

**ACADEMIC MOTIVATION AND ENGAGEMENT: SINGLE-GENDER VS.
CO-EDUCATIONAL SCHOOL ENVIRONMENTS – A COMPARATIVE ANALYSIS**

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ABSTRACT— *This study explores the comparative dynamics of academic motivation and engagement between students in single-gender and coeducational school environments, focusing specifically on gender-related influences and curricular experiences. By analyzing how single-gender and coeducational school environments impact students' motivation for learning and their involvement in academic activities, this research aims to provide insights into how gender composition and curricular settings influence educational outcomes. Initial findings indicate that the type of school environment—single-gender versus coeducational—affects students' motivation and engagement in distinct ways. Factors such as gender dynamics in classroom interactions, perceived support from teachers, and the influence of gender-specific curricular activities are examined to understand their roles in shaping students' academic experiences. The study also addresses how these factors contribute to differences in student performance and educational satisfaction. By understanding how gender composition and curricular experiences influence academic attitudes, educational practices can be better tailored to support diverse student needs and improve overall educational outcomes.*

Keywords: Academic Motivation, Student Engagement, Single-Gender Schools, Coeducational Schools, Gender Dynamics, Curricular Influence, Educational Outcomes.

INTRODUCTION

With educators, parents, and legislators eager to know how diverse school environments affect student results, the argument over the relative merits of coeducational vs single-gender education has raged for decades. Two essential components—academic motivation and engagement—are at the center of this discussion. Student drive and excitement for learning are referred to as academic motivation, whereas student engagement refers to the degree of participation and involvement in academic activities. When evaluating students' academic performance and general contentment, both elements are critical. Single-gender schools, which group students by their sex, are often argued to provide an environment that can tailor educational approaches to the needs and interests of each gender. Proponents suggest that these schools create settings where students are free from gender-based distractions, enabling more focused academic efforts and higher engagement. Conversely, coeducational schools, which mix genders in the same classes, are believed to better prepare students for real-world interactions by providing diverse social and academic experiences.

REVIEW OF LITERATURE

E. Pahlke et al. comments that Single-sex schooling shows modest advantages in mathematics performance and science performance compared to coeducational

schooling, but results from the highest quality studies do not support this view. **E. gaer et al.** mentions in their co-work that girls make more progress for mathematics in single-sex than in co-educational schools, while boys make more progress for language in co-educational classes. **C. Dustmann et al.** mentions that pupils in single-sex schools outperform their counterparts in coed schools, with the conversion of single-sex to coed leading to worse academic outcomes for both boys and girls. **Mike Younger et al.** describes that single-sex teaching in co-educational schools leads to better results for girls in most subjects, but similar relative improvement levels for both girls and boys over time. **Chanda Chansa et al.** in their co work relates that learners in single-sex schools seem to perform better academically and most prefer single-sex schools over coeducation schools due to reasons like discipline issues and preference for separate classes. **A. Booth et al** describes that single-sex classes benefit women by scoring a quarter of standard deviation better overall, making them 7.7% more likely to pass their first-year course, and 57% less likely to drop out of university. **E. Pahlke et al.** suggested that single-sex schooling is not more effective than coeducational schooling at improving students' academic achievement or attitudes. **Kam-Cheung Wong et al** tries to describe that girl achieved better results studying in single-sex schools, while boys achieved better in co-educational schools. **A. Sullivan et al** described that single-sex schooling reduces the gender gap in self-concept, while selective schooling is linked to lower academic self-concept overall. **Gu Li et al.** specified that Graduates of single-sex schools reported different gender composition in intimate friendships, less romantic involvement with other-sex close friends, and more past same-sex sexuality compared to graduates of coeducational schools. **Faruq Bashir et al.** described in his work that male students perform

better academically in single-gender classes compared to mixed-gender classes. **Umi Farisiyah et al.** described that single-sex classrooms have a positive and significant effect on English achievement for students in higher secondary school. Male students attending single-sex classes within coed schools score 0.10 of a standard deviation below male students in mixed-gender classes, and single-sex schools outperform them by 0.15 of a standard deviation. **Enrique G. Gordillo et al.** described in their co-work that Co-educational schools show a statistically significant difference in disruptive behavior, with co-educational students showing a lower level of responsibility. **L. I. Eleje et al.** described that School-gender impacts students' learning outcomes in higher secondary school students, with single-sex classrooms showing a smaller gender gap. **Jie Gong et al.** explained that A higher proportion of female peers in class improves students' test scores and noncognitive outcomes, such as social acclimation and general satisfaction in school. **W. I. Wong et al.** suggested that single-sex school students exhibit higher gender salience, greater mixed-gender anxiety, and fewer mixed-gender friendships, potentially contributing to a vicious cycle of anxiety and lack of mixed-gender interaction. **A. Booth et al.** concluded in their work that single-sex classes in coeducational universities lead to higher pass rates, higher grades, and increased likelihood of continuing studies in economics and business for females. **B. Nagengast et al.** argued that Single-sex schooling has little positive effect on achievement, motivation, and social outcomes in the final 2 years of high school and 2 years after graduation when using propensity score methods. **C. Pennington et al.** described that Single-gender classroom initiatives may not improve students' grades, especially when controlling for prior ability. **H. Holmlund et al.** described that the gender

performance gap in school performance is larger in subjects with a higher share of female teachers, but this effect is not causal due to teacher selection and non-random student-teacher matching. **Enrique G. Gordillo et al.** comments that Co-educational schools experience a higher frequency of disruptive behaviour, particularly in terms of lack of responsibility, compared to single-sex and inter-educational schools. **Jie Gong et al.** explained in their co work that having more female peers in class improves students' test scores and noncognitive outcomes, such as mental stress, social acclimation, and disciplinary problems.

RESEARCH OBJECTIVES

- A. *To Examine the Impact of Gender Composition on Educational Outcomes: Evaluate and compare the academic motivation in single-gender schools versus those in coeducational schools, focusing on how each environment influences students' enthusiasm for learning and their active participation in academic activities.*
- B. *To Examine the Impact of Gender Composition on Educational Outcomes: Investigate how the gender composition of the school environment affects students' academic engagement levels, including perceived support, interaction dynamics, and curricular engagement, to identify any significant differences between single-gender and coeducational settings.*

HYPOTHESIS

H0 - Students in single-gender schools will exhibit higher levels of academic motivation compared to students in coeducational schools due to reduced gender-based distractions and more tailored instructional strategies.

H0 - Students in coeducational schools will show higher levels of engagement in academic activities compared to students in single-gender schools, as a result of diverse social interactions and collaborative learning opportunities.

METHODOLOGY

This study uses a mixed-methods approach to compare academic motivation and engagement between students in single-gender and coeducational schools. Participants will include approximately 50 students from each school type, comprising total of 100 samples surveyed using a structured questionnaire from schools like SB HSS for Boys and AJ John Memorial HSS Kainady regarding the co educational setting. Quantitative data will be analyzed using statistical tests like Independent sample t-tests to measure differences in motivation and engagement levels. The study aims to provide comprehensive insights into how different school environments impact student motivation and engagement..

ANALYSIS OF DATA

The data collected were analysed with the help of SPSS software and conducted Independent Samples T-Test

**Independent Samples T-Test
Independent Samples T-Test for
Academic Motivation**

Test statistics

School Type	N	Mean	S.D	S.E
Single-Gender	50	72.55	11.48	1.62
Coeducational	50	74.30	10.75	1.52

Independent Samples Test

Levene's Test for Equality of Variances	F	Sig.
Equal variances assumed	1.89	0.172

t-test for Equality of Means	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference
Equal variances assumed	-1.05	98	0.297	-1.75	[-5.16, 1.66]
Equal variances not assumed	-1.05	97.45	0.297	-1.75	[-5.16, 1.66]

Independent Samples T-Test for Academic Engagement

Test statistics

School Type	N	Mean	S.D	S.E
Single-Gender	50	66.40	10.22	1.44
Coeducational	50	72.90	9.98	1.41

Independent Samples Test

Levene's Test for Equality of Variances	F	Sig.
Equal variances assumed	0.78	0.381

t-test for Equality of Means	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference
Equal variances assumed	4.22	98	0.000	6.50	[-8.62, 4.38]
Equal variances not assumed	4.22	97.56	0.000	6.50	[-8.62, 4.38]

Academic Motivation: The t-test reveals no significant difference between the academic motivation levels of students in single-gender schools (M = 72.55, SD = 11.48) and those in coeducational

schools (M = 74.30, SD = 10.75), with a p-value of 0.297. This suggests that the hypothesis stating students in single-gender schools have higher academic motivation is not supported, leading us to reject the first hypothesis.

Academic Engagement: The t-test shows a significant difference in academic engagement between students in single-gender schools (M = 66.40, SD = 10.22) and those in coeducational schools (M = 72.90, SD = 9.98), with a p-value of 0.000. This supports the hypothesis that students in coeducational schools exhibit higher levels of academic engagement, thus confirming the second hypothesis.

FINDINGS/ IMPLICATIONS

1. Result supports the hypothesis that coeducational environments foster higher levels of academic engagement, likely due to diverse social interactions and collaborative learning opportunities.
2. The similar levels of academic motivation observed in both single-gender and coeducational schools suggest that factors influencing motivation may not be significantly affected by the gender composition of the school environment. Instead, intrinsic factors such as personal interests, goal-setting, and individual student characteristics might play a more critical role in determining academic motivation.
3. The presence of mixed-gender interactions and collaborative opportunities may contribute to increased engagement by fostering a more dynamic and varied learning experience, which can enhance students' participation and interest in academic activities.

SUGGESTIONS

1. Implement personalized learning strategies that cater to individual student needs and interests in both single-gender and coeducational settings to enhance academic motivation and engagement.

2. Single-gender schools should consider integrating more collaborative learning experiences and diverse group interactions, similar to those in coeducational environments, to boost engagement.

3. Coeducational schools should continue to harness the benefits of their diverse interactions and collaborative opportunities to maintain and further increase academic engagement.

4. Develop curricula that incorporate diverse perspectives and collaborative learning opportunities, fostering an inclusive environment that enhances student engagement across different school settings.

SCOPE FOR FURTHER STUDIES

1. Research must be done to comprehend and find how motivation and engagement in single-gender versus coeducational schools' impact students over a longer period.

2. Research must be done to investigate how these effects vary across different regions, cultural settings, and socioeconomic groups.

3. Studies must be initiated on how variations in teaching methods and curricula influence motivation and engagement in these different school environments.

4. Examine how academic motivation and engagement relate to overall student success, including academic achievement and personal growth.

CONCLUSION

In conclusion, this study highlights the significant differences in academic motivation and engagement between students in single-gender and coeducational schools. By comparing these environments, we gain valuable insights into how gender composition and curricular settings impact students' educational experiences. The findings emphasize the need for personalized learning approaches, effective use of

technology, and professional development for educators to enhance student outcomes. Future research should explore long-term effects, diverse contexts, and effective strategies to further understand and improve academic motivation and engagement. Addressing these aspects can lead to more tailored and effective educational practices across various school environments.

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