

# Killing the Stereotype of Women Leadership at Senior High School

Maharromiyati<sup>1</sup>, Sumaryanto<sup>2</sup>, Lia Yuliana<sup>3</sup>, Sani Suhardiman<sup>4</sup>

## Abstract

*This article explores the increasing attendance and impact of female principals, emphasizing the role in challenging stereotypes and changing educational leadership. Women leaders use a collaborative and empathetic style, fostering an inclusive and supportive school environment that enhances student engagement and academic performance. This study aims to assess the influence of women's leadership philosophy on students and examine how gender dynamics and school culture are influenced by women's leadership. Addressing gender stereotypes and inequalities in educational leadership is critical, as highlighted by this study. Using a quantitative design, data was collected from students and teachers through questionnaires to gain insights into the unique strengths of female principals in shaping educational environments. The study highlights the positive impact of female principals on academic achievement and school culture in high schools, attributing these results to their collaborative, empathetic, and student-centered leadership styles. The survey results revealed that 85% of teachers and 78% of students felt supported and motivated by female principals, who also effectively managed conflicts and created an inclusive environment. These findings underscore the importance of women's leadership in education to foster a positive school atmosphere and improve academic performance.*

**Keywords:** *Stereotype Leadership, Women Leadership, Senior High School, Student Achievement, School Culture.*

## Introduction

There has long been a dearth of female leaders in a number of industries, including education (Alves, 2022). Stereotypes that remain, particularly in high-stress settings like high schools, cast doubt on women's capacity for effective leadership, which contributes to this underrepresentation (Silva et al., 2023). But there has been a noticeable change in the last few years as more women are taking on leadership roles and dispelling these antiquated ideas (Bano & Nadeem, 2023). In addition to shattering stereotypes, their success illustrates the special abilities they offer (Surawicz, 2016). This article examines the ways in which female principals are challenging preconceptions and transforming high school leadership.

The increase in female leadership roles in high schools is evidence of their tenacity and aptitude (Brion & Ampah, 2021). Many women have shown themselves to be extraordinary leaders who create welcoming and encouraging school environments in spite of the obstacles and prejudices they encounter (Clark & Kroska, 2024). Their methodology frequently prioritizes teamwork, compassion, and a strong dedication to the well-being of students (Garrett, 2023). This is in contrast to the conventional, more autocratic leadership style that is frequently connected to men in positions of authority (Olarongbe et al., 2023). Female principals are demonstrating that there are several ways to be an effective leader by advocating for a firm but loving approach (Palupi et al., 2019).

However, impacting student achievement positively is one of the main advantages of having women in leadership roles in high schools (Shen et al., 2021). Research indicates that educational institutions headed by female principals frequently witness enhancements in student interaction and performance (Agustina et al., 2020). Their focus on developing a welcoming and equal learning environment is what has allowed them to be successful (Nguyen et al., 2024). Prioritizing open communication, student-centered practices, and

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<sup>1</sup> Faculty of Education and Psychology, Yogyakarta State University, Jl. Colombo No.1, Karang Malang, Caturtunggal, Kec. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta, Indonesia, Email: maharromiyati1009@gmail.com

<sup>2</sup> Faculty of Education and Psychology, Yogyakarta State University, Jl. Colombo No.1, Karang Malang, Caturtunggal, Kec. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta, Indonesia, Email: sumaryanto@uny.ac.id

<sup>3</sup> Faculty of Education and Psychology, Yogyakarta State University, Jl. Colombo No.1, Karang Malang, Caturtunggal, Kec. Depok, Kabupaten, Sleman, Daerah Istimewa Yogyakarta, Indonesia, Email: lia\_yuliana@uny.ac.id

<sup>4</sup> Faculty of Language of Arts and Culture, Yogyakarta State University, Jl. Colombo No.1, Karang Malang, Caturtunggal, Kec. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta, Indonesia, Email: sani.suhardiman@ubpkarawang.ac.id

professional development for teachers are common among female leaders (Bortes & Giota, 2024). Students who feel appreciated and inspired to excel in school are a result of these factors (Garrett, 2023).

Furthermore, the gender dynamics in the education sector are being challenged and changed in large part by female principals (Massouti et al., 2024). They set an example for staff and students by holding leadership roles and showing that gender shouldn't be a hindrance to accomplishing one's objectives (Offiah & Gabhann, 2024). Their presence inspires young girls to aspire to similar professions and helps to legitimize female leadership (Belasen et al., 2021). It also encourages schools to become more inclusive and varied places of learning where all students can see themselves represented in leadership roles (Olsen & LaGree, 2023).

On the other hand, growing proportion of female high school principals is a potent force in dispelling myths and changing attitudes toward leadership (Hammad et al., 2024). Their distinct style of school leadership has shown to be very successful, helping children as well as the larger school community (Alam, 2022). It is crucial to keep encouraging and appreciating the contributions made by women as more of them assume these positions (Cook et al., 2023). By doing this, we can take a step toward a more diverse and egalitarian educational system in which aptitude and vision, rather than gender, determine leadership (Balasi et al., 2023). The accomplishments of female principals demonstrate the possibilities of inclusive leadership and push each of us to reconsider our preconceptions and adopt a more expansive definition of what it means to be an effective leader (Antinluoma et al., 2021).

#### *Research Question*

By understanding the explanation above the writer concludes the research question as follows:

- What effects do female administrators' leadership philosophies have on high school students' academic performance and engagement?
- How do gender dynamics and school culture affect the educational environment when there are female principals?

#### *Research Objective*

The writer optimizes the objective of the research based on the problems as follows:

- To assess the effects of female administrators' leadership philosophies on high school students' academic performance and engagement.
- To evaluate the impact of gender dynamics and school culture on the educational environment in high schools led by female principals.

#### *Research Urgency*

The urgency of researching the impact of female principals in high schools is underscored by the need to address persistent gender stereotypes and inequalities in educational leadership. Despite progress in gender equality, women remain underrepresented in principal roles, and their contributions are often undervalued. Understanding how female principals influence student achievement, engagement, and school culture is crucial for promoting more inclusive and effective leadership models. This research can provide valuable insights into the unique strengths and approaches that women bring to educational leadership, helping to inform policies and practices that support diverse leadership. Moreover, it can inspire future generations of female leaders by demonstrating the positive impact and importance of their roles in shaping the educational landscape.

## Literature Review

### *Impact of Female Leadership on Student Achievement and Engagement*

Studies on the benefits of female leadership in high schools show that there are notable gains in student performance (Chyu et al., 2021). When compared to schools run by their male counterparts, schools led by female principals frequently exhibit higher academic achievement (Teferi & Debelo, 2024). This improvement can be partially attributable to women's generally collaborative and empathic leadership approaches (KimKim et al., 2023). Building a welcoming and inclusive learning environment is a top priority for female principals, because it has a direct impact on students' motivation and engagement (Almansour et al., 2024). Better academic results are a result of their leadership style, which cultivates a sense of community and belonging among students (Massouti et al., 2024).

Additional evidence bolstering these conclusions emphasizes how female principals might improve student involvement (Shen et al., 2021). Policies that are focused on the needs of students and cater to their diversity are more likely to be implemented by female leaders (Zhang & Basha, 2023). This entails encouraging extracurricular activities, providing mental health care, and creating individualized lesson plans (MarequeMareque et al., 2022). Female principals contribute to the formation of a more stimulating and inspiring learning environment in schools by emphasizing the whole student (Cankaya & Serin, 2020). As a result, dropout and absenteeism rates go down and student participation rises (Page et al., 2023).

The focus placed by female leaders on open communication and teacher development is another important component (Akgöz et al., 2023). Female principals frequently encourage teachers to collaborate and pursue professional development in order to create a culture of continual improvement (Shah, 2023). This method improves student learning while also improving teacher performance (Liswati et al., 2023). Increased motivation and support for teachers results in better teaching techniques (Jeppesen et al., 2024). Students get from a better education as a result, and they have a better chance of succeeding academically (Gallagher & Morison, 2019).

The emotional and social well-being of students is also impacted by female leadership on student participation (Vo et al., 2023). In addition to being more proactive in addressing issues like bullying and mental health, female principals are more sensitive to the emotional needs of their kids (Hassan & Wright, 2023). They frequently carry out projects and programs that support mental stability and a supportive school environment (Anand, 2021). Female principals assist pupils in feeling more secure and focused on their studies by fostering a caring and safe environment (Stavrou & Kafa, 2023). Students' intellectual and personal development are supported by this all-encompassing approach to education (Jeong et al., 2024).

In conclusion, research continually demonstrates that student engagement and achievement are significantly impacted by female leadership in high schools (Suartama et al., 2024). An inclusive and encouraging learning atmosphere is facilitated by the cooperative and compassionate leadership exhibited by female principals (Oxley, 2018). A culture of continual improvement and comprehensive student development is fostered by their emphasis on teacher development, open communication, and student-centered policies (Conway & Andrews, 2022). When taken as a whole, these factors result in improved academic achievement, greater student involvement, and a supportive school environment (Morrison, 2018). The increasing amount of data highlights how crucial it is to support female leadership in education in order to improve student results and establish more equal learning environments (Weiss et al., 2023).

### *Influence of Female Principals on School Culture and Gender Dynamics*

The ethos of schools is greatly influenced by female principals, who frequently create more welcoming and equal workplaces (Fernandes et al., 2023). Their leadership philosophies generally place a strong emphasis on empathy, open communication, and teamwork, all of which contribute to a welcoming environment (Olsen & LaGree, 2023). It is well known that female principals aggressively combat prejudice and bullying by enacting laws that support gender equality (Yasuda, 2023). All students benefit from a safer and friendlier

learning environment as a result of these initiatives (Pedro et al., 2021). As a result, learning and personal development are more supported by the general school culture (van den Eertwegh & Stalmeijer, 2023).

The inclusion of female principals is also essential in changing the way that gender roles are interpreted in educational settings (Sheerin & Garavan, 2022). They defy gender norms and act as role models for both staff and students by assuming leadership responsibilities (Yoong, 2022). This prominence helps dispel misconceptions about women's talents and inspires young girls to aim for leadership positions (Beaupre, 2022). Furthermore, gender-sensitive practices and curriculum that advance gender equality are frequently promoted by female principals (Bennett et al., 2024). These programs foster interactions between kids of different genders that are more courteous and balanced (Chatman et al., 2022).

The teaching staff's morale and professional growth are impacted by female principals (Nolan, 2022). They are more likely to make investments in programs that support teacher development, which promotes a collaborative and ongoing improvement culture (Schmitz et al., 2023). Female principals improve teacher satisfaction and performance by fostering teamwork and offering opportunity for professional growth (Sothinathan et al., 2024). The learning results for students eventually gain from teachers being able to perform their jobs more effectively in this supporting setting (Cunningham et al., 2022). A more inventive and dynamic educational culture is also influenced by the emphasis placed on professional development (Nordin & Comeau, 2003).

The emphasis on social and emotional well-being is one way that female leadership has affected school culture (Fehérvári, 2023). Implementing initiatives that promote resilience and mental health, female principals are frequently more sensitive to the emotional needs of their staff members and kids (BachnikBachnik et al., 2023). These programs foster a supportive and nurturing environment where children feel cared for, which improves their social and academic performance (Ismail et al., 2023). A more comprehensive approach to student development is facilitated by female principals' attention to the emotional components of education (Asmamaw & Semela, 2023). This emphasis on wellbeing contributes to the development of a happier and more cohesive school community (Khaqan & Redondo-Sama, 2024).

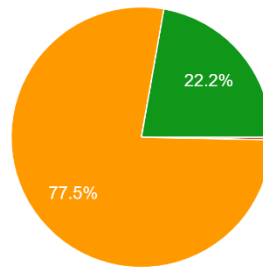
To sum up, female principals have a big impact on gender dynamics and school culture because they advocate equality, inclusivity, and support (Schmidt et al., 2023). Both students and staff benefit from the collaborative and sympathetic environment that their leadership styles produce (Hui & Singh, 2020). They help create an educational atmosphere that is more equal by questioning conventional gender roles and putting gender-sensitive strategies into practice (Lari et al., 2022). Better academic and social outcomes result from their emphasis on professional development and emotional well-being, which further improves the school culture (Olive et al., 2020). The increasing number of female principals highlights the value of diversified leadership in developing successful learning environments (Mousa et al., 2022).

## Method

The author intends to elaborate on the design of this study using quantitative design. Furthermore, the data obtained will be explained by descriptive analysis of the distribution of questionnaires. Meanwhile, the data collection instrument uses a Likert scale with the following choices: strongly disagree is given a score of 1; disagree is given a grade of 2; neutral is rated 3; agreed was given a score of 4; and strongly agreed to be given a score of 5.

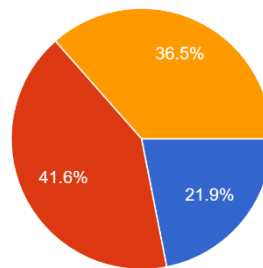
### *Participants*

Of the total 315 respondents, as many as 139 of them were teachers and students who provided information related to the leadership of female school principals. This data provides a comprehensive picture of their perceptions and experiences of leadership effectiveness in schools. The results of this questionnaire are expected to provide useful insights to improve school leadership practices and support the achievement of student learning outcomes.



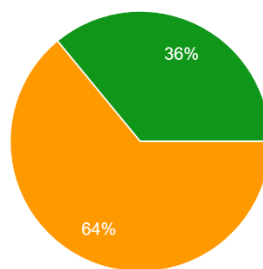
**Figure 1. Show The Gender Distribution of Students Who Responded.**

In light of Figure 1, the gender data shows a significant majority of student responders were female at 77.5%, compared to 22.2% male respondents. This distribution indicates that the experiences and perceptions represented in the study are predominantly those of female students, which may influence the overall findings regarding the impact of female principals.



**Figure 2. Illustrating A Class of Student Respondents**

In light of Figure 2, the distribution of student responses across classes shows that 21.9% are from Class X, 41.6% from Class XI, and 36.5% from Class XII. This varied representation across different grade levels provides a comprehensive view of students' experiences and perceptions, allowing for a more nuanced analysis of the impact of female principals on academic and school outcomes.



**Figure 3. Illustrating The Gender of The Teacher Respondent**

In light of Figure 3, the data reveals that 36% of the instructor responders were men, while a substantial 64% were women. This gender imbalance among the respondents highlights the dominance of female teachers in the study, which could influence the overall perspectives on the impact of female principals in the educational setting.

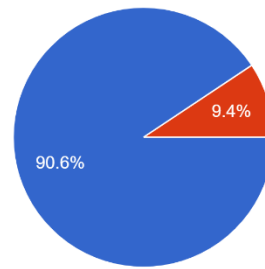


Figure 4. Illustrate The Education Level of Teacher Respondents

In light of Figure 4, the data shows that 90.6% of teacher respondents hold a bachelor's degree, while 9.4% have a master's degree. This distribution indicates that the majority of teachers have foundational educational qualifications, which may influence their perspectives on leadership and its impact on academic performance and school culture.

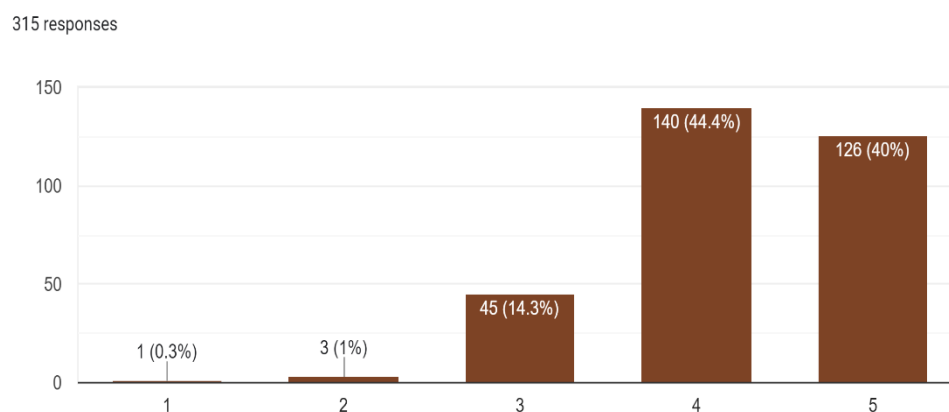
## Results And Discussion

The prominence of female principals in high schools has grown due to their distinct leadership philosophies and the favorable results they provide. This research aims to investigate the specific impacts of female leadership on academic performance, student involvement, and school climate by examining quantitative data on academic performance and teacher feedback. The study's conclusions will contribute to the understanding of gender dynamics in educational leadership and provide guidance on creating welcoming and encouraging school environments. Previous studies have highlighted the unique qualities of female leadership, such as empathy, teamwork, and open communication, which are linked to successful educational outcomes. However, there is still a lack of scientific data on the direct effects of female principals on high school students and faculty.

This study addresses this gap by using quantitative methods to systematically analyze the performance of schools led by female administrators, aiming to validate the theoretical benefits of female leadership and offer practical suggestions to school administrators. In addition to evaluating direct results, the research investigates the underlying processes that contribute to a positive and productive school environment. By integrating quantitative data, the study provides a nuanced perspective on the multifaceted impact of female principals in high schools. It also explores the broader implications of female leadership on school culture and teacher development, examining the holistic approach adopted by many female principals in detail.

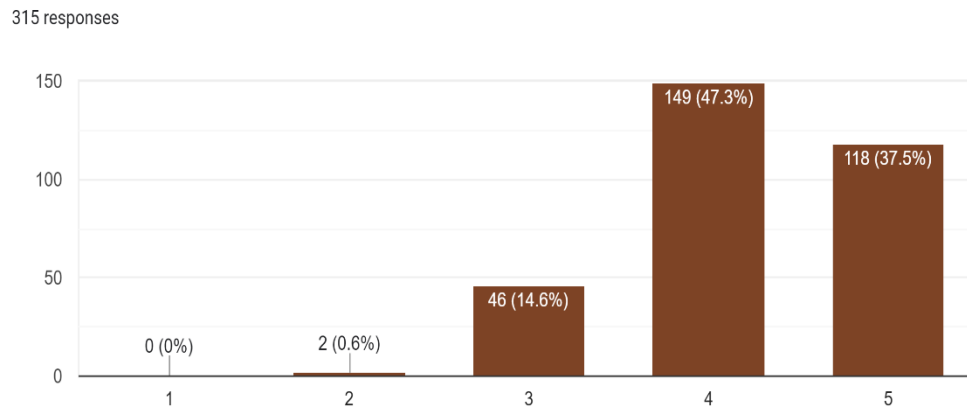
### *Impact of Female Principals on Academics*

#### *Student Perspective*

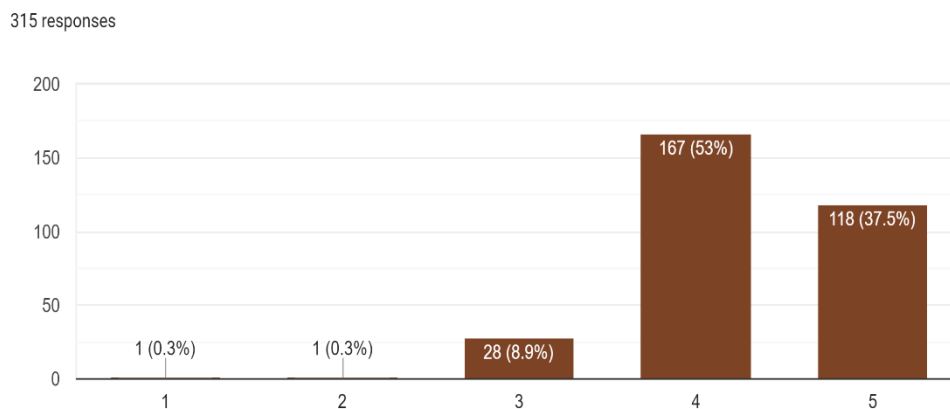


**Figure 5. Illustrate Principal Support for Academic Achievement**

In light of Figure 5, 40% of respondents strongly agreed and 44.4% agreed that they felt supported by female school principals to achieve good academic performance, indicating a significant positive impact of female leadership on student motivation and achievement. The responses, with 14.3% neutral, 1% disagreeing, and 0.3% strongly disagreeing, suggest that the majority of students benefit from the supportive environment fostered by female principals, enhancing their academic success.

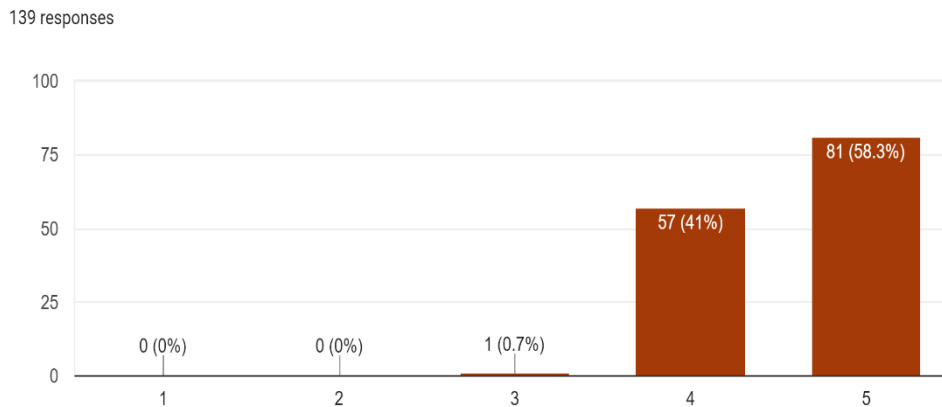
**Figure 6. Illustrate Female Principals Appreciate Academic Achievement**

In light of Figure 6, 37.5% of respondents strongly agreed and 47.3% agreed that female principals always appreciate students' academic achievements, indicating their commitment to recognizing and encouraging academic excellence. The responses, with 14.6% neutral, 0.6% disagreeing, and 0% strongly disagreeing, suggest that this appreciation from female principals positively impacts student motivation and reinforces a culture of academic success.

**Figure 7. Illustrate Female Principals Appreciate Non-Academic Achievement.**

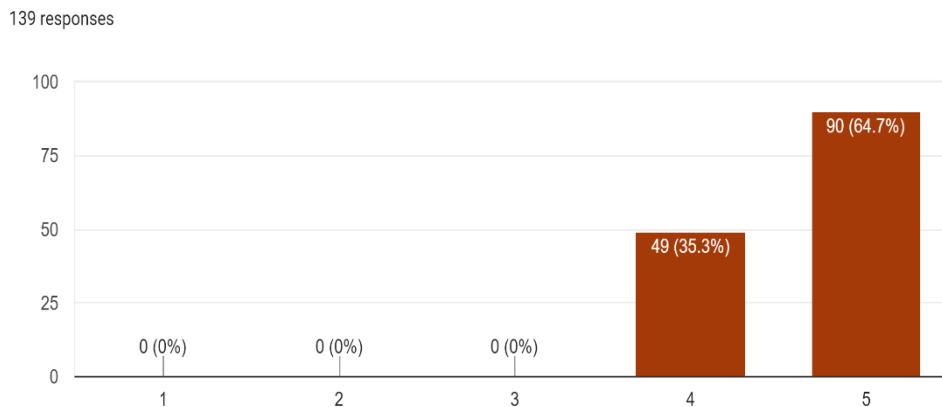
In light of Figure 7, 37.5% of respondents strongly agreed and 53% agreed that the female principal values students' non-academic achievements and awards them appropriately, highlighting her commitment to recognizing achievements beyond academics. The responses, with 8.9% neutral and only 0.3% disagreeing, suggest that this recognition fosters a supportive and motivating environment, encouraging students to excel in various aspects of their development.



*Teacher's Perspective*

**Figure 8. Illustrate Female Principals' Leadership Style Contributes.**

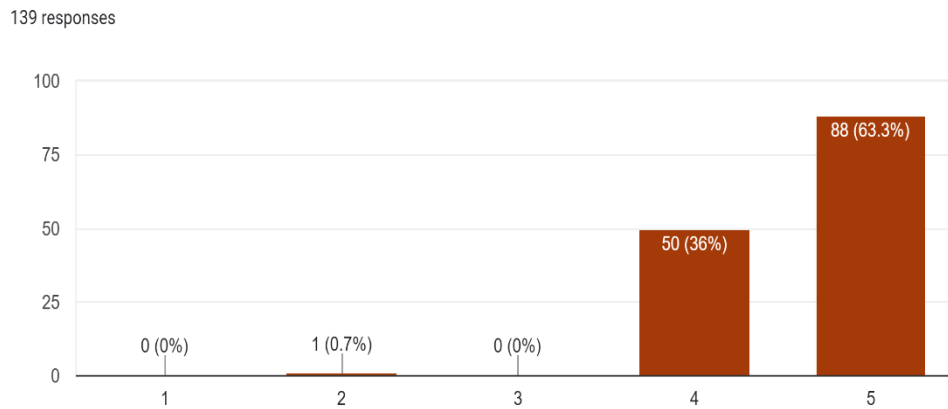
In light of Figure 8, 58.3% of teachers strongly agreed and 41% agreed that the leadership style of female principals positively contributes to student learning outcomes, highlighting their effectiveness in fostering a supportive and productive educational environment. The overwhelmingly positive responses, with 0.7% neutral and 0% disagreeing or strongly disagreeing, indicate that female principals' leadership styles are highly valued and significantly impact improving student academic performance.



**Figure 9. Illustrate Female Principals Rewarding Achievement**

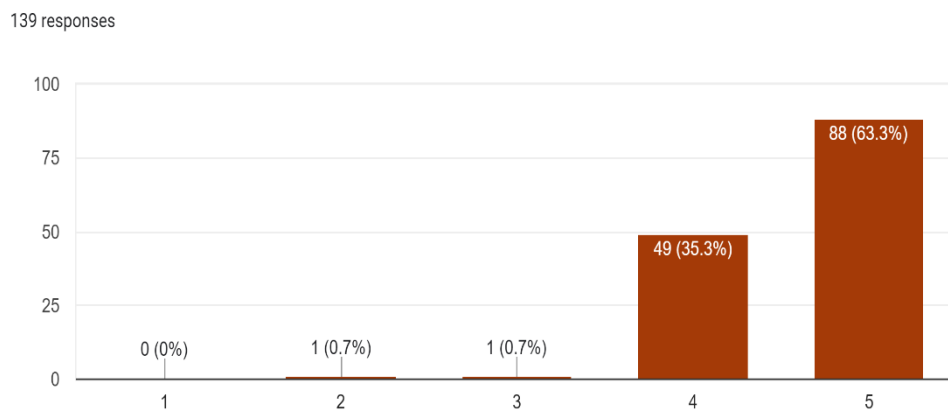
In light of Figure 9, 64.7% of teachers strongly agreed and 36.3% agreed that female principals value students' academic achievements and award them appropriately. The absence of neutral, disagreeing, or strongly disagreeing responses underscores the strong consensus among teachers on the positive impact of female principals' recognition, which likely enhances student motivation and reinforces academic excellence.





**Figure 10. Illustrating Female Principals Motivating Students**

In light of Figure 10, 63.3% of teachers strongly agreed and 36% agreed that female principals consistently motivate students to study hard and diligently. The lack of neutral, disagreeing, or strongly disagreeing responses indicates a strong consensus on the effectiveness of female principals' motivational strategies, which likely contributes to increased student effort and improved academic performance.



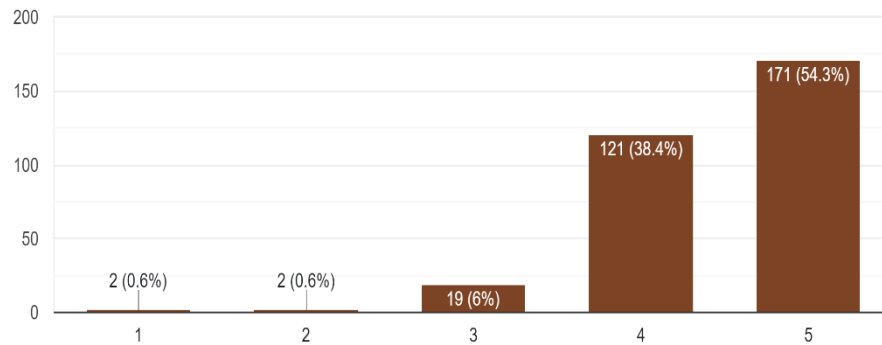
**Figure 11. Illustrate The Support and Assistance of Female Principals**

In light of Figure 11, 63.3% of teachers strongly agreed and 36.3% agreed that the female principal at their school consistently provides the support and assistance needed by students to achieve good learning outcomes. The minimal neutral and disagreeing responses, with no strong disagreements, highlight the positive impact of the principal's support, which likely contributes to enhanced student performance and achievement.

### *Effect Of Female Principals on Environment*

#### *Student Perspective*

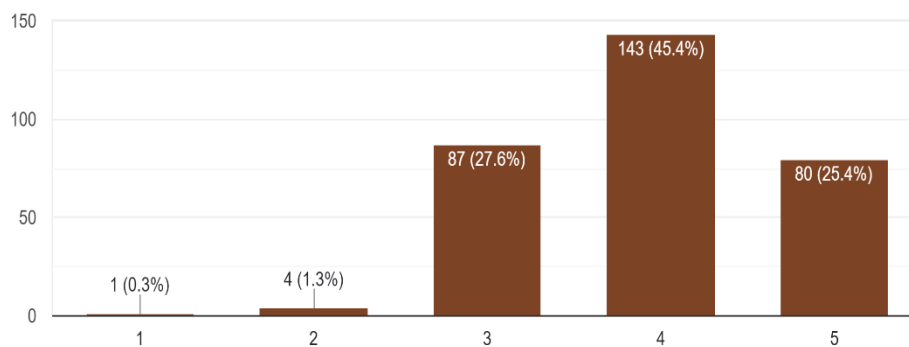
315 responses



**Figure 12. Female Principals Motivate Students**

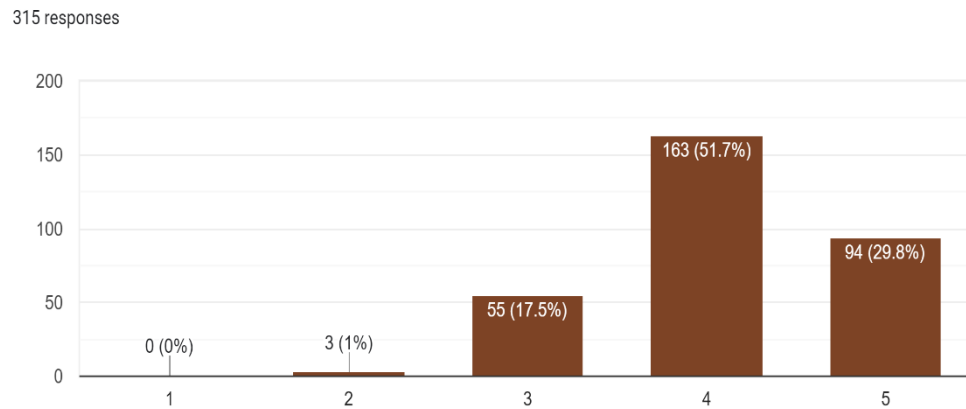
In light of Figure 12, 54.3% of students strongly agreed and 38.4% agreed that female school principals often motivate them to study harder, with 6% neutral and only 0.6% each disagreeing and strongly disagreeing. This significant majority indicates that the motivational efforts of female principals are widely recognized and appreciated, likely leading to increased student effort and better academic performance.

315 responses



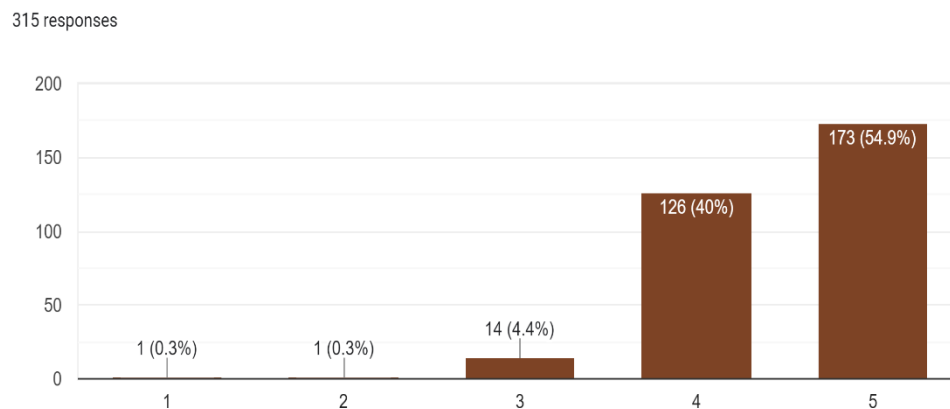
**Figure 13. The Convenience of Students Expressing Their Opinions**

In light of Figure 13, 25.4% of students strongly agreed, 45.4% agreed, 27.6% were neutral, 1.3% disagreed, and 0.3% strongly disagreed that they feel comfortable expressing opinions and input to female principals. This majority indicates that a significant portion of students feel confident in sharing their thoughts with female principals, fostering an open and communicative school environment, which can enhance student satisfaction and school climate.



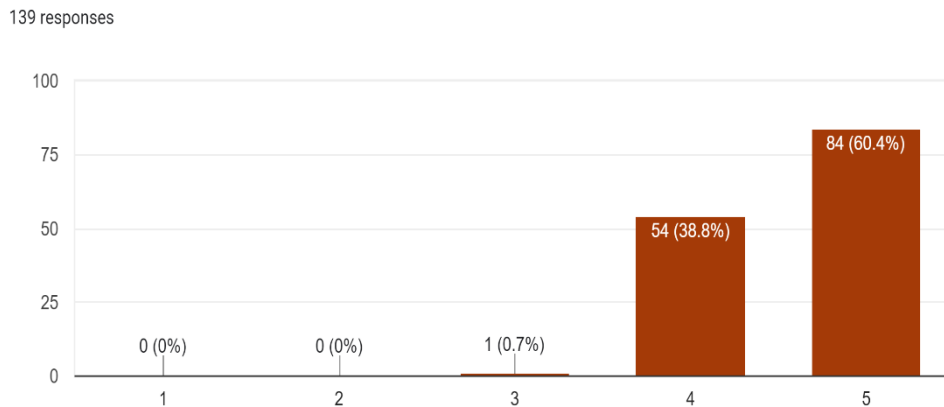
**Figure 14. Illustrate Conflict Management Skills**

In light of Figure 14, 29.8% of students strongly agreed, 51.7% agreed, 17.5% were neutral, 1% disagreed, and 0% strongly disagreed that female principals manage conflicts well, allowing them to study with peace of mind. This majority indicates that effective conflict management by female principals contributes to a calm and focused learning environment, which is likely to enhance student concentration and academic performance.



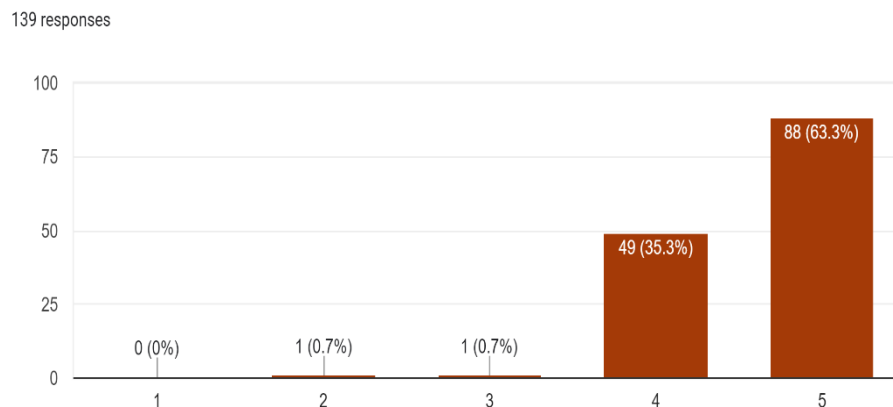
**Figure 15. Illustrating A Friendly and Responsive Female Principal**

In light of Figure 15, 54.5% of teachers strongly agreed, 40% agreed, 4.4% were neutral, and 0.3% each disagreed and strongly disagreed that the female principal at their school is very friendly and responsive. This overwhelming majority suggests that the principal's approachable and attentive demeanor positively impacts teacher morale and collaboration, creating a more supportive and productive school environment.

*Teacher's Perspective*

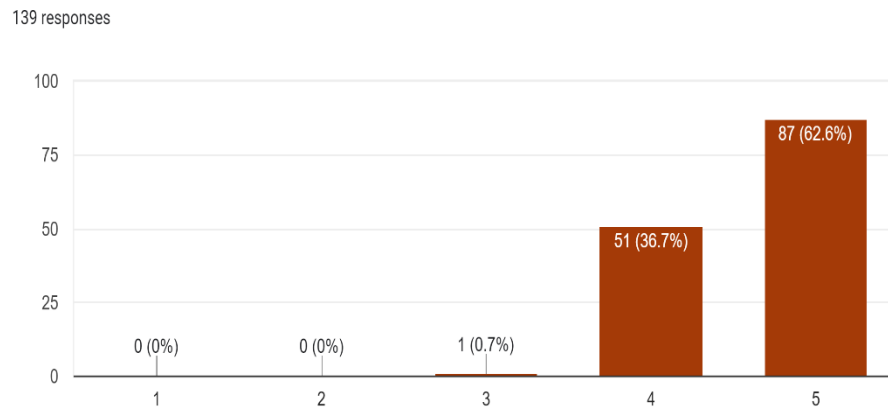
**Figure 16. Illustrate The Ability to Create a Fun Environment**

In light of figure 16, the female principal at my school is able to create a conducive and fun learning environment. A total of 60.4% of teachers stated that they strongly agreed, 38.8% agreed, 0.7% were neutral, while disagreed and strongly disagreed with 0% each. This data shows that female principals were able to create a conducive and enjoyable learning environment. This shows that the majority of teachers feel that the learning environment created by female principals helps increase students' motivation and comfort, so that it can have a positive impact on their learning outcomes.



**Figure 17. Illustrate The Ability to Provide Support and Assistance**

In light of figure 17, As many as 63.3% of teachers strongly agree and 35.3% agree that female principals always provide the support and assistance that students need to achieve good learning outcomes. Only 0.7% were neutral and 0.7% disagreed, while none strongly disagreed. This shows that the majority of teachers feel that female principals play a significant role in supporting students' academic achievement through the support and assistance provided. This consistent support can improve student motivation and their overall learning outcomes.



**Figure 18. Illuminating The Ability to Be a Role Model**

In light of figure 18, As many as 62.6% of teachers strongly agree and 36.7% agree that female principals in their schools can be role models for teachers, students, and all school residents. Only 0.7% were neutral and no one disagreed or strongly disagreed. This shows that the majority of teachers see female school principals as figures who can be used as role models. As a result, the role models provided by female principals can inspire the entire school community to work better and create a positive learning environment.

According to the study, the majority of respondent teachers are women, with a response rate of 94%, compared to only 36% for men. This shows the dominance of women in teaching professions in participating schools. Additionally, only 9.4% of teacher respondents had basic knowledge, while 90.6% had mastery knowledge. This indicates that the majority of teachers are adequately qualified to teach at their schools. Based on the data, 58.3% of teachers believe that female school principals positively impact student learning outcomes, while 41% are uncertain.

The influence of female school principals on students' academic achievement is very positive. About 40% of respondents strongly agreed they felt pressured by female principals to achieve good academic performance, while 44.4% agreed similarly. Only 1% were unsatisfied, and 0.3% were very unsatisfied, indicating most teachers are negatively impacted by students' poor performance. The study shows that 77.5% of participants are women and 22.2% are men, suggesting most students in the research are women. Student grade distribution is 21.9% from grade X, 41.6% from grade XI, and 36.5% from grade XII, providing comprehensive demographic information for the research.

In summary, this study indicates that the leadership of female school administrators has a positive and significant impact on academic achievement and school culture. Women's leadership provides strong support for teachers to achieve their academic goals, which improves student learning outcomes. This highlights the importance of women's leadership in creating a positive and productive school environment. The study also examines processes indicating the influence of employee empowerment on a productive school environment. By integrating quantitative data, this study offers a comprehensive perspective on the multifaceted impact of female school principals, showing their focus on both academics and school culture, as well as teacher development.

The data collection instrument in this study uses a Likert scale with the following options: very non-settling (1), non-settling (2), neutral (3), settling (4), and very settling (5). Approximately 315 respondents, including 139 teachers and students, addressed this question. The Likert scale allows researchers to adjust the response threshold to various statements related to the female school principal's leadership style and its impact on student learning outcomes. The gender distribution among participants indicates that the majority are women (77.5%) and men (22.2%). This distribution is important to consider in the analysis as it can affect students' perceptions and experiences with female school principal leadership. Additionally, the students' grade distribution varies, with 21.9% from grade

X, 41.6% from grade XI, and 36.5% from grade XII, offering a comprehensive explanation of student perceptions across different class levels.

The study found no respondents were dissatisfied or very dissatisfied with the female principal's positive contribution to students' learning outcomes. This indicates that teacher effectiveness in the classroom is highly valued and effective in raising student learning outcomes. The academic achievement of students under female principals is positive, with the majority of respondents feeling supported to achieve good academic performance. In summary, this study highlights the importance of employee empowerment in creating a positive and productive school environment. Women's leadership provides strong support for teachers to achieve their academic goals and improves student learning outcomes, making a significant contribution to understanding the impact of leadership on school life and academics.

## Conclusion

Based on the results and discussion above, the author concludes that increasing attendance and impact of female principals in secondary schools, as well as their role in challenging stereotypes and changing educational leadership. Female principals often adopt collaborative, empathetic, and student-centered approaches, which positively affect student engagement and academic performance. Research shows that female-led schools tend to create more inclusive and supportive environments, which in turn improves student learning outcomes. The survey results indicate that the head of a female-only school is under pressure to meet both academic and extracurricular requirements. Most of the teachers expressed concern about this and stated that the school's principal should give careful consideration to various aspects of the students' growth. This means that the school's focus should not only be on academic performance but also on the development of the students' extracurricular interests and skills.

In addition, the leadership style applied by female principals is considered to contribute positively to student learning outcomes, with 58.3% of teachers agreeing that this leadership style supports effective learning. This shows that the leadership approach applied by female principals has the ability to create a conducive learning environment and support students' academic achievement. Female principals are also considered good motivators for students. They provide the necessary support to achieve high learning outcomes, and many teachers express strong agreement with this. Students benefit from various forms of this support, including academic guidance and emotional support.

From the perspective of students, female principals are also considered capable of motivating them and making them feel comfortable expressing their opinions. Students recognise the conflict management skills of female principals and their friendly and responsive nature. This shows that female principals are able to create a safe and supportive environment for students to thrive. Teachers also agree that female principals create a conducive learning environment and provide essential support. Many stated that female school principals acted as role models, showing that they not only lead with words but also with actions. This is important in building a positive and supportive school culture.

Overall, the data shows that female principals have a significant positive impact on the academic and social environment in schools. They not only play a role in improving student learning outcomes but also in creating an inclusive and supportive environment. This demonstrates the importance of diversity in educational leadership and the need for more research to understand the impact of women's leadership on school culture and gender dynamics. This article emphasizes the need for further research on the effects of women's leadership on school culture and gender dynamics, with the aim of promoting more diverse and equitable educational leadership. As such, it is hoped that more women will be encouraged to take leadership roles in education, which will ultimately benefit the entire school community.

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## References

- Agustina, R., Kamdi, W., Hadi, S., Muladi, M., Nurhadi, D., & Umniati, S. (2020). Leadership Selection at Vocational Education Based on Digital Leadership Model Using AHP Method. 4th International Conference on Vocational Education and Training, ICOVET 2020, 36–40. <https://doi.org/10.1109/ICOVET50258.2020.9230124>
- Akgöz, E. E., Şahin, F., & Erdoğan, O. (2023). The mediator role of school climate in the relationship between instructional leadership behaviors of school principals and teacher autonomy. *International Journal of Educational Management*, 38(4), 1142–1159. <https://doi.org/https://doi.org/10.1108/IJEM-07-2023-0323>
- Alam, G. M. (2022). The Relationship between Figureheads and Managerial Leaders in the Private University Sector: A Decentralised, Competency-Based Leadership Model for Sustainable Higher Education. *Sustainability (Switzerland)*, 14(19). <https://doi.org/10.3390/su141912279>
- Almansour, M., Abouammoh, N., Idris, R. Bin, Alsuliman, O. A., Alhomaidi, R. A., Alhumud, M. H., & Alghamdi, H. A. (2024). Exploring medical students' experience of the learning environment: a mixed methods study in Saudi medical college. *BMC Medical Education*, 24(1), 1–14. <https://doi.org/10.1186/s12909-024-05716-4>
- Alves, L. (2022). Challenges and opportunities of female leadership in education. *The Lancet Child & Adolescent Health*, 6(10), 675–676. [https://doi.org/https://doi.org/10.1016/S2352-4642\(22\)00217-6](https://doi.org/https://doi.org/10.1016/S2352-4642(22)00217-6)
- Anand, V. (2021). Performance of Induction Motor and BLDC Motor and Design of Induction Motor driven Solar Electric Vehicle (IM-SEV). *International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)*, 6(1), 1046–1053. <https://doi.org/10.48175/568>
- Antinluoma, M., Iloäki, L., & Toom, A. (2021). Practices of Professional Learning Communities. *Frontiers in Education*, 6. <https://doi.org/10.3389/educ.2021.617613>
- Asmamaw, A. T., & Semela, T. (2023). Are African academic women more emotionally intelligent than men? Exploring emotional intelligence, gender, and leadership in higher education. *Heliyon*, 9(12), e22949. <https://doi.org/10.1016/j.heliyon.2023.e22949>
- Bachnik, K., Howe-Walsh, L., Critchley, L., Alicea, M., Guajardo, M., & Washington, C. E. E. (2023). Women's crucible leadership experiences: through the lens of the four-frame organisational model. *Gender in Management*, 38(7), 877–895. <https://doi.org/https://doi.org/10.1108/GM-03-2022-0101>
- Balasi, A., Iordanidis, G., & Tsakiridou, E. (2023). Entrepreneurial leadership behaviour of primary school principals across Europe: a comparative study. *International Journal of Educational Management*, 37(5), 1067–1087. <https://doi.org/https://doi.org/10.1108/IJEM-04-2023-0208>
- Bano, A., & Nadeem, S. (2023). Examining women leaders' identity conflict in a low gender egalitarian culture: a study of female corporate sector leaders in Pakistan. *Gender in Management*, 39(2), 274–290. <https://doi.org/https://doi.org/10.1108/GM-11-2021-0346>
- Beaupre, J. G. (2022). To lead or not to lead: exploring how young women's early career experiences impact their leadership ambition. *Gender in Management*, 37(8), 1064–1079. <https://doi.org/https://doi.org/10.1108/GM-11-2021-0344>
- Belasen, A. T., Belasen, A. M., Belasen, A. R., & Belasen, A. R. (2021). A win-win for health care: promoting co-leadership and increasing women's representation at the top. *Gender in Management*, 36(6), 762–781. <https://doi.org/https://doi.org/10.1108/GM-06-2020-0176>
- Bennett, A. M., Connor, R. A., Bryant, M. M., & Metzger, S. M. (2024). What is she wearing and how does he lead?: An examination of gendered stereotypes in the public discourse around women political candidates. *Technological Forecasting and Social Change*, 205, 123454. <https://doi.org/https://doi.org/10.1016/j.techfore.2024.123454>
- Bortes, C., & Giota, J. (2024). Beyond academics: Links from teaching practices in Swedish schools to students' achievements and mental health complaints. *Learning and Instruction*, 92, 101937. <https://doi.org/https://doi.org/10.1016/j.learninstruc.2024.101937>
- Brion, & Ampah. (2021). Changing cultural norms through education: voices from Ghanaian women principals. *International Journal of Educational Management*, 35(7), 1458–1475. <https://doi.org/10.1108/IJEM-11-2020-0521>
- Cankaya, S., & Serin, O. (2020). Investigation of the variables predicting leadership styles of school principals. *Revista de Cercetare Si Interventie Sociala*, 70, 172–189. <https://doi.org/10.33788/rcis.70.11>
- Chatman, J. A., Sharps, D., Mishra, S., Kray, L. J., & North, M. S. (2022). Agentic but not warm: Age-gender interactions and the consequences of stereotype incongruity perceptions for middle-aged professional women. *Organizational Behavior and Human Decision Processes*, 173, 104190. <https://doi.org/https://doi.org/10.1016/j.obhdp.2022.104190>
- Chyu, J., Peters, C. E., Nicholson, T. M., Dai, J. C., Taylor, J., Garg, T., Smith, A. B., Porten, S. P., Greene, K., Browning, N., Harris, E., Sutherland, S. E., & Psutka, S. P. (2021). Women in Leadership in Urology: The Case for Increasing Diversity and Equity. *Urology*, 150, 16–24. <https://doi.org/https://doi.org/10.1016/j.urology.2020.07.079>
- Clark, R., & Kroska, A. (2024). Free to represent you and me: Gender attitudes and women's share of parliament, 1995–2021. *Social Science Research*, 122, 103051. <https://doi.org/https://doi.org/10.1016/j.ssresearch.2024.103051>



- Conway, J. M., & Andrews, D. (2022). Parallel Leadership: A Leadership Approach for Organizational Alignment. In *The Palgrave Handbook of Educational Leadership and Management Discourse*. [https://doi.org/10.1007/978-3-030-99097-8\\_21](https://doi.org/10.1007/978-3-030-99097-8_21)
- Cook, N. J., Benedum, M. E., Gorti, G., & Thapa, S. (2023). Promoting women's leadership under environmental decentralization: The roles of domestic policy, foreign aid, and population change. *Environmental Science & Policy*, 139, 240–249. <https://doi.org/https://doi.org/10.1016/j.envsci.2022.11.007>
- Cunningham, C., Hill, S., & Zhang, W. (2022). Gender equality and educational leadership in Chinese schools. *Power and Education*, 14(1), 66–81. <https://doi.org/10.1177/17577438211058965>
- Fehérvári, A. (2023). The role of teachers' views and attitudes in the academic achievement of Roma students. *Journal for Multicultural Education*, 17(3), 253–264. <https://doi.org/https://doi.org/10.1108/JME-08-2022-0104>
- Fernandes, V., Wong, W., & Noonan, M. (2023). Developing adaptability and agility in leadership amidst the COVID-19 crisis: experiences of early-career school principals. *International Journal of Educational Management*, 37(2), 483–506. <https://doi.org/https://doi.org/10.1108/IJEM-02-2022-0076>
- Gallagher, J. E., & Morison, S. (2019). Women in academic leadership: A chance to shape the future. *Journal of Dentistry*, 87, 45–48. <https://doi.org/https://doi.org/10.1016/j.jdent.2019.05.011>
- Garrett, M. D. (2023). Creating Visionaries Through Positive Leadership: Shifting Educational Paradigms Toward Strengths. *Canadian Journal of Educational Administration and Policy*, 203, 91–101.
- Hammad, W., Polatcan, M., & Morad, H. (2024). Investigating links between teacher leadership, collective efficacy and teacher commitment in Egyptian schools: a mediated-effects analysis. *International Journal of Educational Management*, 38(3), 750–768. <https://doi.org/https://doi.org/10.1108/IJEM-03-2023-0124>
- Hassan, K. S., & Wright, E. (2023). Gender and Leadership: Student Perspectives on Gender Stereotypes in Round Square Schools. *ECNU Review of Education*. <https://doi.org/10.1177/20965311231210010>
- Hui, L. S., & Singh, G. S. B. (2020). The influence of instructional leadership on learning organisation at high performing primary schools in Malaysia. *Asian Journal of University Education*, 16(2), 69–76. <https://doi.org/10.24191/AJUE.V16I2.10298>
- Ismail, H. N., Kertechian, K. S., & Blaique, L. (2023). Visionary leadership, organizational trust, organizational pride, and organizational citizenship behaviour: a sequential mediation model. *Human Resource Development International*, 26(3), 264 – 291. <https://doi.org/10.1080/13678868.2022.2108993>
- Jeong, D. W., Moon, H., Jeong, S. M., & Moon, C. J. (2024). Digital capital accumulation in schools, teachers, and students and academic achievement: Cross-country evidence from the PISA 2018. *International Journal of Educational Development*, 107, 103024. <https://doi.org/https://doi.org/10.1016/j.ijedudev.2024.103024>
- Jeppesen, L. S., Damsgaard, L., Stolpe, M. N., Melcher, J. N. S., Wienecke, J., Nielsen, G., Smedegaard, S., Henriksen, A. H., Hansen, R. A., Hillman, C. H., Tammelin, T. H., Resaland, G. K., Daly-Smith, A., & Bugge, A. (2024). Study protocol for the ACTIVE SCHOOL study investigating two different strategies of physical activity to improve academic performance in Schoolchildren. *BMC Pediatrics*, 24(1), 1–12. <https://doi.org/10.1186/s12887-024-04647-9>
- Khaqan, S., & Redondo-Sama, G. (2024). A systematic review of the role of dialogic leadership: Characterization and impacts. *Educational Research Review*, 44, 100618. <https://doi.org/https://doi.org/10.1016/j.edurev.2024.100618>
- KimKim, J., LeeLee, H. W. W., & ChungChung, G. H. H. (2023). Organizational resilience: leadership, operational and individual responses to the COVID-19 pandemic. *Journal of Organizational Change Management*, 37(1), 92–115. <https://doi.org/https://doi.org/10.1108/JOCM-05-2023-0160>
- Lari, N., Al-Ansari, M., & El-Maghraby, E. (2022). Challenging gender norms: women's leadership, political authority, and autonomy. *Gender in Management*, 37(4), 476–493. <https://doi.org/https://doi.org/10.1108/GM-06-2021-0159>
- Liswati, T. W., Mustaji, Hariyati, N., & Uulaa, R. F. R. (2023). Actualization of Principal's Visionary Leadership in Improving Teacher Skills in Managing Learning Innovations in Senior High Schools. *Journal of Educational and Social Research*, 13(1), 45–56. <https://doi.org/10.36941/jesr-2023-0005>
- MarequeMareque, M., de Prada Prada, E., & Pino JustePino Juste, M. (2022). Aspiring and inspiring: the role of women in educational leadership. *Gender in Management*, 37(8), 1009–1025. <https://doi.org/https://doi.org/10.1108/GM-07-2021-0221>
- Massouti, A., Shaya, N., & Qareiny, S. M. A. (2024). Exploring the nexus between female school leaders' perceptions of distributed instructional leadership, socio-cultural dynamics, and student achievement in the Arab world. *International Journal of Educational Research Open*, 7(March), 100372. <https://doi.org/10.1016/j.ijedro.2024.100372>
- Morrison, A. R. (2018). Beyond the status quo – setting the agenda for effective change: The role of leader within an international school environment. *Educational Management Administration and Leadership*, 46(3), 511–529. <https://doi.org/10.1177/1741143216682500>
- Mousa, M., Skouteris, H., Boyle, J. A., Currie, G., Riach, K., & Teede, H. J. (2022). Factors that influence the implementation of organisational interventions for advancing women in healthcare leadership: A meta-ethnographic study. *EClinicalMedicine*, 51, 101514. <https://doi.org/https://doi.org/10.1016/j.eclinm.2022.101514>
- Nguyen, P.-H., Thi Nguyen, L.-A., Thi Nguyen, T.-H., & Vu, T.-G. (2024). Exploring complexities of innovation capability in Vietnam's IT firms: Insights from an integrated MCDM model-based grey theory. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(3), 100328. <https://doi.org/https://doi.org/10.1016/j.joitmc.2024.100328>
- Nolan, J. V. (2022). Recent Advances in Animal Nutrition-Australia: people and circumstances shaping this symposium's successful first 50 years. *Animal Production Science*, 62(12), 1060–1089. <https://doi.org/10.1071/AN21219>
- Nordin, V. J., & Comeau, R. (2003). Forest resources education in Canada. *Forestry Chronicle*, 79(4), 799–808. <https://doi.org/10.5558/tfc79799-4>

- Offiah, G., & Gabhann, J. (2024). Societal impact of increasing the visibility of women in biomedical and clinical research. *Societal Impacts*, 3, 100039. <https://doi.org/https://doi.org/10.1016/j.socimp.2024.100039>
- Olarongbe, S. A., Sulyman, A. S., Taiwo, M. A., Abdulrahman, H. K., & Idris, A. O. (2023). Managers or leaders: Who fit the helms of 21st century librarianship? *Business Information Review*, 40(4), 183–190. <https://doi.org/10.1177/02663821231195732>
- Olive, J. K., Preventza, O. A., Blackmon, S. H., & Antonoff, M. B. (2020). Representation of Women in The Society of Thoracic Surgeons Authorship and Leadership Positions. *The Annals of Thoracic Surgery*, 109(5), 1598–1604. <https://doi.org/https://doi.org/10.1016/j.athoracsur.2019.07.069>
- Olsen, K., & LaGree, D. (2023). Taking action in the first five years to increase career equality: the impact of professional relationships on young women's advancement. *Gender in Management*, 38(7), 925–941. <https://doi.org/https://doi.org/10.1108/GM-02-2022-0058>
- Oxley, C. (2018). Strength in Numbers: Encouraging Every Staff Member to Work to Capacity. *International Information and Library Review*, 50(1), 69–75. <https://doi.org/10.1080/10572317.2018.1422907>
- Page, A., Sealy, R., Parker, A., & Hauser, O. (2023). Regulation and the trickle-down effect of women in leadership roles. *The Leadership Quarterly*, 101721. <https://doi.org/https://doi.org/10.1016/j.leaqua.2023.101721>
- Palupi, A. T., Sukidin, & Kantun, S. (2019). Women's leadership style in special education cases in Jember regency: 21st century skills challenges. *IOP Conference Series: Earth and Environmental Science*, 243(1). <https://doi.org/10.1088/1755-1315/243/1/012153>
- Pedro, H., Koentjoro, Meiyanto, S., & Andayani, B. (2021). Transformation of women's leadership through producing natural-dyed hand-woven fabrics (ethnographic study on Palue weavers). *Gaceta Sanitaria*, 35, S554–S557. <https://doi.org/https://doi.org/10.1016/j.gaceta.2021.07.032>
- Schmidt, D. H., van Dierendonck, D., & Weber, U. (2023). The data-driven leader: developing a big data analytics leadership competency framework. *Journal of Management Development*, 42(4), 297 – 326. <https://doi.org/10.1108/JMD-12-2022-0306>
- Schmitz, M.-L., Antonietti, C., Consoli, T., Cattaneo, A., Gonon, P., & Petko, D. (2023). Transformational leadership for technology integration in schools: Empowering teachers to use technology in a more demanding way. *Computers & Education*, 204, 104880. <https://doi.org/https://doi.org/10.1016/j.compedu.2023.104880>
- Shah, S. (2023). Navigating gender stereotypes as educational leaders: An ecological approach. *Management in Education*, 37(3), 140–149. <https://doi.org/10.1177/08920206211021845>
- Sheerin, C., & Garavan, T. (2022). Female leaders as 'Superwomen': Post-global financial crisis media framing of women and leadership in investment banking in UK print media 2014–2016. *Critical Perspectives on Accounting*, 86, 102307. <https://doi.org/https://doi.org/10.1016/j.cpa.2021.102307>
- Shen, J., Ma, X., Mansberger, N., Wu, H., Palmer, L. A. B., Poppink, S., & Reeves, P. L. (2021). The relationship between growth in principal leadership and growth in school performance: The teacher perspective. *Studies in Educational Evaluation*, 70, 101023. <https://doi.org/https://doi.org/10.1016/j.stueduc.2021.101023>
- Silva, D. N., Silva, W. D. O., & Fontana, M. E. (2023). A gendered perspective of challenges women in engineering careers face to reach leadership positions: A innovative theoretical model from Brazilian students' perceptions. *Women's Studies International Forum*, 98, 102712. <https://doi.org/https://doi.org/10.1016/j.wsif.2023.102712>
- Sothinathan, J. S., Adams, D., & Mohd Radzi, N. (2024). From leadership to allegiance: the interplay of middle leadership, teacher job satisfaction and commitment in schools. *International Journal of Educational Management*, 38(5), 1342–1356. <https://doi.org/https://doi.org/10.1108/IJEM-01-2024-0057>
- Stavrou, E., & Kafa, A. (2023). School principals' leadership styles on implementing inclusive education: the entrepreneurial leadership effect. *International Journal of Educational Management*, 38(1), 40–56. <https://doi.org/https://doi.org/10.1108/IJEM-08-2023-0424>
- Suartama, I. K., Sudarma, I. K., Sudatha, I. G. W., Sukmana, A. I. W. I. Y., & Susiani, K. (2024). Student engagement and academic achievement: the effect of gamification on case and project-based online learning. *Journal of Education and Learning*, 18(3), 976–990. <https://doi.org/10.11591/edulearn.v18i3.21349>
- Surawicz, C. M. (2016). Women in Leadership: Why So Few and What to Do About It. *Journal of the American College of Radiology*, 13(12, Part A), 1433–1437. <https://doi.org/https://doi.org/10.1016/j.jacr.2016.08.026>
- Teferi, M. T., & Debelo, D. B. (2024). Exploring the experience of female middle managers in secondary schools of Jimma town, Ethiopia. *Social Sciences and Humanities Open*, 10(January), 101003. <https://doi.org/10.1016/j.ssaho.2024.101003>
- van den Eertwegh, V., & Stalmeijer, R. E. (2023). How do peer group reflection meetings support medical students' learning and personal development during clinical rotations? *BMC Medical Education*, 23(1). <https://doi.org/10.1186/s12909-023-04481-0>
- Vo, A., Torti, J., Haddara, W., & Sultan, N. (2023). Exploring medical students' perspectives of physician leadership. *BMC Medical Education*, 23(1). <https://doi.org/10.1186/s12909-022-03971-x>
- Weiss, M., Dogan, R., Jeltema, H.-R., Hatipoglu Majernik, G., Venturini, S., Ryang, Y.-M., Darie, L., Engel, D., Ferreira, A., Ilic, T., Lawson McLean, A. C., Malli, A., Mielke, D., Vanchaze, K., & Hernández-Durán, S. (2023). Women in leadership positions in European neurosurgery - Have we broken the glass ceiling? *Brain and Spine*, 3, 101777. <https://doi.org/https://doi.org/10.1016/j.bas.2023.101777>
- Yasuda, H. (2023). Employers' stereotypes and taste-based discrimination. *Journal of the Japanese and International Economies*, 67, 101240. <https://doi.org/https://doi.org/10.1016/j.jjie.2022.101240>
- Yoong, M. (2022). "If your voice isn't accepted, does it mean you stop talking?" Exploring a woman leader's reversal of postfeminist confidence discourses. *Gender in Management*, 38(2), 200–214. <https://doi.org/https://doi.org/10.1108/GM-06-2022-0207>

Zhang, C., & Basha, D. (2023). Women as leaders: the glass ceiling effect on women's leadership success in public bureaucracies. *Gender in Management*, 38(4), 489–503. <https://doi.org/https://doi.org/10.1108/GM-09-2021-0283>.