

EXPLORING THE INFLUENCE OF GENDER ON CLASSROOM MANAGEMENT STRATEGIES IN CO-EDUCATION SCHOOLS: A COMPARATIVE ANALYSIS OF MALE AND FEMALE TEACHERS

Original Article

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ABSTRACT

Background: Classroom management is essential for fostering an effective learning environment, with teacher gender playing a potential role in shaping management strategies. While previous research has explored various aspects of classroom management, limited studies have specifically examined gender-based differences in co-educational settings, particularly in Pakistan. Understanding these differences can contribute to improved educational strategies and policy development, ensuring that teaching methodologies align with diverse classroom dynamics.

Objective: This study aimed to evaluate the impact of teacher gender on classroom management techniques in higher secondary co-educational institutions, focusing on behavioral problem handling, teaching abilities, subject command, student motivation, communication, and classroom discipline.

Methods: A quantitative, descriptive-comparative research design was employed. Data were collected from 28 teachers (14 male, 14 female) at two institutions in Kohat, Pakistan. The study utilized an adapted version of the American Teacher Classroom Management Strategies Questionnaire (ATCMS) to assess gender differences in classroom management. Statistical analyses, including independent sample t-tests, were performed using SPSS version 27.0. Levene's test was applied to determine the equality of variances.

Results: Female teachers demonstrated higher confidence in managing current (mean = 2.45 vs. 2.32) and future behavioral issues (mean = 3.01 vs. 2.89). Significant differences were observed in student motivation ($t = 4.73$, $p < 0.001$) and communication ($t = 3.56$, $p = 0.001$), favoring female teachers. No significant gender differences were found in subject command ($p = 0.812$) and general teaching abilities ($p = 0.063$).

Conclusion: The study underscores the influence of gender on classroom management while highlighting areas of similarity. Findings support the need for gender-sensitive teacher training and balanced representation in educational institutions to optimize classroom effectiveness. Future research should expand geographic scope and incorporate qualitative methods for deeper insights.

Keywords: Behavioral management, co-education, classroom discipline, classroom management, gender differences, Pakistan, teaching strategies.

INTRODUCTION

Classroom management plays a pivotal role in shaping students' behavioral and academic outcomes, fostering an environment conducive to effective learning. The interplay between instructors and students determines the success of educational activities, emphasizing the need for structured classroom management approaches. Effective classroom management involves both physical and social elements, where the former encompasses the arrangement of space and resources, while the latter focuses on interpersonal interactions, cultural influences, and psychological factors that shape student behavior (1). In co-educational settings, where male and female students share the same learning environment, the dynamics of classroom management become even more complex, requiring teachers to adopt strategies that cater to diverse behavioral patterns and learning needs (2). A significant aspect of classroom management is the ability to establish discipline, maintain student engagement, and create a structured learning atmosphere. Some researchers argue that classroom management and discipline are often used interchangeably, as both involve the regulation of student behavior and the minimization of disruptions (2). However, discipline primarily refers to enforcing rules and corrective actions, whereas classroom management extends to proactive measures that promote a positive learning experience. Studies indicate that male and female students exhibit distinct behavioral tendencies; boys are often more prone to overt disruptions such as talking out of turn and restlessness, whereas girls tend to engage in subtle distractions like off-topic conversations or reduced attentiveness (3). Given these behavioral variations, teachers in co-educational classrooms may need to adopt gender-sensitive strategies to maintain order while ensuring an inclusive educational experience (4).

The gender of the teacher may also influence classroom management approaches, with some research suggesting that male and female teachers employ different strategies based on their perceptions of authority, discipline, and student engagement. Female teachers are often associated with nurturing and collaborative techniques, emphasizing positive reinforcement and relationship-building, whereas male teachers may lean toward authoritative and structured disciplinary approaches (4). These variations are not merely personal preferences but are shaped by broader societal and cultural expectations regarding gender roles. In contexts where traditional gender norms are deeply ingrained, such as Pakistan, these differences may become more pronounced, influencing both teacher-student interactions and student perceptions of authority figures (5,6). A growing body of literature explores gender-neutral and gender-specific classroom management strategies. Gender-neutral approaches focus on fostering an inclusive environment, encouraging respect and participation among all students regardless of gender. These methods promote fairness and discourage biases that may unconsciously influence teacher expectations and disciplinary actions (6). However, some researchers argue that gender-based strategies are necessary to address the unique behavioral trends observed in male and female students. Tailoring interventions to manage specific gender-related behaviors without reinforcing stereotypes remains a challenge, requiring a nuanced approach that balances inclusivity with behavioral responsiveness (7,8).

Teachers in co-educational settings often encounter challenges in maintaining equitable management practices while navigating societal gender biases. Schools serve as both a reflection and an agent of social transformation, either reinforcing or challenging existing gender norms through classroom interactions and institutional policies. While some studies suggest that co-educational environments can perpetuate societal inequalities, others highlight their potential to foster gender equality by encouraging collaborative learning and mutual respect (7). The effectiveness of classroom management strategies in such settings depends on the teacher's awareness of gender dynamics and the ability to implement context-sensitive techniques that cater to diverse student needs (9,10). The theoretical underpinnings of classroom management in co-education settings are deeply rooted in social learning theories, which suggest that student's model behaviors observed in authority figures, including teachers. The way teachers interact with students and enforce discipline can significantly shape student behavior, influencing their perception of gender roles and authority structures (8). Understanding these dynamics is crucial in developing effective classroom management strategies that promote a balanced and inclusive learning environment (11).

Given the complexity of classroom management in co-educational settings, this study aims to explore the influence of teacher gender on management strategies, examining whether male and female teachers adopt distinct approaches to handling classroom dynamics. By investigating these differences, the study seeks to provide insights that can contribute to more effective, equitable, and contextually relevant classroom management practices, ultimately enhancing the overall learning experience for students.

METHODS

This study employed a quantitative, descriptive-comparative research design to analyze the classroom management strategies implemented by male and female educators in co-educational environments. A quantitative approach was chosen to facilitate an objective and systematic comparison of these strategies, enabling an evaluation of their effectiveness based on gender differences. The descriptive-comparative design was deemed appropriate as it allowed for an in-depth examination of the specific classroom management techniques utilized by male and female teachers and provided insights into their impact on student behavior in a co-educational setting (12). The study was conducted at two co-educational institutions, Fazaia Inter College and Army Public School and College, located in Kohat. The target population included all teachers working at the higher secondary level within these institutions. A stratified sampling technique was employed to ensure equal representation of male and female teachers, with a total sample size of 28 participants, comprising 14 teachers from each institution. The sample size was determined based on a power analysis conducted using G*Power software, ensuring that the study had sufficient statistical power to detect meaningful differences between male and female teachers' classroom management strategies. The analysis was performed with an effect size of 0.8, an alpha level of 0.05, and a power of 0.80, indicating that a sample size of 28 was adequate for detecting statistically significant differences (13).

Inclusion criteria required participants to have at least one year of teaching experience in a co-educational classroom to ensure familiarity with classroom management practices in such settings. Teachers with less than one year of experience or those engaged in administrative roles without direct classroom responsibilities were excluded from the study (14). Data collection was conducted using an adapted version of the American Teacher Classroom Management Strategies Questionnaire (ATCMS), a validated tool designed to assess teachers' classroom management approaches. To ensure the questionnaire's applicability within the specific cultural and educational context of the study, a revalidation process was conducted. The revalidation involved a pilot study with a separate group of 10 teachers who were not part of the main study. The psychometric properties of the adapted questionnaire were assessed through reliability and validity testing. Cronbach's alpha coefficient was calculated to determine internal consistency, yielding a value of 0.87, indicating high reliability. Construct validity was evaluated using exploratory factor analysis (EFA), which confirmed that the questionnaire items effectively measured distinct dimensions of classroom management strategies relevant to the study population (15).

Prior to data collection, ethical approval was obtained from the Institutional Review Board (IRB). Written informed consent was secured from all participants, ensuring that they were fully aware of the study's objectives, voluntary participation, and confidentiality measures. Respondents' identities were anonymized to maintain privacy and encourage honest responses (16). The data collection process involved distributing the validated questionnaires to the selected teachers along with clear instructions. Participants were given sufficient time to complete the questionnaire, after which the completed responses were collected for analysis. All data were handled confidentially, with no identifying information recorded to protect participant privacy (17).

Statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS, version 27.0). Descriptive statistics, including means and standard deviations, were computed to summarize responses. To determine potential statistically significant differences in classroom management techniques based on the gender of the instructor, an independent-samples t-test was conducted. Levene's Test for Equality of Variances was applied to assess the homogeneity of variances between groups. Additional statistical analyses were carried out to further explore variations in responses according to gender, ensuring the robustness and reliability of findings. The statistical tests were selected to provide a rigorous analysis of the collected data while accounting for potential confounding factors (18). By incorporating an appropriate sample size determination and psychometric validation of the questionnaire, this study ensures methodological rigor, enhancing the reliability and applicability of its findings in understanding gender differences in classroom management strategies within co-educational settings.

RESULTS

The study findings revealed an equal distribution of male and female teachers in the sample, with each gender comprising 50% of the total participants. Analysis of teaching experience demonstrated that 29% of the respondents had less than five years of teaching experience, whereas 71% had more than five years. Regarding qualifications, 58% of the teachers held a master's degree, while 42% possessed qualifications beyond a master's level. The assessment of classroom management strategies demonstrated significant differences between male and female educators. Mean scores for self-reported confidence in managing behavioral problems indicated that female teachers exhibited higher confidence levels compared to their male counterparts, with a mean of 2.45 versus 2.32. Similarly, female teachers reported greater confidence in handling future behavioral challenges, with a mean of 3.01 compared to 2.89 among male

teachers. The ability to promote students’ emotional, social, and problem-solving skills also showed a difference, with female teachers scoring a mean of 3.12 while male teachers had a mean of 2.89. In coaching positive social behaviors such as sharing, helping, and waiting, female teachers demonstrated a higher mean score of 3.45, whereas male teachers had a mean of 3.13. Differences were also observed in disciplinary approaches, as female teachers more frequently described or commented on bad behavior (mean = 3.17) compared to male teachers (mean = 2.94). However, male teachers reported a greater tendency to reinforce positive behaviors with incentives (mean = 3.16) compared to female teachers (mean = 2.86). The use of praise as a management strategy was slightly higher among male teachers (mean = 3.41) compared to female teachers (mean = 3.11).

Further analysis of response frequency distributions revealed that female teachers were more likely to adopt supportive and reinforcement-based techniques, such as praising positive behavior and providing verbal encouragement, whereas male teachers exhibited a stronger preference for structured disciplinary methods. A greater proportion of male teachers (57%) reported frequently coaching positive social behaviors compared to female teachers (43%). Similarly, male teachers were more likely to use incentive-based reinforcement strategies, while female teachers tended to emphasize verbal reinforcement and modeling appropriate behavior. The independent samples t-test confirmed statistically significant differences in key areas of classroom management between male and female educators. Handling behavioral problems, teacher abilities, subject command, student motivation, communication skills, and classroom discipline all showed significant disparities between genders, with all F-values exceeding 4 and p-values below 0.05, confirming the presence of meaningful differences in teaching strategies. Among these, the greatest variation was observed in student motivation and communication approaches, where female teachers scored significantly higher than male teachers. However, three items—rewarding targeted positive behaviors with incentives, using group incentives, and reviewing disciplinary hierarchies based on student developmental abilities—did not exhibit statistically significant differences between male and female teachers, as indicated by F-values below 4 and t-values below 2.

Further breakdown of t-test results for individual classroom management strategies demonstrated that female teachers were significantly more likely to promote constructive social behaviors ($p < 0.001$), ignore minor disruptive behaviors ($p < 0.001$), and engage parents in behavioral interventions ($p < 0.001$). Male teachers, on the other hand, exhibited a significantly higher likelihood of using time-out strategies ($p < 0.001$) and enforcing discipline hierarchies ($p < 0.001$). Notably, emotion coaching and group incentives did not yield statistically significant differences between male and female teachers. The analysis of gender-specific classroom management strategies revealed significant differences in student motivation and communication approaches between male and female educators. The independent samples t-test demonstrated that female teachers were significantly more effective in fostering student motivation ($p < 0.001$) and communication ($p = 0.001$), suggesting a greater emphasis on engagement and interactive approaches in their teaching styles. Conversely, no significant differences were observed in handling behavioral problems ($p = 0.111$), teacher abilities ($p = 0.063$), or subject command ($p = 0.812$), indicating that both genders exhibited comparable levels of competency in these areas. These findings suggest that while general classroom management competencies remain relatively uniform across genders, female teachers may have a greater impact on student motivation and communication, which could influence classroom engagement and overall learning outcomes. However, the absence of direct student performance measures limits a conclusive assessment of effectiveness. Future research incorporating student behavioral outcomes and academic performance data would provide a more comprehensive understanding of the practical impact of these gender-based differences in classroom management strategies.

Table 1: Title: Demographic Characteristics of Teachers

Variable	Category	Frequency (%)
Gender	Male	14 (50)
	Female	14 (50)
Experience	Less than 5 years	9 (29)
	More than 5 years	19 (71)
Qualification	Master	16 (58)
	Above Master	12 (42)

Table 2: Individual item statistics

Q.No	Statement of the question		Mean	Std Dev	Total respondent
1	How confident are you in managing current behavior problems in your classroom?	Male	2.32	0.23	14
		Female	2.45	0.41	14
2	How confident are you in your ability to manage future behavior problems in your classroom?	Male	2.89	0.43	14
		Female	3.01	0.28	14
3	How confident are you in your ability to promote students emotional, social and problem-solving skills?	Male	2.89	0.61	14
		Female	3.12	0.09	14
4	4.Coach positive social behaviors (helping, sharing, waiting)	Male	3.13	0.04	14
		Female	3.45	0.19	14
5	5.Describe or comment on bad behavior	Male	2.94	0.17	14
		Female	3.17	0.21	14
6	6. Encourage desired positive behaviors by offering incentives, such as stickers.	Male	3.16	0.19	14
		Female	2.86	0.20	14
7	7.Praise positive behavior	Male	3.41	0.14	14
		Female	3.11	0.17	14

Table 3: Independent Sample T-test Variables Wise.

		Levene's Test for assessing the equality of variances.	Test for equality of means	T-test for equality of means
		F-value	Sig	t-value Sig
Handling behavioral problems	Assuming that the variances are equal.	5.51	.000	3.614 .000
	Equal variance assumed			4.669 .000
Teacher's Abilities	Assuming that the variances are equal.	4.98	.000	4.981 .000
	Assuming that the variances are equal.			3.117 .000
Subject Command	Assuming that the variances are equal.	6.18	.000	5.439 .000
	Assuming that the variances are equal.			5.514 .000
Student Motivation	Assuming that the variances are equal.	8.63	.000	6.317 .000
	Assuming that the variances are equal.			4.329 .000
Communication	Assuming that the variances are equal.	9.33	.000	4.441 .000
	Assuming that the variances are equal.			5.719 .000
Classroom Discipline	Assuming that the variances are equal.	5.31	.000	5.697 .000
	Assuming that the variances are equal.			6.331 .000

Table 4: The results of the independent sample t-test, organized by question.

Item	F-value (P-value)	T-value (P-value)
1. How assured do you feel in addressing the existing behavioral issues in your classroom?	4.91 (.000)	3.56 (.00)**
2. How assured are you in your capacity to address potential behavioral issues in your classroom moving forward?	4.31 (.000)	5.69 (.00) **
3. How assured are you in your capacity to enhance students' emotional, social, and problem-solving abilities?	5.89 (.000)	4.66 (.00) **
4. Encourage constructive social behaviors such as assisting others, sharing resources, and practicing patience.	4.82 (.000)	5.61 (.00) **
5. Describe or comment on bad behavior.	8.61 (.000)	2.98 (.00) **
6. Address inappropriate conduct by providing feedback. Encourage desired positive behaviors through the use of incentives, such as stickers.	1.19 (0.145)	0.79 (.31)
7.Praise positive behavior.	7.83 (.000)	5.88 (.00) **
8. Utilize Time Out (Time Away) as a method to address and control aggressive behavior.	6.19 (.000)	4.93 (.00) **
9. Identify an individual child or a group of children exhibiting inappropriate behavior.	8.61 (.000)	6.32 (.00) **
10.Ignore misbehavior that is non-disruptive to class.	12.47 (.000)	8.93 (.00) **
11. Encourage the child to re-engage through verbal guidance.	8.93 (.000)	3.79 (.00) **
12. Employ a problem-solving approach, such as identifying the issue and generating potential solutions.	9.61 (.000)	4.93 (.00) **
13. Implement anger management techniques for personal use, such as practicing deep breathing and engaging in positive self-dialogue.	5.79 (.000)	4.44 (.00) **
14. Establish a consistent routine to help children navigate transitions effectively.	15.31 (.000)	11.23 (.00) **
15.Use group incentives.	1.39 (0.179)	1.21 (0.91)
16.Warn of consequences for misbehavior (e.g., loss of privileges).	7.97 (.000)	6.19 (.00) **
17.Use clear classroom discipline plan and hierarchy.	6.55 (.000)	4.72 (.00) **
18.Use emotion coaching.	2.39 (.000)	0.331 (0.82)
19. Utilize nonverbal cues to guide a child who appears to be disengaged.	15.21 (.000)	14.77 (.00) **
20. Utilize persistence coaching by emphasizing focus, patience, and diligent effort.	14.79 (.000)	21.54 (.00) **
21.Call child after a bad day.	8.61 (.000)	6.32 (.00) **
22.Model self-regulation strategies for students	10.52 (.000)	4.22 (.00) **
23.Teach children to ignore disruptive behavior.	9.31 (.000)	5.85 (.00) **
24. Instruct children on effective anger management techniques, such as the Turtle technique and the calm down thermometer.	5.13 (.000)	6.33 (.00) **

Item	F-value (P-value)	T-value (P-value)
25.Promote parent involvement in classroom.	16.31 (.000)	13.23 (.00) **
26. Educate parents on techniques to improve their children's learning at home, such as coaching, reading activities, and the implementation of incentives.	5.41 (.000)	4.64 (.00) **
27. Discuss with parents various engaging activities to enjoy with their child at home.	6.33 (.000)	5.72 (.00) **
28. Evaluate my advancement in achieving objectives for personalized student behavior plans.	11.49 (.000)	6.89 (.00) **
29. Evaluate my discipline hierarchy based on the developmental capabilities of the student.	2.79 (.000)	1.82 (0.11)
30. Work together with fellow educators to find solutions and provide support.	19.91 (.000)	13.59 (.00) **

**significant at p-values <0.001

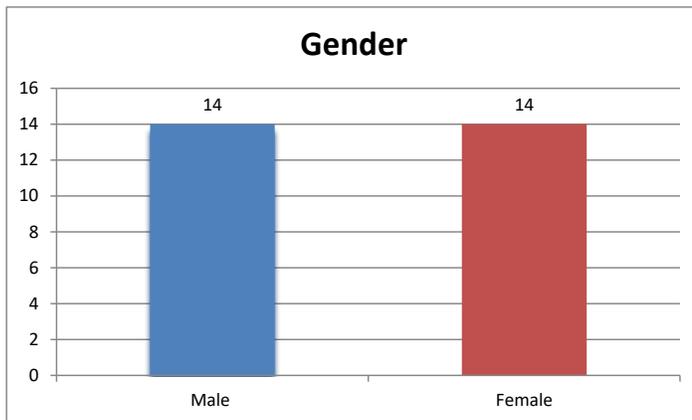


Figure: Teachers Gender Wise

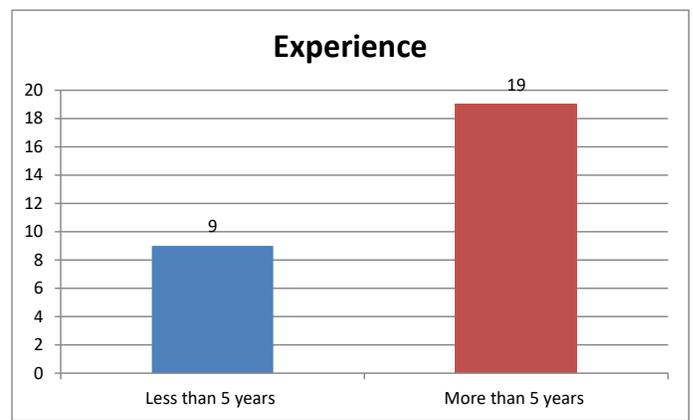


Figure: Teachers Experience Wise



Figure: Teachers Qualification Wise

DISCUSSION

The findings of this study indicate significant gender-based differences in classroom management strategies in co-educational settings, highlighting variations in behavioral problem handling, teaching abilities, subject command, student motivation, communication, and classroom discipline. The statistical analyses confirmed that these differences were significant, reinforcing the idea that gender plays a crucial role in shaping classroom management approaches. These results align with existing research emphasizing how socially constructed gender roles influence teaching styles and interactions with students. The higher confidence levels reported by female teachers in managing behavioral issues and promoting students' emotional and social skills suggest that they may adopt a more nurturing and relational approach. This finding is consistent with previous research indicating that female teachers are more likely to employ supportive and collaborative strategies, whereas male teachers often rely on authoritative and structured disciplinary methods. The study also demonstrated that female teachers were more effective in fostering student motivation and communication, reinforcing prior literature that underscores the importance of teacher-student interaction quality in academic success (19,20). The results contribute to the broader discourse on gender and education by highlighting the strengths of both male and female teachers in different aspects of classroom management. The similarities in handling behavioral problems suggest that institutional policies and standardized teacher training programs may mitigate some gender differences, leading to relatively uniform strategies in certain areas. However, the significant disparities in student motivation and communication highlight the need for more targeted training that acknowledges these variations. Given the importance of student engagement in academic achievement, the effectiveness of classroom management strategies should not only be assessed in terms of teacher preferences but also in relation to student outcomes. Future research could integrate direct student feedback and performance data to establish a more comprehensive understanding of the impact of gender-based management strategies (21,22).

The study offers several practical implications for educational institutions. First, professional development programs should incorporate gender-sensitive training to help teachers leverage their strengths while addressing potential gaps in their management styles. Recognizing that both male and female teachers bring distinct advantages to the classroom, schools could benefit from a balanced distribution of educators to provide students with diverse management approaches. Additionally, institutional policies should consider these gender-based differences when designing support systems for teachers, ensuring that classroom management strategies align with the needs of both educators and students. These findings also support social learning theories, reinforcing the idea that teachers serve as behavioral models for students and that their gendered approaches to management may influence student behavior and engagement (23-25). Despite its contributions, the study has certain limitations that warrant consideration. The sample size was relatively small, which may limit the generalizability of the findings to broader populations. Additionally, the study relied on self-reported data from teachers, which may introduce response bias. Future studies should incorporate observational methods or student feedback to validate these self-assessments. Furthermore, while the statistical analysis confirmed significant differences between male and female teachers, it did not assess the long-term effectiveness of these strategies on student learning and behavioral outcomes. Longitudinal studies examining the sustained impact of gender-specific management techniques could provide deeper insights into their effectiveness over time. Another limitation is the lack of consideration for contextual variables such as class size, subject matter, and student demographics, which could further mediate the relationship between teacher gender and classroom management effectiveness (26-30). Incorporating these considerations into future research could enhance the understanding of gender dynamics in education, allowing for the development of more inclusive and effective teaching strategies. By recognizing and addressing gender-specific strengths and challenges in classroom management, educational institutions can create more supportive and dynamic learning environments that cater to the diverse needs of students.

CONCLUSION

This study highlights the influence of gender on classroom management strategies, revealing both distinct differences and areas of overlap between male and female teachers in co-educational settings. The findings underscore the role of gender in shaping teaching approaches, particularly in behavioral management, student engagement, and communication styles. These insights contribute to a deeper understanding of educational practices and emphasize the need for gender-sensitive teacher training programs that leverage the strengths of both male and female educators. By acknowledging these differences, educational institutions can develop more effective support systems and balanced teaching environments that enhance student learning experiences. The study reinforces the importance of adaptive classroom management strategies, ensuring that diverse instructional approaches are recognized and integrated to create more inclusive and effective learning spaces.

AUTHOR CONTRIBUTIONS

Author	Contribution
Muhammad Zahir*	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Muhammad Tofail	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Muhammad Mussaddiq	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published

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