2019.1638233
- Lee, J., Rhee, D.-E., & Rudolf, R. (2019). Teacher gender, student gender, and primary school achievement: Evidence from ten Francophone African countries. *The Journal of Development Studies*, 55(4), 661-679. https://doi.org/10.1080/00220388.2018.1453604
- Määttä, K., & Uusiautti, S. (2020). Nine contradictory observations about girls' and boys' upbringing and education: The strength-based approach as the way to eliminate the gender gap. *Frontiers in Education*, *5*, 1-9. https://doi.org/10.3389/feduc.2020.00134
- Mikofu, J. (2023). Wizara ya Elimu yapiga marufuku vitabu 11. *Mwananchi*. https://www.mwananchi.co.tz/mw/habari/kitaifa/wizara-ya-elimu-yapiga-marufuku-vitabu-11-4217202
- Mills, G. E., & Gay, L. R. (2019). *Educational research: Competences for analysis and applications* (12th ed.). Pearson.
- Mitchem, M. C. (2021). 'A woman before a person': Teachers navigating gender roles during international experiences. *Globalisation, Societies and Education, 19*(5), 568-578. https://doi.org/10.1080/14767724.2020.1861438
- Miyajima, T. (2008). Gender inequality among Japanese high school teachers: Women teachers' resistance to gender bias in occupational culture. *Journal of Education for Teaching*, 34(4), 319-332. https://doi.org/10.1080/02607470802401479
- MoEST. (2019). National Basic Education Statistics in Tanzania.
- MoEST. (2020). National Basic Education Statistics in Tanzania.
- MoEST. (2021). National Basic Education Statistics in Tanzania.
- Mtanzania. (2018). Shule ya kimataifa yachunguzwa kwa ushoga. *Mtanzania*. https://magazetini3.rssing.com/chan-65451559/article66739.html
- O'Brien, W., Hanlon, C., & Apostolopoulos, V. (2023). Women as leaders in male-dominated sectors: A bifocal analysis of gendered organizational practices. *Gender, Work & Organization*, 1-18. https://doi.org/https://doi.org/10.1111/gwao.13019
- Ortega, L., Treviño, E., & Gelber, D. (2021). The inclusion of girls in Chilean mathematics classrooms: Gender bias in teacher-student interaction networks. *Journal for the Study of Education and Development*, 44(3), 623-674. https://doi.org/10.1080/02103702.2020.1773064

- Pudrovska, T., Carr, D., McFarland, M., & Collins, C. (2013). Higher-status occupations and breast cancer: A life-course stress approach. *Social Science & Medicine*, 89, 53-61. https://doi.org/10.1016/j.socscimed.2013.04.013
- Pudrovska, T., & Karraker, A. (2014). Gender, job authority, and depression. *Journal of Health and Social Behaviour*, 55(4), 424-441. https://doi.org/10.1177/0022146514555223
- Shaked, H., Glanz, J., & Gross, Z. (2018). Gender differences in instructional leadership: How male and female principals perform their instructional leadership role. *School Leadership & Management*, 1-18. https://doi.org/10.1080/13632434.2018.1427569
- Sifuna, D. N., & Kaime, J. G. (2007). The effect of in-service education and training (INSET) programmes in mathematics and science on classroom interaction: A case study of primary and secondary schools in Kenya. *Africa Education Review*, 4(1), 104-126. https://doi.org/10.1080/18146620701412191
- Stein, M., & Bockwoldt, L. (2016). Amount and implications of bullying, sexual harassment and corporal punishment in secondary boarding schools in Tanzania. *International Journal of Education and Research*, 4(1), 283-300.
- Trzeinski, E., & Holst, E. (2012). Gender differences in subjective well-being in and out of management positions. *Social Indicators Research*, 107(3), 449-463. https://doi.org/10.1007/sl1205-011-9857-y
- Wolle, G. S. (2023). Does principals' gender matter in their leadership performance and leadership style, the case in governmental primary schools of Addis Ababa. *International Journal of Primary, Elementary and Early Years Education*, 1-14. https://doi.org/10.1080/03004279.2023.2165883